AL-13-000-3537

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 2 1 2013

OFFICE OF
AIR AND RADIATION

The Honorable Lisa Murkowski
Ranking Member
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Murkowski:

Thank you for your March 22, 2013, letter co-signed by Senator Ron Wyden, regarding the recent increase in prices of Renewable Identification Numbers (RINs). As you know, RINs are the tradable credits used to demonstrate compliance with the Renewable Fuel Standard (RFS), which was established by Congress in 2005 and strengthened by the Energy Independence and Security Act of 2007 (EISA).

Congress designed the RFS as a market-based program, establishing increasing volumetric requirements for various categories of biofuels while providing industry enough flexibility to determine the most cost-effective fuel mix to meet those requirements. While non-ethanol biofuels can be and have been used to meet the RFS requirements, ethanol has been, and will likely continue to be, the predominant biofuel, given its favorable economics at volumes below the 10 percent ethanol-gasoline blend (E10) saturation point (commonly referred to as the blendwall).

Over the past few months, prices for certain types of RINs have increased. Industry stakeholders and market observers have expected some upward price pressure on RINs, as the volumes of biofuel required by statute approach the E10 saturation point and as market pressure for the use of higher blends of ethanol increases.

As we monitor the RIN market, we are simultaneously looking at the potential impacts of the blendwall over the near and longer terms. We are also reviewing comments submitted in response to the agency's proposed rulemaking for the 2013 RFS volume standards, and we will carefully consider this input as we set future RFS standards. Going forward, we will consider whether any further action under the authorities established by Congress is appropriate to help ensure orderly implementation of the program. Given the importance of these issues, the EPA recognizes that it is important to avoid precipitous action that could have adverse effects on the market.

Enclosed are the agency's responses to your questions. We are providing you notice pursuant to 40 C.F.R. § 2.209(b) that some of the requested information has been claimed as confidential business information (CBI) by the submitters. We have also informed the affected businesses of the disclosure of this information to you in accordance with 40 C.F.R. § 2.209(b)(2).

Although we have not made any final determinations regarding these confidentiality claims, we respectfully request that you treat the information as confidential and that you not publicly disclose the

contents of the information to which the agency is granting you access. The limited disclosure of this information is authorized by law and does not constitute a waiver of any confidentiality claims.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Patricia Haman in the EPA's Office of Congressional and Intergovernmental Relations at 202-564-2806.

Sincerely,

Gina McCarthy
Assistant Administrator

Enclosure

Enclosure

Responses to Questions from March 22 Letter

1.) *Market volatility and irregular trading: In a particularly volatile three-week period beginning February 19, the price of conventional RINs nearly quadrupled from $0.28 before falling precipitously. Prices hit $1.10 on both March 8 and March 11, and then fell to intraday lows of $0.60 and $0.67 on March 12 and March 14, respectively.*[1] *These price spikes appear to be most pronounced in West Coast and East Coast markets. One industry report indicated that conventional ethanol with a RIN in the Midwest market actually had a negative value of 4.6 cents compared to ethanol without a RIN at the same time that ethanol with RINs in the West Coast market had a value of $1.325 compared to ethanol without a RIN.*[2]

1a. *Please detail the trading activity that occurred during the period of February 19 to March 14, with particular attention paid to the trading days of March 1, March 7, March 9, March 12 and March 14, when market data shows that intraday price ranges exceeded $0.10. Please identify any unusually large trades, high-volume trading, bids or offers that were markedly higher or lower than others in the market, and trades involving market participants that have not been active in conventional RIN markets. Please identify the traders involved in these trades.*

As background, the EPA-Moderated Transaction System (EMTS) is not a trading platform. Rather, it is a system that records and tracks the tens of thousands of RIN transactions (generation, buy/sell, and retirement) that occur each day. As stated in the preamble to the RFS 2 regulations, "[w]hile we believe that EMTS will simplify and reduce burdens on the regulated community, it is important to point out that EMTS is strictly a RIN tracking and managing tool designed to facilitate reporting under the Renewable Fuel Standard program." 75 Fed. Reg. 14731-1432 (March 26, 2010).

RIN buy/sell transactions are typically facilitated by RIN agents and brokers. After transactions have been completed, they must be submitted to EMTS within five business days. EMTS ensures that any recorded RIN transfers between two parties are limited to those involving RINs from registered producers (no one else can create a RIN) and that RIN balances remain accurate (two parties can't claim to hold the same RIN). In this sense, EMTS acts much like a title company recording the transfer of RIN ownership between two parties.

As shown in the tables below, EMTS recorded 132,733 "standard trade" transactions involving approximately three billion separated (Table 1a-1) or assigned (Table 1a-2) D6 RINs[3] between February 19 and March 14, 2013. RIN buyers and sellers are required to self report either "Price per RIN" or "Price per Gallon" for the transaction. There is no clear threshold for what would be considered an unusually large trade as some companies routinely trade large volumes in comparison to other companies. We also note that clerical errors for self reported transaction

[1] Ethanol & Gasoline Component Spot Market Prices, *OPIS Ethanol & Biodiesel Information Service*, volume 10, issues 9 (March 4, 2013), 10 (March 11, 2013) and 11 (March 18, 2013).
[2] *Ibid.*
[3] Assigned RINs are RINs that accompany a volume of renewable fuel. Separated RINs do not accompany a volume of renewable fuel. Requirements for separating RINs from volumes of renewable fuel are specified in the renewable fuel standard regulations.

prices will inevitably occur (e.g., misplacing a decimal point and reporting two dollars when twenty cents is intended).

Table 1a-1. Price per RIN for Separated D6 RINs from February 19, 2013 – March 14, 2013

Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total RINs	Transactions
14-Mar-13	0.01	0.4	1	16,915,187	800
2013	0.01	0.4	1	15,273,771	792
2012	0.22	0.53	0.67	1,641,416	8
13-Mar-13	0.01	0.54	1	25,104,384	232
2013	0.01	0.5	1	19,841,501	71
2012	0.35	0.55	0.95	5,262,883	161
12-Mar-13	0.01	0.35	1.05	14,792,661	1,252
2013	0.01	0.32	1.05	8,420,703	910
2012	0.13	0.43	0.95	6,371,958	342
11-Mar-13	0.01	0.42	1.05	18,059,705	596
2013	0.01	0.35	1.05	15,664,424	383
2012	0.27	0.55	0.68	2,395,281	213
8-Mar-13	0.01	0.46	1.03	24,082,160	947
2013	0.01	0.7	1.03	12,771,336	181
2012	0.4	0.41	0.83	11,310,824	766
7-Mar-13	0.02	0.22	0.81	22,370,916	978
2013	0.02	0.21	0.81	17,454,085	973
2012	0.26	0.58	0.7	4,916,831	5
6-Mar-13	0.01	0.44	0.77	3,866,808	170
2013	0.01	0.44	0.77	2,790,627	164
2012	0.3	0.43	0.63	1,076,181	6
5-Mar-13	0.01	0.43	0.75	21,809,575	534
2013	0.01	0.43	0.75	16,972,723	521
2012	0.27	0.53	0.67	4,836,852	13
4-Mar-13	0.03	0.27	0.75	13,468,975	65
2013	0.03	0.26	0.75	13,452,137	64
2012	0.36	0.36	0.36	16,838	1
1-Mar-13	0.03	0.42	0.6	13,369,236	171
2013	0.03	0.43	0.6	6,629,162	163
2012	0.03	0.34	0.46	6,740,074	8
28-Feb-13	0.01	0.37	0.55	38,367,625	476

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Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total RINs	Transactions
2013	0.01	0.36	0.55	24,012,831	228
2012	0.01	0.38	0.48	14,354,794	248
27-Feb-13	0.01	0.31	0.45	34,619,572	834
2013	0.01	0.33	0.45	15,078,264	308
2012	0.06	0.3	0.42	19,541,308	526
26-Feb-13	0.01	0.23	0.44	23,173,605	105
2013	0.01	0.22	0.44	11,351,543	74
2012	0.01	0.25	0.41	11,822,062	31
25-Feb-13	0.01	0.29	0.46	34,977,943	1,353
2013	0.01	0.07	0.46	10,792,437	252
2012	0.01	0.34	0.42	24,185,506	1,101
22-Feb-13	0.01	0.36	0.42	99,756,002	311
2013	0.01	0.28	0.4	15,811,614	124
2012	0.03	0.41	0.42	68,698,236	186
2011	0.03	0.03	0.03	15,246,152	1
21-Feb-13	0.01	0.16	0.45	46,990,213	70
2013	0.01	0.07	0.45	3,071,296	40
2012	0.01	0.29	0.4	43,918,917	30
20-Feb-13	0.01	0.16	0.3	148,324,692	812
2013	0.01	0.25	0.3	13,144,997	392
2012	0.01	0.07	0.26	106,883,322	418
2011	0.01	0.01	0.01	28,296,373	2
19-Feb-13	0.01	0.12	0.27	12,692,134	467
2013	0.03	0.12	0.26	984,897	142
2012	0.11	0.12	0.27	5,707,237	323
2011	0.01	0.01	0.01	6,000,000	2

Contains Information Claimed as CBI

Table 1a-2. Price per Gallon for Assigned D6 RINs from February 19, 2013 – March 14, 2013

Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total Volume (gallons)	Total RINs	Transactions
14-Mar-13	2.16	2.56	3.01	51,945,752	52,166,818	4,029
2013	2.16	2.56	3.01	51,945,752	52,166,818	4,029
13-Mar-13	1.98	2.54	2.99	63,776,504	63,780,268	4,285
2013	1.98	2.54	2.99	63,776,504	63,780,268	4,285
12-Mar-13	2.12	2.54	2.98	52,726,781	52,730,531	4,159
2013	2.12	2.54	2.98	52,146,781	52,150,531	4,158
2012	2.46	2.46	2.46	580,000	580,000	1
11-Mar-13	0.45	2.52	3.31	81,095,546	81,103,487	5,085
2013	0.45	2.52	3.31	81,095,546	81,103,487	5,085
10-Mar-13	1.35	2.56	2.96	12,151,538	12,151,538	986
2013	2.19	2.56	2.96	11,868,927	11,868,927	985
2012	1.35	1.35	1.35	282,611	282,611	1
9-Mar-13	2.18	2.52	2.92	17,474,850	17,474,850	1,357
2013	2.18	2.52	2.92	17,474,850	17,474,850	1,357
8-Mar-13	1.51	2.49	2.93	58,190,413	58,201,210	3,818
2013	1.51	2.49	2.93	58,190,413	58,201,210	3,818
7-Mar-13	0.37	2.49	3.31	55,185,466	55,460,243	3,920
2013	0.37	2.49	3.31	54,694,914	54,969,691	3,916
2012	2.41	2.41	2.41	490,552	490,552	4
6-Mar-13	1.51	2.48	3.4	55,160,787	55,173,802	3,923
2013	1.51	2.48	3.4	55,153,094	55,166,109	3,922
2012	2.36	2.36	2.36	7,693	7,693	1
5-Mar-13	1.51	2.47	2.93	55,788,963	55,808,955	4,141
2013	1.51	2.47	2.93	55,788,963	55,808,955	4,141
4-Mar-13	0.25	2.46	2.9	76,381,964	76,381,964	4,428
2013	0.25	2.46	2.9	76,381,764	76,381,764	4,427
2012	2.5	2.50	2.5	200	200	1
3-Mar-13	2.17	2.48	2.93	9,491,229	9,491,229	931
2013	2.17	2.48	2.93	9,491,229	9,491,229	931
2-Mar-13	2.19	2.47	2.93	19,343,018	19,502,517	1,415
2013	2.19	2.47	2.93	19,343,018	19,502,517	1,415
1-Mar-13	2.15	2.47	2.93	45,958,935	46,335,542	3,424
2013	2.15	2.47	2.93	45,958,935	46,335,542	3,424
28-Feb-13	2.15	2.47	2.85	75,107,289	75,194,513	4,563

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Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total Volume (gallons)	Total RINs	Transactions
2013	2.15	2.47	2.85	75,078,596	75,165,820	4,541
2012	2.37	2.47	2.51	28,693	28,693	22
27-Feb-13	1.98	2.47	2.93	65,533,483	65,533,483	3,840
2013	1.98	2.47	2.93	65,522,670	65,522,670	3,828
2012	2.41	2.46	2.48	10,813	10,813	12
26-Feb-13	2.05	2.47	2.84	57,629,856	57,637,696	3,813
2013	2.05	2.47	2.84	57,628,123	57,635,963	3,808
2012	2.44	2.49	2.60	1,733	1,733	5
25-Feb-13	2.07	2.46	2.93	73,811,000	73,118,928	5,069
2013	2.07	2.46	2.93	73,789,542	73,097,470	5,054
2012	2.41	2.44	2.48	21,458	21,458	15
24-Feb-13	2.20	2.46	2.93	8,514,773	8,514,773	939
2013	2.20	2.46	2.93	8,474,810	8,474,810	920
2012	2.42	2.47	2.48	39,963	39,963	19
23-Feb-13	2.20	2.46	2.93	9,731,122	9,731,122	1,299
2013	2.20	2.46	2.93	9,665,952	9,665,952	1,272
2012	2.39	2.46	2.48	65,170	65,170	27
22-Feb-13	2.15	2.47	2.81	55,047,906	55,122,292	3,906
2013	2.15	2.47	2.81	54,970,258	55,008,614	3,876
2012	2.33	2.40	2.48	77,648	113,678	30
21-Feb-13	2.15	2.47	2.93	55,608,518	55,793,959	3,212
2013	2.15	2.47	2.93	55,479,611	55,570,853	3,171
2012	2.33	2.38	2.52	128,907	223,106	41
20-Feb-13	2.10	2.46	2.93	65,069,572	65,067,771	3,802
2013	2.10	2.47	2.93	64,972,501	64,970,700	3,757
2012	2.35	2.42	2.48	97,071	97,071	45
19-Feb-13	0.39	2.47	2.84	67,302,060	67,304,028	4,289
2013	2.00	2.47	2.84	67,219,610	67,214,354	4,248
2012	0.39	2.35	2.48	82,450	89,674	41

1b. Please provide the names and volume holding of the 10 largest non-physical holders of conventional RINs - for example, traders and brokers, hedge funds, banks or other financial institutions. Please provide this information for January 1, February 19, March 14 and the date of this letter.

As background, petroleum refiners and importers are considered "obligated parties" under the RFS Program. An obligated party's Renewable Volume Obligations (RVOs) are determined each year based on the RFS standards established by the EPA and the volume of gasoline and diesel fuel the obligated party produces and/or imports. Obligated parties demonstrate compliance with their RVOs by retiring RINs in EMTS following the end of each compliance year. Parties that export renewable fuel are also required to retire RINs in EMTS for compliance purposes. We interpret "non-physical holders" to mean registered parties holding RINs without associated fuel gallons (separated RINs) or registered parties holding RINs without an obligation to retire RINs under the RFS program. Table 1b shows the RIN holdings (separated RINs only) of companies that did not retire RINs for the 2012 compliance year.

Please note that the data provided in the tables below represent company balances as of March 27, 2013. While EMTS now has the ability to provide daily RIN balances by company (as the result of a recent system upgrade that was deployed into production on April 11), it does not readily provide such data going backward in time. EMTS maintains a dynamic database of all current RIN holdings to the minute and a separate change log for each individual RIN so that the EPA has a record of every RIN transaction since the inception of EMTS. To conduct the analysis presented below for the requested dates would require the recreation of the dynamic database by backtracking each individual RIN change log record to each earlier date. Such a process is technically possible and routinely done for individual RIN records, but to do so for the entire catalog of RINs is not practical.

Table 1b. RIN Holdings (separated RINs only) of the Top 10 Companies that did not Retire RINs for the 2012 Compliance Year (as of March 27, 2013)

Company Name	RIN Year	RINs Owned
Fred Meyer Inc.	2012	
	2013	1,233,340
Fred Meyer Inc. Total		1,233,340
Carbo Industries	2013	1,134,000
	2012	84,000
Carbo Industries Total		1,218,000
New England Petroleum Limited Partnership	2012	
	2013	546,000
New England Petroleum Limited Partnership Total		546,000
RINAlliance, Inc.	2013	351,834
	2012	31,498
RINAlliance, Inc. Total		383,332
Road Ranger LLC	2012	
	2013	294,890
Road Ranger LLC Total		294,890
McClure Oil Corporation	2012	
	2013	200,336
McClure Oil Corporation Total		200,336
Strategic Bio Energy LLC	2012	135,395
	2013	29,000
Strategic Bio Energy LLC Total		164,395
Wilson Oil Inc.	2012	152,105
	2013	
Wilson Oil Inc. Total		152,105
Kinder Morgan Liquids Terminal	2012	58,000
	2013	
Kinder Morgan Liquids Terminal Total		58,000
Broadbill Investment Partners, LLC	2012	
	2013	56,000
Broadbill Investment Partners, LLC Total		56,000
Nustar Marketing LLC	2012	2,245
	2013	
Nustar Marketing LLC Total		2,245

1c. Market data indicates that there were wide spreads for conventional RINs that are attached to ethanol sold in the West Coast region compared to ethanol sold in other regions of the country. Please detail the trading activity in the West Coast market that occurred during the period of February 19 to March 14. Please identify any unusually large trades, high-volume trading, bids or offers that were markedly higher or lower than others in the market, and trades involving market participants that have not previously been active in conventional RIN markets. Please identify the traders involved in these trades.

1d. Have these dramatic regional differences in the price of RINs previously existed? If so, when did they occur? Please provide reasons for these significant regional differences

As described in the response to question 1, EMTS is not a trading platform (i.e., no bid/offer functionality) but a recording system for the tens of thousands of RIN transactions that occur on a daily basis. RINs are only tracked and recorded as owned in EMTS at the company level, which may or may not be associated with the physical location of the renewable fuel. Additionally, renewable fuel that is imported into the United States from a foreign renewable fuel producer only has to enter the specific Petroleum Administration for Defense District (PADD) of the RIN generating import facility and the importer can then generate RINs on that volume even if it's not physically on-site. EMTS does not record physical location in a buy/sell transaction. Hence, we are not able to provide information on RIN pricing based on the physical location of the renewable fuel. We know of no reason for RIN prices to vary by geographic location since RINs are not physical products. In general, geographic differences in the prices for fuel products should not be larger than the transportation costs between the two markets.

2) *<u>RINs deficits among market participants:</u> The RFS requires fuel blenders, suppliers and refiners to submit a certain number of RINs for each type of biofuel to meet their RVO for a given marketing year. However, if a fuel blender or refiner ends the marketing year with a deficit of RINs in relation to its RVO, the deficit can be carried over and met in the next marketing year. If such deficits were widespread in the conventional RINs market, they could induce additional demand that would push up the price of RINS:*

2a. Were there any fuel blenders, suppliers, refiners or other RINs market participants that failed to meet their RVO for the 2012 marketing year, thus entering 2013 with deficit in conventional RINs?

As of March 27, there were a total of five companies that carried a renewable fuel RVO deficit from 2012 into 2013. The combined deficit was 32,238,691 or 0.2% of the 15.2 billion gallon renewable fuel standard for 2012.

2b. If so, please provide the name for each of these market participants and the volume of RINs in deficit as of December 31, 2012

- National Cooperative Refinery Association (9,571,465)
- Pasadena Refining Systems Inc (7,294,548)
- Canadian Pacific Railway Company (4)
- EVVO LLC (129,862)
- Monroe Energy, LLC (15,242,992)

The compliance year is a calendar year (January 1 through December 31), but RINs can be traded until the compliance reporting deadline which is February 28th of the following year. These additional two months provide obligated parties the necessary time to calculate any needed changes to their RVO, purchase the needed RINs, and retire them for compliance purposes. The 2012 RVO deficits shown above are what each company reported in its annual compliance demonstration (deadline was February 28, 2013).

3) *RINs surpluses and carryover among market participants: The RFS allows up to 20 percent of RINs generated in the prior year to be "rolled over" and applied against the subsequent year's RVO. These rollover RINs allow blenders and refiners to take advantage of surplus RINs and have effectively helped smooth out costs amid fluctuations in the price or availability of biofuels from year to year.*

3a. Please detail how many conventional RINs were generated and used during the 2012 marketing year, and how many of those RINs were rolled over into the 2013 compliance year.
3b. How do the rollovers for 2012 - 13 conventional RINs compare to the previous two years?

Table 3-1 shows the total D6 RINs generated, retired, and carried over into next compliance year. Data are only shown for 2012 and 2011. The year 2010 was a transition year from RFS1 to RFS2, with EMTS implemented in July 2010, so we do not have a complete and readily accessible dataset for the 2010 compliance period. Also, please note that, as on the EPA's RFS2 data website (http://www.epa.gov/otaq/fuels/rfsdata/index.htm), these totals exclude RINs that were retired either as "Import Volume Correction," "Invalid RIN," or "Volume Error Correction."

Table 3-1. D6 RINs Generated, Retired, and Carried over from 2012 and 2011

	2012*	2011
Total Generated	12,977,767,089	13,587,229,647
Total Retired	10,880,637,521	13,339,516,166
Total Carry-Over into Next Year	2,097,129,568 (as of 3/8/13)	3,842,017,287 (as of 3/16/12)

* The total number of carry-over RINs from 2012 to 2013 was 2.6 billion when also accounting for D4 and D5 carry over RINs.

3c. To what extent have 2012 rollover conventional RINs been used to fulfill blender and refiner RVOs during the first 10 weeks of 2013 compared to the same period for each of the previous two years?

Obligated parties report RVOs to the EPA after the end of each compliance year on February 28. The EPA will know how many 2012 rollover D6 RINs were retired for 2013 compliance purposes following the February 28, 2014 reporting deadline. However since 2012 RINs can only be used for compliance in 2012 or 2013, it would seem safe to assume that all 2012 carry-over RINs will be used in compliance demonstrations for the 2013 compliance year.

3d. Based on the current rate of ethanol production and blending, will the 2013 supply of rollover conventional RINs be expected to be depleted before year's end?

RINs are not always retired for compliance purposes in real time since compliance with the annual standards is not required until February 28 of the following year. As a result, obligated parties are not required to retire any RINs to demonstrate compliance with the 2013 standards until February 28, 2014. This includes any RINs that were generated in 2012 and were carried over into compliance year 2013. Similarly, we do not have information on the obligated parties' gasoline and diesel fuel production to estimate the demand for RINs. As a result, we cannot determine if the pool of rollover RINs from 2012 will be depleted before the end of 2013. However, we do expect that all rollover RINs from 2012 will ultimately be used for compliance with the 2013 standards since they will expire if they are not used.

4.) *Market development and use of biofuels in the United States: There is substantial evidence of declining U.S. consumption of gasoline at the same time as the Renewable Fuel Standard is increasing the volume of ethanol/biofuel that must be blended into the national gasoline supply. One approach to meeting the increasing demands of the Renewable Fuel Standard is to increase the consumption and use of gasoline with a 15 percent biofuels/ethanol blend (E15) and gasoline with 85 percent ethanol (E-85). Each gallon of the aforementioned fuels will use more biofuel than gasoline with the standard 10 percent blend (E10), which would increase consumption of and demand for biofuels.*

4a. *How much gasoline was produced and consumed in the United States during the first 10 weeks of 2013 and is projected to be consumed for the full year? How does that compare to each of the last two years?*

All information that the EPA has on actual production and near-term projections comes from the Energy Information Administration (EIA). As released in the EIA's Petroleum Supply Monthly on April 29, 2013, refiners produced 513,576 thousand barrels (21.57 billion gallons) of gasoline for the time period January-February 2013. For January-February 2012 and January-February 2011, refiners produced 511,938 thousand barrels (21.50 billion gallons) and 515,011 thousand barrels (21.63 billion gallons) of gasoline, respectively.

The Early Release of EIA's Annual Energy Outlook 2013 was released in December 2012 and contains a projection of 133.98 billion gallons of gasoline for all of 2013. This estimate includes all blends of gasoline and ethanol. In 2012, the gasoline volume consumed was 133.85 billion gallons, and in 2011 it was 134.56 billion gallons.

4b. *How much of each type of biofuel under the RFS was produced and consumed in the United States during the first 10 weeks of 2013 and is projected to be produced for the full year? How much ethanol was blended into gasoline during the first 10 weeks of 2013 and how much is projected to be blended for the full year? How do those volumes correspond with EPA's minimum volume mandates for 2013?*

The EPA tracks production of biofuels through EMTS, but does not track consumption. Production between January 1 and March 31 of 2013 is shown below:

Cellulosic biofuel	4.9 thou gal
Biomass-based diesel	266 mill gal
Advanced biofuel (other than biomass-based diesel or	126 mill gal

cellulosic biofuel)	
Conventional renewable fuel	2,870 mill gal

For 2013, cellulosic biofuel is likely to be a mixture of ethanol and renewable diesel. Biomass-based diesel is expected to be predominantly biodiesel, advanced biofuel in the above table is predominately imported sugarcane ethanol, and conventional renewable fuel is predominately corn-ethanol. Given all four categories, the total volume of ethanol produced or imported between January 1 and March 31 of 2013 is 2,993 million gallons.

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

The EPA's projection for consumption for all of 2013 is based on the proposed 2013 standards.[4] The standards set under the RFS program are in four categories. The volumes that have been proposed for 2013 are shown below:

Cellulosic biofuel	14 mill gal
Biomass-based diesel	1,280 mill gal
Total advanced biofuel (includes cellulosic biofuel, biomass-based diesel, and other advanced biofuel)	2,750 mill gal
Total renewable fuel (includes cellulosic biofuel, biomass-based diesel, other advanced biofuel, and conventional renewable fuel)	16,550 mill gal

However, there are also more than 2.6 billion carryover RINs from 2012 that can be used for compliance with the 2013 standards.

Carryover RINs from 2012 into 2013 (million)

	D Code	RINs
Biomass-Based Diesel	4	353
Advanced Biofuel	5	196
Conventional Biofuel	6	2,117
Total		2,666

The use of these carryover RINs will reduce the physical volume of renewable fuel that must be consumed in 2013.

4c. *How much of the ethanol being blended in 2013 is expected to come from domestic sources and how much is expected to be imported?*

Based on the analyses described in the February 7, 2013, Notice of Proposed Rulemaking, the volume of ethanol that is projected to be needed to meet the proposed standards would be 14.52 billion gallons. Of this volume, 13.95 billion gallons is estimated to come from domestic sources and 0.57 billion gallons is estimated to come from imports. However, up to 2.6 billion carryover

[4] 78 Fed. Reg. 9282, February 7, 2013.

RINs from 2012 will likely be used for compliance in 2013, reducing the demand for volumes of domestically-produced ethanol. The volume of imported ethanol also depends on the volumes of domestically-produced biofuels including biodiesel in excess of the applicable standard of 1.28 billion gallons.

4d. How much E10 has been consumed through the first 10 weeks of 2013 and how much is projected to be used for the full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2013 and beyond, the EPA expects that essentially all volumes of gasoline consumed in the U.S. will contain ethanol. If all gasoline is E10, we estimate that this would amount to 131.14 billion gallons in 2013 and 128.88 billion gallons in 2014.

4e. How much E15 has been consumed through the first 10 weeks of 2013 and how much E 15 is projected to be used for full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2013, the EPA expects that only a very small amount of gasoline will be E15 due to the very small number of retail service stations that currently offer it for sale. It is not clear how quickly the number of stations offering E15 will rise by 2014.

4f. How much E85 has been consumed through the first 10 weeks of 2013 and how much E85 is projected to be used for full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2012, the EIA estimated that 100 million gallons of E85 was consumed, and projects that E85 consumption will be 176 and 1,021 million gallons in 2013 and 2014, respectively.[5]

4g. Please identify the extent to which EPA has determined that existing retail infrastructure, including regulatory requirements and physical features, would need to be modified to accommodate E15 and E85, and how much capacity would be available for 2013 and 2014.

The consumption of gasoline/ethanol blends higher than E10 depends on the availability of vehicles that can consume the fuel, the number of retail stations that offer it, and the price of E15 - E85 compared to the price of E10. Any changes to these three factors can increase the volume of E15 - E85 that is consumed. The EPA has not made any specific projections of the combination of these three factors that would be needed to reach particular volume consumption goals. Our understanding is that with few exceptions, existing retail infrastructure would require modification to dispense E15-E85 blends. However, there are already over 3000 such stations across the country, and approximately 10 million FFVs in-use (approximately five percent of the

[5] EIA's Annual Energy Outlook 2013 Early Release, Table 11.

national fleet according to the EIA). Consequently, a growing number of consumers have the option to choose to purchase such fuel blends should it be priced attractively.

4h. Please describe any other factors that must be overcome to enable the wider use of E15 and E85.

The EPA has fulfilled its obligations under the Clean Air Act that needed to be completed in order for producers and distributors to bring E15[6] to market, and some companies are now lawfully introducing E15 into the marketplace. Other federal, state and local requirements and practical concerns, however, must also be addressed. For example, dispenser and tank compatibility with E15 must be considered by marketers of E15. The EPA has issued guidance and a proposed rule on tank compatibility. Since a number of states restrict the sale of some gasoline-ethanol blends, state law changes may also be needed before E15 may be sold in those states. E85 faces similar impediments to wider use, as well as those factors mentioned in the response to question 4g.

[6] EPA's E15 web page is available at: http://www.epa.gov/otaq/regs/fuels/additive/e15/.

AL-13-000-3537

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 2 1 2013

OFFICE OF
AIR AND RADIATION

The Honorable Ron Wyden
Chairman, Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Senator Wyden:

Thank you for your March 22, 2013, letter co-signed by Senator Lisa Murkowski, regarding the recent increase in prices of Renewable Identification Numbers (RINs). As you know, RINs are the tradable credits used to demonstrate compliance with the Renewable Fuel Standard (RFS), which was established by Congress in 2005 and strengthened by the Energy Independence and Security Act of 2007 (EISA).

Congress designed the RFS as a market-based program, establishing increasing volumetric requirements for various categories of biofuels while providing industry enough flexibility to determine the most cost-effective fuel mix to meet those requirements. While non-ethanol biofuels can be and have been used to meet the RFS requirements, ethanol has been, and will likely continue to be, the predominant biofuel, given its favorable economics at volumes below the 10 percent ethanol-gasoline blend (E10) saturation point (commonly referred to as the blendwall).

Over the past few months, prices for certain types of RINs have increased. Industry stakeholders and market observers have expected some upward price pressure on RINs, as the volumes of biofuel required by statute approach the E10 saturation point and as market pressure for the use of higher blends of ethanol increases.

As we monitor the RIN market, we are simultaneously looking at the potential impacts of the blendwall over the near and longer terms. We are also reviewing comments submitted in response to the agency's proposed rulemaking for the 2013 RFS volume standards, and we will carefully consider this input as we set future RFS standards. Going forward, we will consider whether any further action under the authorities established by Congress is appropriate to help ensure orderly implementation of the program. Given the importance of these issues, the EPA recognizes that it is important to avoid precipitous action that could have adverse effects on the market.

Enclosed are the agency's responses to your questions. We are providing you notice pursuant to 40 C.F.R. § 2.209(b) that some of the requested information has been claimed as confidential business information (CBI) by the submitters. We have also informed the affected businesses of the disclosure of this information to you in accordance with 40 C.F.R. § 2.209(b)(2).

Although we have not made any final determinations regarding these confidentiality claims, we respectfully request that you treat the information as confidential and that you not publicly disclose the

contents of the information to which the agency is granting you access. The limited disclosure of this information is authorized by law and does not constitute a waiver of any confidentiality claims.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Patricia Haman in the EPA's Office of Congressional and Intergovernmental Relations at 202-564-2806.

Sincerely,

Gina McCarthy
Assistant Administrator

Enclosure

Enclosure

Responses to Questions from March 22 Letter

1.) *Market volatility and irregular trading: In a particularly volatile three-week period beginning February 19, the price of conventional RINs nearly quadrupled from $0.28 before falling precipitously. Prices hit $1.10 on both March 8 and March 11, and then fell to intraday lows of $0.60 and $0.67 on March 12 and March 14, respectively.*[1] *These price spikes appear to be most pronounced in West Coast and East Coast markets. One industry report indicated that conventional ethanol with a RIN in the Midwest market actually had a negative value of 4.6 cents compared to ethanol without a RIN at the same time that ethanol with RINs in the West Coast market had a value of $1.325 compared to ethanol without a RIN.*[2]

1a. *Please detail the trading activity that occurred during the period of February 19 to March 14, with particular attention paid to the trading days of March 1, March 7, March 9, March 12 and March 14, when market data shows that intraday price ranges exceeded $0.10. Please identify any unusually large trades, high-volume trading, bids or offers that were markedly higher or lower than others in the market, and trades involving market participants that have not been active in conventional RIN markets. Please identify the traders involved in these trades.*

As background, the EPA-Moderated Transaction System (EMTS) is not a trading platform. Rather, it is a system that records and tracks the tens of thousands of RIN transactions (generation, buy/sell, and retirement) that occur each day. As stated in the preamble to the RFS 2 regulations, "[w]hile we believe that EMTS will simplify and reduce burdens on the regulated community, it is important to point out that EMTS is strictly a RIN tracking and managing tool designed to facilitate reporting under the Renewable Fuel Standard program." 75 Fed. Reg. 14731-1432 (March 26, 2010).

RIN buy/sell transactions are typically facilitated by RIN agents and brokers. After transactions have been completed, they must be submitted to EMTS within five business days. EMTS ensures that any recorded RIN transfers between two parties are limited to those involving RINs from registered producers (no one else can create a RIN) and that RIN balances remain accurate (two parties can't claim to hold the same RIN). In this sense, EMTS acts much like a title company recording the transfer of RIN ownership between two parties.

As shown in the tables below, EMTS recorded 132,733 "standard trade" transactions involving approximately three billion separated (Table 1a-1) or assigned (Table 1a-2) D6 RINs[3] between February 19 and March 14, 2013. RIN buyers and sellers are required to self report either "Price per RIN" or "Price per Gallon" for the transaction. There is no clear threshold for what would be considered an unusually large trade as some companies routinely trade large volumes in comparison to other companies. We also note that clerical errors for self reported transaction

[1] Ethanol & Gasoline Component Spot Market Prices, *OPIS Ethanol & Biodiesel Information Service*, volume 10, issues 9 (March 4, 2013), 10 (March 11, 2013) and 11 (March 18, 2013).
[2] *Ibid.*
[3] Assigned RINs are RINs that accompany a volume of renewable fuel. Separated RINs do not accompany a volume of renewable fuel. Requirements for separating RINs from volumes of renewable fuel are specified in the renewable fuel standard regulations.

prices will inevitably occur (e.g., misplacing a decimal point and reporting two dollars when twenty cents is intended).

Table 1a-1. Price per RIN for Separated D6 RINs from February 19, 2013 – March 14, 2013

Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total RINs	Transactions
14-Mar-13	0.01	0.4	1	16,915,187	800
2013	0.01	0.4	1	15,273,771	792
2012	0.22	0.53	0.67	1,641,416	8
13-Mar-13	0.01	0.54	1	25,104,384	232
2013	0.01	0.5	1	19,841,501	71
2012	0.35	0.55	0.95	5,262,883	161
12-Mar-13	0.01	0.35	1.05	14,792,661	1,252
2013	0.01	0.32	1.05	8,420,703	910
2012	0.13	0.43	0.95	6,371,958	342
11-Mar-13	0.01	0.42	1.05	18,059,705	596
2013	0.01	0.35	1.05	15,664,424	383
2012	0.27	0.55	0.68	2,395,281	213
8-Mar-13	0.01	0.46	1.03	24,082,160	947
2013	0.01	0.7	1.03	12,771,336	181
2012	0.4	0.41	0.83	11,310,824	766
7-Mar-13	0.02	0.22	0.81	22,370,916	978
2013	0.02	0.21	0.81	17,454,085	973
2012	0.26	0.58	0.7	4,916,831	5
6-Mar-13	0.01	0.44	0.77	3,866,808	170
2013	0.01	0.44	0.77	2,790,627	164
2012	0.3	0.43	0.63	1,076,181	6
5-Mar-13	0.01	0.43	0.75	21,809,575	534
2013	0.01	0.43	0.75	16,972,723	521
2012	0.27	0.53	0.67	4,836,852	13
4-Mar-13	0.03	0.27	0.75	13,468,975	65
2013	0.03	0.26	0.75	13,452,137	64
2012	0.36	0.36	0.36	16,838	1
1-Mar-13	0.03	0.42	0.6	13,369,236	171
2013	0.03	0.43	0.6	6,629,162	163
2012	0.03	0.34	0.46	6,740,074	8
28-Feb-13	0.01	0.37	0.55	38,367,625	476

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Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total RINs	Transactions
2013	0.01	0.36	0.55	24,012,831	228
2012	0.01	0.38	0.48	14,354,794	248
27-Feb-13	0.01	0.31	0.45	34,619,572	834
2013	0.01	0.33	0.45	15,078,264	308
2012	0.06	0.3	0.42	19,541,308	526
26-Feb-13	0.01	0.23	0.44	23,173,605	105
2013	0.01	0.22	0.44	11,351,543	74
2012	0.01	0.25	0.41	11,822,062	31
25-Feb-13	0.01	0.29	0.46	34,977,943	1,353
2013	0.01	0.07	0.46	10,792,437	252
2012	0.01	0.34	0.42	24,185,506	1,101
22-Feb-13	0.01	0.36	0.42	99,756,002	311
2013	0.01	0.28	0.4	15,811,614	124
2012	0.03	0.41	0.42	68,698,236	186
2011	0.03	0.03	0.03	15,246,152	1
21-Feb-13	0.01	0.16	0.45	46,990,213	70
2013	0.01	0.07	0.45	3,071,296	40
2012	0.01	0.29	0.4	43,918,917	30
20-Feb-13	0.01	0.16	0.3	148,324,692	812
2013	0.01	0.25	0.3	13,144,997	392
2012	0.01	0.07	0.26	106,883,322	418
2011	0.01	0.01	0.01	28,296,373	2
19-Feb-13	0.01	0.12	0.27	12,692,134	467
2013	0.03	0.12	0.26	984,897	142
2012	0.11	0.12	0.27	5,707,237	323
2011	0.01	0.01	0.01	6,000,000	2

Contains Information Claimed as CBI

Table 1a-2. Price per Gallon for Assigned D6 RINs from February 19, 2013 – March 14, 2013

Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total Volume (gallons)	Total RINs	Transactions
14-Mar-13	2.16	2.56	3.01	51,945,752	52,166,818	4,029
2013	2.16	2.56	3.01	51,945,752	52,166,818	4,029
13-Mar-13	1.98	2.54	2.99	63,776,504	63,780,268	4,285
2013	1.98	2.54	2.99	63,776,504	63,780,268	4,285
12-Mar-13	2.12	2.54	2.98	52,726,781	52,730,531	4,159
2013	2.12	2.54	2.98	52,146,781	52,150,531	4,158
2012	2.46	2.46	2.46	580,000	580,000	1
11-Mar-13	0.45	2.52	3.31	81,095,546	81,103,487	5,085
2013	0.45	2.52	3.31	81,095,546	81,103,487	5,085
10-Mar-13	1.35	2.56	2.96	12,151,538	12,151,538	986
2013	2.19	2.56	2.96	11,868,927	11,868,927	985
2012	1.35	1.35	1.35	282,611	282,611	1
9-Mar-13	2.18	2.52	2.92	17,474,850	17,474,850	1,357
2013	2.18	2.52	2.92	17,474,850	17,474,850	1,357
8-Mar-13	1.51	2.49	2.93	58,190,413	58,201,210	3,818
2013	1.51	2.49	2.93	58,190,413	58,201,210	3,818
7-Mar-13	0.37	2.49	3.31	55,185,466	55,460,243	3,920
2013	0.37	2.49	3.31	54,694,914	54,969,691	3,916
2012	2.41	2.41	2.41	490,552	490,552	4
6-Mar-13	1.51	2.48	3.4	55,160,787	55,173,802	3,923
2013	1.51	2.48	3.4	55,153,094	55,166,109	3,922
2012	2.36	2.36	2.36	7,693	7,693	1
5-Mar-13	1.51	2.47	2.93	55,788,963	55,808,955	4,141
2013	1.51	2.47	2.93	55,788,963	55,808,955	4,141
4-Mar-13	0.25	2.46	2.9	76,381,964	76,381,964	4,428
2013	0.25	2.46	2.9	76,381,764	76,381,764	4,427
2012	2.5	2.50	2.5	200	200	1
3-Mar-13	2.17	2.48	2.93	9,491,229	9,491,229	931
2013	2.17	2.48	2.93	9,491,229	9,491,229	931
2-Mar-13	2.19	2.47	2.93	19,343,018	19,502,517	1,415
2013	2.19	2.47	2.93	19,343,018	19,502,517	1,415
1-Mar-13	2.15	2.47	2.93	45,958,935	46,335,542	3,424
2013	2.15	2.47	2.93	45,958,935	46,335,542	3,424
28-Feb-13	2.15	2.47	2.85	75,107,289	75,194,513	4,563

Contains Information Claimed as CBI

Transfer Date by RIN Year	Min ($)	Transaction Average ($)	Max ($)	Total Volume (gallons)	Total RINs	Transactions
2013	2.15	2.47	2.85	75,078,596	75,165,820	4,541
2012	2.37	2.47	2.51	28,693	28,693	22
27-Feb-13	1.98	2.47	2.93	65,533,483	65,533,483	3,840
2013	1.98	2.47	2.93	65,522,670	65,522,670	3,828
2012	2.41	2.46	2.48	10,813	10,813	12
26-Feb-13	2.05	2.47	2.84	57,629,856	57,637,696	3,813
2013	2.05	2.47	2.84	57,628,123	57,635,963	3,808
2012	2.44	2.49	2.60	1,733	1,733	5
25-Feb-13	2.07	2.46	2.93	73,811,000	73,118,928	5,069
2013	2.07	2.46	2.93	73,789,542	73,097,470	5,054
2012	2.41	2.44	2.48	21,458	21,458	15
24-Feb-13	2.20	2.46	2.93	8,514,773	8,514,773	939
2013	2.20	2.46	2.93	8,474,810	8,474,810	920
2012	2.42	2.47	2.48	39,963	39,963	19
23-Feb-13	2.20	2.46	2.93	9,731,122	9,731,122	1,299
2013	2.20	2.46	2.93	9,665,952	9,665,952	1,272
2012	2.39	2.46	2.48	65,170	65,170	27
22-Feb-13	2.15	2.47	2.81	55,047,906	55,122,292	3,906
2013	2.15	2.47	2.81	54,970,258	55,008,614	3,876
2012	2.33	2.40	2.48	77,648	113,678	30
21-Feb-13	2.15	2.47	2.93	55,608,518	55,793,959	3,212
2013	2.15	2.47	2.93	55,479,611	55,570,853	3,171
2012	2.33	2.38	2.52	128,907	223,106	41
20-Feb-13	2.10	2.46	2.93	65,069,572	65,067,771	3,802
2013	2.10	2.47	2.93	64,972,501	64,970,700	3,757
2012	2.35	2.42	2.48	97,071	97,071	45
19-Feb-13	0.39	2.47	2.84	67,302,060	67,304,028	4,289
2013	2.00	2.47	2.84	67,219,610	67,214,354	4,248
2012	0.39	2.35	2.48	82,450	89,674	41

1b. Please provide the names and volume holding of the 10 largest non-physical holders of conventional RINs - for example, traders and brokers, hedge funds, banks or other financial institutions. Please provide this information for January 1, February 19, March 14 and the date of this letter.

As background, petroleum refiners and importers are considered "obligated parties" under the RFS Program. An obligated party's Renewable Volume Obligations (RVOs) are determined each year based on the RFS standards established by the EPA and the volume of gasoline and diesel fuel the obligated party produces and/or imports. Obligated parties demonstrate compliance with their RVOs by retiring RINs in EMTS following the end of each compliance year. Parties that export renewable fuel are also required to retire RINs in EMTS for compliance purposes. We interpret "non-physical holders" to mean registered parties holding RINs without associated fuel gallons (separated RINs) or registered parties holding RINs without an obligation to retire RINs under the RFS program. Table 1b shows the RIN holdings (separated RINs only) of companies that did not retire RINs for the 2012 compliance year.

Please note that the data provided in the tables below represent company balances as of March 27, 2013. While EMTS now has the ability to provide daily RIN balances by company (as the result of a recent system upgrade that was deployed into production on April 11), it does not readily provide such data going backward in time. EMTS maintains a dynamic database of all current RIN holdings to the minute and a separate change log for each individual RIN so that the EPA has a record of every RIN transaction since the inception of EMTS. To conduct the analysis presented below for the requested dates would require the recreation of the dynamic database by backtracking each individual RIN change log record to each earlier date. Such a process is technically possible and routinely done for individual RIN records, but to do so for the entire catalog of RINs is not practical.

Table 1b. RIN Holdings (separated RINs only) of the Top 10 Companies that did not Retire RINs for the 2012 Compliance Year (as of March 27, 2013)

Company Name	RIN Year	RINs Owned
Fred Meyer Inc.	2012	
	2013	1,233,340
Fred Meyer Inc. Total		1,233,340
Carbo Industries	2013	1,134,000
	2012	84,000
Carbo Industries Total		1,218,000
New England Petroleum Limited Partnership	2012	
	2013	546,000
New England Petroleum Limited Partnership Total		546,000
RINAlliance, Inc.	2013	351,834
	2012	31,498
RINAlliance, Inc. Total		383,332
Road Ranger LLC	2012	
	2013	294,890
Road Ranger LLC Total		294,890
McClure Oil Corporation	2012	
	2013	200,336
McClure Oil Corporation Total		200,336
Strategic Bio Energy LLC	2012	135,395
	2013	29,000
Strategic Bio Energy LLC Total		164,395
Wilson Oil Inc.	2012	152,105
	2013	
Wilson Oil Inc. Total		152,105
Kinder Morgan Liquids Terminal	2012	58,000
	2013	
Kinder Morgan Liquids Terminal Total		58,000
Broadbill Investment Partners, LLC	2012	
	2013	56,000
Broadbill Investment Partners, LLC Total		56,000
Nustar Marketing LLC	2012	2,245
	2013	
Nustar Marketing LLC Total		2,245

1c. Market data indicates that there were wide spreads for conventional RINs that are attached to ethanol sold in the West Coast region compared to ethanol sold in other regions of the country. Please detail the trading activity in the West Coast market that occurred during the period of February 19 to March 14. Please identify any unusually large trades, high-volume trading, bids or offers that were markedly higher or lower than others in the market, and trades involving market participants that have not previously been active in conventional RIN markets. Please identify the traders involved in these trades.

1d. Have these dramatic regional differences in the price of RINs previously existed? If so, when did they occur? Please provide reasons for these significant regional differences

As described in the response to question 1, EMTS is not a trading platform (i.e., no bid/offer functionality) but a recording system for the tens of thousands of RIN transactions that occur on a daily basis. RINs are only tracked and recorded as owned in EMTS at the company level, which may or may not be associated with the physical location of the renewable fuel. Additionally, renewable fuel that is imported into the United States from a foreign renewable fuel producer only has to enter the specific Petroleum Administration for Defense District (PADD) of the RIN generating import facility and the importer can then generate RINs on that volume even if it's not physically on-site. EMTS does not record physical location in a buy/sell transaction. Hence, we are not able to provide information on RIN pricing based on the physical location of the renewable fuel. We know of no reason for RIN prices to vary by geographic location since RINs are not physical products. In general, geographic differences in the prices for fuel products should not be larger than the transportation costs between the two markets.

2) *<u>RINs deficits among market participants:</u> The RFS requires fuel blenders, suppliers and refiners to submit a certain number of RINs for each type of biofuel to meet their RVO for a given marketing year. However, if a fuel blender or refiner ends the marketing year with a deficit of RINs in relation to its RVO, the deficit can be carried over and met in the next marketing year. If such deficits were widespread in the conventional RINs market, they could induce additional demand that would push up the price of RINS:*

2a. Were there any fuel blenders, suppliers, refiners or other RINs market participants that failed to meet their RVO for the 2012 marketing year, thus entering 2013 with deficit in conventional RINs?

As of March 27, there were a total of five companies that carried a renewable fuel RVO deficit from 2012 into 2013. The combined deficit was 32,238,691 or 0.2% of the 15.2 billion gallon renewable fuel standard for 2012.

2b. If so, please provide the name for each of these market participants and the volume of RINs in deficit as of December 31, 2012

- National Cooperative Refinery Association (9,571,465)
- Pasadena Refining Systems Inc (7,294,548)
- Canadian Pacific Railway Company (4)
- EVVO LLC (129,862)
- Monroe Energy, LLC (15,242,992)

The compliance year is a calendar year (January 1 through December 31), but RINs can be traded until the compliance reporting deadline which is February 28th of the following year. These additional two months provide obligated parties the necessary time to calculate any needed changes to their RVO, purchase the needed RINs, and retire them for compliance purposes. The 2012 RVO deficits shown above are what each company reported in its annual compliance demonstration (deadline was February 28, 2013).

3) *RINs surpluses and carryover among market participants: The RFS allows up to 20 percent of RINs generated in the prior year to be "rolled over" and applied against the subsequent year's RVO. These rollover RINs allow blenders and refiners to take advantage of surplus RINs and have effectively helped smooth out costs amid fluctuations in the price or availability of biofuels from year to year.*

3a. Please detail how many conventional RINs were generated and used during the 2012 marketing year, and how many of those RINs were rolled over into the 2013 compliance year.
3b. How do the rollovers for 2012 - 13 conventional RINs compare to the previous two years?

Table 3-1 shows the total D6 RINs generated, retired, and carried over into next compliance year. Data are only shown for 2012 and 2011. The year 2010 was a transition year from RFS1 to RFS2, with EMTS implemented in July 2010, so we do not have a complete and readily accessible dataset for the 2010 compliance period. Also, please note that, as on the EPA's RFS2 data website (http://www.epa.gov/otaq/fuels/rfsdata/index.htm), these totals exclude RINs that were retired either as "Import Volume Correction," "Invalid RIN," or "Volume Error Correction."

Table 3-1. D6 RINs Generated, Retired, and Carried over from 2012 and 2011

	2012*	2011
Total Generated	12,977,767,089	13,587,229,647
Total Retired	10,880,637,521	13,339,516,166
Total Carry-Over into Next Year	2,097,129,568 (as of 3/8/13)	3,842,017,287 (as of 3/16/12)

* The total number of carry-over RINs from 2012 to 2013 was 2.6 billion when also accounting for D4 and D5 carry over RINs.

3c. To what extent have 2012 rollover conventional RINs been used to fulfill blender and refiner RVOs during the first 10 weeks of 2013 compared to the same period for each of the previous two years?

Obligated parties report RVOs to the EPA after the end of each compliance year on February 28. The EPA will know how many 2012 rollover D6 RINs were retired for 2013 compliance purposes following the February 28, 2014 reporting deadline. However since 2012 RINs can only be used for compliance in 2012 or 2013, it would seem safe to assume that all 2012 carry-over RINs will be used in compliance demonstrations for the 2013 compliance year.

3d. Based on the current rate of ethanol production and blending, will the 2013 supply of rollover conventional RINs be expected to be depleted before year's end?

RINs are not always retired for compliance purposes in real time since compliance with the annual standards is not required until February 28 of the following year. As a result, obligated parties are not required to retire any RINs to demonstrate compliance with the 2013 standards until February 28, 2014. This includes any RINs that were generated in 2012 and were carried over into compliance year 2013. Similarly, we do not have information on the obligated parties' gasoline and diesel fuel production to estimate the demand for RINs. As a result, we cannot determine if the pool of rollover RINs from 2012 will be depleted before the end of 2013. However, we do expect that all rollover RINs from 2012 will ultimately be used for compliance with the 2013 standards since they will expire if they are not used.

4.) *Market development and use of biofuels in the United States: There is substantial evidence of declining U.S. consumption of gasoline at the same time as the Renewable Fuel Standard is increasing the volume of ethanol/biofuel that must be blended into the national gasoline supply. One approach to meeting the increasing demands of the Renewable Fuel Standard is to increase the consumption and use of gasoline with a 15 percent biofuels/ethanol blend (E15) and gasoline with 85 percent ethanol (E-85). Each gallon of the aforementioned fuels will use more biofuel than gasoline with the standard 10 percent blend (E10), which would increase consumption of and demand for biofuels.*

4a. How much gasoline was produced and consumed in the United States during the first 10 weeks of 2013 and is projected to be consumed for the full year? How does that compare to each of the last two years?

All information that the EPA has on actual production and near-term projections comes from the Energy Information Administration (EIA). As released in the EIA's Petroleum Supply Monthly on April 29, 2013, refiners produced 513,576 thousand barrels (21.57 billion gallons) of gasoline for the time period January-February 2013. For January-February 2012 and January-February 2011, refiners produced 511,938 thousand barrels (21.50 billion gallons) and 515,011 thousand barrels (21.63 billion gallons) of gasoline, respectively.

The Early Release of EIA's Annual Energy Outlook 2013 was released in December 2012 and contains a projection of 133.98 billion gallons of gasoline for all of 2013. This estimate includes all blends of gasoline and ethanol. In 2012, the gasoline volume consumed was 133.85 billion gallons, and in 2011 it was 134.56 billion gallons.

4b. How much of each type of biofuel under the RFS was produced and consumed in the United States during the first 10 weeks of 2013 and is projected to be produced for the full year? How much ethanol was blended into gasoline during the first 10 weeks of 2013 and how much is projected to be blended for the full year? How do those volumes correspond with EPA's minimum volume mandates for 2013?

The EPA tracks production of biofuels through EMTS, but does not track consumption. Production between January 1 and March 31 of 2013 is shown below:

Cellulosic biofuel	4.9 thou gal
Biomass-based diesel	266 mill gal
Advanced biofuel (other than biomass-based diesel or	126 mill gal

cellulosic biofuel)	
Conventional renewable fuel	2,870 mill gal

For 2013, cellulosic biofuel is likely to be a mixture of ethanol and renewable diesel. Biomass-based diesel is expected to be predominantly biodiesel, advanced biofuel in the above table is predominately imported sugarcane ethanol, and conventional renewable fuel is predominately corn-ethanol. Given all four categories, the total volume of ethanol produced or imported between January 1 and March 31 of 2013 is 2,993 million gallons.

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

The EPA's projection for consumption for all of 2013 is based on the proposed 2013 standards.[4] The standards set under the RFS program are in four categories. The volumes that have been proposed for 2013 are shown below:

Cellulosic biofuel	14 mill gal
Biomass-based diesel	1,280 mill gal
Total advanced biofuel (includes cellulosic biofuel, biomass-based diesel, and other advanced biofuel)	2,750 mill gal
Total renewable fuel (includes cellulosic biofuel, biomass-based diesel, other advanced biofuel, and conventional renewable fuel)	16,550 mill gal

However, there are also more than 2.6 billion carryover RINs from 2012 that can be used for compliance with the 2013 standards.

Carryover RINs from 2012 into 2013 (million)

	D Code	RINs
Biomass-Based Diesel	4	353
Advanced Biofuel	5	196
Conventional Biofuel	6	2,117
Total		2,666

The use of these carryover RINs will reduce the physical volume of renewable fuel that must be consumed in 2013.

4c. How much of the ethanol being blended in 2013 is expected to come from domestic sources and how much is expected to be imported?

Based on the analyses described in the February 7, 2013, Notice of Proposed Rulemaking, the volume of ethanol that is projected to be needed to meet the proposed standards would be 14.52 billion gallons. Of this volume, 13.95 billion gallons is estimated to come from domestic sources and 0.57 billion gallons is estimated to come from imports. However, up to 2.6 billion carryover

[4] 78 Fed. Reg. 9282, February 7, 2013.

RINs from 2012 will likely be used for compliance in 2013, reducing the demand for volumes of domestically-produced ethanol. The volume of imported ethanol also depends on the volumes of domestically-produced biofuels including biodiesel in excess of the applicable standard of 1.28 billion gallons.

4d. How much E10 has been consumed through the first 10 weeks of 2013 and how much is projected to be used for the full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2013 and beyond, the EPA expects that essentially all volumes of gasoline consumed in the U.S. will contain ethanol. If all gasoline is E10, we estimate that this would amount to 131.14 billion gallons in 2013 and 128.88 billion gallons in 2014.

4e. How much E15 has been consumed through the first 10 weeks of 2013 and how much E 15 is projected to be used for full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2013, the EPA expects that only a very small amount of gasoline will be E15 due to the very small number of retail service stations that currently offer it for sale. It is not clear how quickly the number of stations offering E15 will rise by 2014.

4f. How much E85 has been consumed through the first 10 weeks of 2013 and how much E85 is projected to be used for full-year 2013 and 2014?

All information that the EPA has on actual consumption of gasoline/ethanol blends comes from the EIA. The EIA has not yet released any actual consumption volumes for 2013.

For 2012, the EIA estimated that 100 million gallons of E85 was consumed, and projects that E85 consumption will be 176 and 1,021 million gallons in 2013 and 2014, respectively.[5]

4g. Please identify the extent to which EPA has determined that existing retail infrastructure, including regulatory requirements and physical features, would need to be modified to accommodate E15 and E85, and how much capacity would be available for 2013 and 2014.

The consumption of gasoline/ethanol blends higher than E10 depends on the availability of vehicles that can consume the fuel, the number of retail stations that offer it, and the price of E15 - E85 compared to the price of E10. Any changes to these three factors can increase the volume of E15 - E85 that is consumed. The EPA has not made any specific projections of the combination of these three factors that would be needed to reach particular volume consumption goals. Our understanding is that with few exceptions, existing retail infrastructure would require modification to dispense E15-E85 blends. However, there are already over 3000 such stations across the country, and approximately 10 million FFVs in-use (approximately five percent of the

[5] EIA's Annual Energy Outlook 2013 Early Release, Table 11.

national fleet according to the EIA). Consequently, a growing number of consumers have the option to choose to purchase such fuel blends should it be priced attractively.

4h. Please describe any other factors that must be overcome to enable the wider use of E15 and E85.

The EPA has fulfilled its obligations under the Clean Air Act that needed to be completed in order for producers and distributors to bring E15[6] to market, and some companies are now lawfully introducing E15 into the marketplace. Other federal, state and local requirements and practical concerns, however, must also be addressed. For example, dispenser and tank compatibility with E15 must be considered by marketers of E15. The EPA has issued guidance and a proposed rule on tank compatibility. Since a number of states restrict the sale of some gasoline-ethanol blends, state law changes may also be needed before E15 may be sold in those states. E85 faces similar impediments to wider use, as well as those factors mentioned in the response to question 4g.

[6] EPA's E15 web page is available at: http://www.epa.gov/otaq/regs/fuels/additive/e15/.

AL-08-000-3552

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 27 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
United States House of Representatives
Washington, DC 20515-6115

Dear Chairman Dingell:

Thank you for your letter of March 12, 2008, requesting responses to questions for the record following the October 4, 2008 hearing before the Subcommittee on Environment and Hazardous Materials titled, "Environmental Justice and the Toxics Release Inventory Reporting Program: Communities Have a Right to Know."

The U.S. Environmental Protection Agency (EPA) is working diligently to provide responses to your questions and will forward them to you shortly.

Again, thank you for your letter. If you have any further questions, please contact me, or you staff may contact Carolyn Levine or Pamela Janifer in EPA's Office of Congressional and Intergovernmental Relations. Carolyn can be reached at (202) 564-1859, and Pamela can be reached at (202) 564-6969.

Sincerely,

Christopher P. Bliley

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 27 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your letter of March 12, 2008, requesting responses to questions for the record following the October 4, 2008 hearing before the Subcommittee on Environment and Hazardous Materials titled, "Environmental Justice and the Toxics Release Inventory Reporting Program: Communities Have a Right to Know."

The U.S. Environmental Protection Agency (EPA) is working diligently to provide responses to your questions and will forward them to you shortly.

Again, thank you for your letter. If you have any further questions, please contact me, or you staff may contact Carolyn Levine or Pamela Janifer in EPA's Office of Congressional and Intergovernmental Relations. Carolyn can be reached at (202) 564-1859, and Pamela can be reached at (202) 564-6969.

Sincerely,

Christopher P. Bliley

AL-08-000-3552

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

APR 17 2008

The Honorable John Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Dingell:

Thank you for your letter of February 26, 2008, containing follow-up questions from the October 4, 2007, hearing before the Subcommittee on Environment and Hazardous Materials on the Environmental Protection Agency's Environmental Justice Program, and H.R. 1103, the Environmental Justice Act of 2007. As requested, we have responded directly to Chairman Wynn. Enclosed for your consideration are responses to these questions.

I hope this information will be useful to you and the Members of the Committee. If you have further questions, please contact me or your staff may contact Carolyn Levine in my office at (202) 564-1859.

Sincerely,

Christopher P. Bliley
Associate Administrator

Enclosure

EPA Responses to Questions for the Record:
October 4, 2007 Hearing on "Environmental Justice and the Toxics Release Inventory Reporting Program: Communities Have a Right to Know"
H.R. 1103, the "Environmental Justice Act of 2007"
H.R. 1055, the "Toxic Right to Know Protection Act"
Before the House Committee on Energy and Commerce
Subcommittee on Environment and Hazardous Materials

The Honorable Albert Wynn

1. **You stated in your oral testimony that the Environmental Protection Agency (EPA) Office of Environmental Justice, the agency's lead office for environmental justice issues, has participated in very few rulemaking efforts.**

   a. Since August 1, 2006, how many proposed or final rules have included a formal analysis of environmental justice issues? Please provide a list of each proposed and final rule, along with the title and date of the formal analysis document.
   b. Since August 1, 2006, how many proposed or final rules have been reviewed and commented upon by EPA's Office of Environmental Justice? Please provide a list of each proposed and final rule, along with the title and date of the comment document.
   c. Have EPA's rulemaking workgroups regularly and consistently included a representative from the EPA Office of Environmental Justice? If not, please explain why not.

2. **You stated in your oral testimony that EPA needs to build the capability of the agency's Program Offices so that they can take the lead on environmental justice issues while developing rules and regulations.**

   a. Does any EPA Program Office currently have the capacity to take the lead on environmental issues during rulemaking efforts? If so, please list each Program Office that currently has this capacity.
   b. For each EPA Program Office that does not currently have the capacity, when will that capacity be developed? Please list each EPA Program Office and a date by which the capacity to lead on environmental justice issues during the rulemaking process can be expected.

3. **When does EPA expect to have a formal analysis of environmental justice issues fully incorporated into the agency's rulemaking process?**

RESPONSE to Questions 1-3:

As stated in EPA's testimony, EPA has developed a comprehensive approach to integrating environmental justice considerations into its everyday work, including rule

and regulation development. Our approach recognizes that (1) environmental justice issues are complex and multi-faceted; (2) that a most effective way to address these issues entails using the range of existing statutory, regulatory and enforcement tools available; and (3) that we need to continue to build the capacity of EPA's Program Offices, including the Office of Environmental Justice (OEJ), to incorporate environmental justice into our programs, policies and activities as comprehensively as possible. In order to meet this goal, the Agency's Program Offices collaborate to develop frameworks to identify and address environmental justice issues in the rulemaking process, and to conduct environmental justice analyses in regulatory activities.

EPA continues to make substantial progress on integrating environmental justice into the agency's rulemaking efforts.

- EPA's Program Offices have the capacity to take the lead on environmental justice issues while developing rules and regulations. In accordance with a systematic approach for rulemaking integration, each Office is expected to develop its internal capacity to identify, analyze and incorporate environmental justice concerns into its regulatory activities.

- Our Program Offices continue to build that capacity by collaborating with the Office of Environmental Justice (OEJ) to identify additional or enhanced analyses during a rulemaking for which an environmental justice analysis may be critical.

- OEJ and the agency's Program Offices also accomplish this integration goal through cross-agency committees and work groups involved in regulatory action development and other regulatory activities, such as participating in monthly Status Report briefings for senior management in the Office of Air and Radiation; biweekly meetings of the Regulatory Steering Committee (RSC); and the quarterly meetings of the Regional Regulatory Contacts (RRC).

EPA's Program Offices are collaborating on activities to revise existing regulatory management tools and to develop tools to incorporate Executive Order 12898 on environmental justice, and enhanced stakeholder involvement and public participation, such as:

- Developing the Environmental Justice Regulatory Template, in use since December of 2006, recommending language for document drafters when writing the preambles to EPA-issued rules.

- Revising the Action Development Process (ADP) Tiering (and Maintenance) Form to include prompts that the Lead Program Office can check for (1) potential impacts of a rule on the "health or environmental condition" of minority communities or low income communities, (2) disproportionately high and adverse human health and environmental effects on minority or low

income populations, and (3) the need for consultation or work group involvement by either OEJ or an appropriate Environmental Justice Coordinator.

- Ensuring that the revised ADP Guidance and the Stakeholder Involvement Rule Aid incorporate explicit references to EO 12898 and environmental justice issues.

- Developing an Environmental Justice Rule Aid to assist rule writers in identifying environmental justice issues at tiering.

- Revising the ADP Flow Chart to identify the stages through the ADP process for consultation with OEJ and/or the appropriate Environmental Justice Coordinator and/or Program management official in Tier 1 & 2 Rules, regardless of whether the work group has a designated a work group member with environmental justice expertise.

- Developing a substantive guidance on methodologies and data to support formal environmental justice analyses in agency rules and activities.

As you can see, OEJ's role in rulemaking is evolving, and the Office has become more actively involved in both procedural and substantive rulemaking activities at EPA. OEJ was never envisioned to participate in all, or even most, work groups which identify environmental justice issues. As part of our systematic approach to integrating environmental justice into the Agency's mission, we expect the lead Program Office in a rulemaking to take the responsibility for the consideration of environmental justice issues, consulting with OEJ, as needed.

4. As part of the TRI rulemaking, did EPA provide a complete copy of the final rulemaking package (including a final economic analysis) to the EPA National Environmental Justice Advisory Committee (NEJAC) for review and comment?

If so:

a) When was a complete copy of the final rulemaking package provided to the NEJAC?

b) Did the NEJAC provide comments in response?

c) Were any NEAJC comments incorporated into the TRI Burden Reduction Final Rule?

Please provide copies of all comments prepared by NEJAC regarding changes to the TRI reporting requirements that were submitted to EPA.

RESPONSE: No. EPA did not provide a complete copy of the final rulemaking package to the NEJAC. As a matter of practice, EPA has utilized the NEJAC for advice and recommendations on broad public policy issues, rather than on specific rulemaking actions. These issues have included brownfields, waste transfer stations, superfund relocation, permitting, cumulative risks and impacts, pollution prevention, fish consumption, meaningful involvement and fair treatment by Tribal environmental programs, disaster preparedness and response, and goods movement.

AL-09-000-3556

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 03 2009

OFFICE OF
AIR AND RADIATION

The Honorable Edward J. Markey
Chairman, Subcommittee on Energy and Environment
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515-6115

Dear Mr. Chairman:

Thank you for your letter dated February 27, 2009, to Administrator Jackson, in which you requested that the U.S. Environmental Protection Agency (EPA) estimate the economic impacts of the Committee on Energy and Commerce draft climate change legislation. The Administrator asked that I respond to your letter.

We would be pleased to conduct this analysis. As you know, we recently held a meeting with your staff to discuss the details, timing, and assumptions needed to conduct the analysis.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz, in EPA's Office of Congressional and Intergovernmental Relations, at (202) 564-3668.

Sincerely,

Elizabeth Craig

Elizabeth Craig
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 0 3 2009

OFFICE OF
AIR AND RADIATION

The Honorable Henry A. Waxman
Chairman, Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515-6115

Dear Chairman Waxman:

Thank you for your letter dated February 27, 2009, to Administrator Jackson, in which you requested that the U.S. Environmental Protection Agency (EPA) estimate the economic impacts of the Committee on Energy and Commerce draft climate change legislation. The Administrator asked that I respond to your letter.

We would be pleased to conduct this analysis. As you know, we recently held a meeting with your staff to discuss the details, timing, and assumptions needed to conduct the analysis.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz, in EPA's Office of Congressional and Intergovernmental Relations, at (202) 564-3668.

Sincerely,

Elizabeth Craig

Elizabeth Craig
Acting Assistant Administrator

AL-09-001-3728

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 27 2009

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your letter of September 14, 2009, in which Congressman Walden and you asked for information about the U.S. Environmental Protection Agency's use of the special pay authorities under Title 42 of the United States Code (42 U.S.C.). We are currently drafting a response to your letter in coordination with representatives from the Office of Personnel Management and the Department of Health and Human Services. Such coordination will ensure that you receive a comprehensive response to your inquiries.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Clara Jones in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3701.

Sincerely,

Craig E. Hooks
Assistant Administrator

cc: The Honorable Henry A. Waxman, Chairman
The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your letter of September 14, 2009, in which Congressman Walden and you asked for information about the U.S. Environmental Protection Agency's use of the special pay authorities under Title 42 of the United States Code (42 U.S.C.). We are currently drafting a response to your letter in coordination with representatives from the Office of Personnel Management and the Department of Health and Human Services. Such coordination will ensure that you receive a comprehensive response to your inquiries.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Clara Jones in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3701.

Sincerely,

Craig E. Hooks
Assistant Administrator

cc: The Honorable Henry A. Waxman, Chairman
The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations
bcc: Clara Jones
Dennis Franklin
Tom Dickerson

AL-09-001-3728

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR - 3 2010

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your letter of September 14, 2009, in which you and Congressman Walden requested information about the Environmental Protection Agency's (EPA or Agency) use of the special pay authorities under Title 42 of the United States Code (U.S.C.). The following information responds to the questions you have asked.

As you noted in your letter, EPA is an independent agency and is not part of the Department of Health and Human Services (HHS) or the Public Health Service. EPA's Title 42 special hiring authority is derivative in nature. In 1970, when EPA was created, Reorganization Plan No. 3 of 1970 transferred certain functions and responsibilities to the EPA Administrator from HHS (then known as the Department of Health, Education, and Welfare). This statutory authority was recently confirmed under EPA's current appropriations act, the Omnibus Appropriations Act of 2009, Public Law 111-8, which allowed EPA's Office of Research and Development to employ up to thirty (30) persons under authority provided by 42 U.S.C. § 209. Public Law 111-8 amended and broadened similar language that first appeared in EPA's 2006 Appropriations Act, Public Law 109-54.[1] As HHS has done, EPA issued its own implementing regulations for this special hiring authority, found at 40 C.F.R. Part 18.

EPA did not receive a delegation from HHS to exercise the Title 42 special hiring authority, nor is such a delegation required. Public Law 109-54 required EPA to consult with the Office of Personnel Management (OPM) and EPA did so in 2006, at the time EPA promulgated regulations and developed its own internal Agency Order and Operating Manual for Title 42 hiring. OPM thereafter made recommendations and approved EPA's procedures. OPM did not approve individual appointments to Title 42 positions at EPA; such approval by OPM is not required.

EPA believes 42 U.S.C. § 209(f) is not limited in application to "scientist employees" because the statutory language in Public Law 111-8 expressly uses the term "persons." Further, § 209 provides for the employment of special consultants and scientific fellows. Within EPA, all of the Title 42 appointees are classified in scientific occupations.

[1] In November 2009, this authority was affirmed and extended until 2015. See Conference Report to H.R. 2996.

There are no salary caps imposed by § 209(f) or (g) or by Public Law 111-8, but EPA's own internal Agency guidance provides that the total compensation paid to any Title 42 employee may not exceed a specified fixed total per annum.

Currently, EPA has 11 employees receiving compensation under the Title 42 program. Five of the Title 42 employees were converted to Title 42 appointments from the federal Civil Service. The total amount of money EPA has spent on the increased salaries for these conversions is just over $22,943. This figure represents an average increase of 4.76% per conversion. EPA has not paid a retention bonus/incentive to any of the individuals getting Title 42 pay. In fact, one of the employees who is currently getting Title 42 pay *was* receiving a retention bonus/incentive *prior* to his conversion to a Title 42 appointment, but that retention bonus/incentive was ended at the time of the conversion.

There are ten employees who currently receive Title 42 annual salaries above $153,000. The aggregate amount that EPA has paid in excess of $153,000 for all of the Title 42 salaries since the inception of the program is $179,387.70. In 2008, the highest annual total compensation paid to a Title 42 employee was $199,909 (which was also the highest annual salary paid that year). For 2009, the highest annual salary is $209,904, with an award bringing the total compensation to $210,275.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call David Piantanida in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-8318.

Sincerely,

Craig E. Hooks
Assistant Administrator

cc: The Honorable Henry A. Waxman, Chairman
Committee on Energy and Commerce

The Honorable Greg Walden, Ranking Member
Subcommittee on Oversight and Investigations

The Honorable Bart Stupak, Chairman
Subcommittee on Oversight and Investigations

AL-10-000-4700

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 3 2010

OFFICE OF
ENVIRONMENTAL INFORMATION

The Honorable Darrell Issa
Ranking Member
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Issa:

This is in response to your March 25, 2010, letter to Administrator Jackson seeking information concerning the Environmental Protection Agency's (EPA) Freedom of Information Act (FOIA) program.

When EPA testified before the Committee on Oversight and Government Reform, Subcommittee on Information Policy, Census, and National Archives on March 18, 2010, we provided numerous examples of the Agency's commitment to the letter and spirit of FOIA and Open Government. EPA's National FOIA program has been engaged in an improvement process to ensure greater timeliness, accountability and transparency in processing FOIA requests submitted to the Agency. In the mid-2000's, EPA had over 23,000 unanswered FOIA requests and, according to the White House, two of the oldest overdue requests in the federal government. Agency FOIA professionals, using strong leadership, improved technology, revised procedures and processes, and the support of subject matter experts across the Agency have successfully reduced the number of pending FOIA requests from 23,000 in 2001 to 783 by the end of FY 2008. By the end of FY 2009, EPA reached an all-time low of 317 unanswered FOIA requests with a 53% reduction in FY 2009 alone.

The Annual FOIA Report to the Department of Justice submitted by all Federal agencies indicates that EPA is a leader among its peers in its FOIA processing activities. This leadership position is due in no small part to the commitment of the Agency to meeting both the letter and spirit of FOIA, the Presidential Memoranda and the Attorney General's Guidelines on FOIA.

In embracing the President's mandate for greater transparency, EPA's FOIA staff worked in concert with Agency program representatives to make information publicly available from Agency data bases on EPA's Web sites without the need to file a FOIA request. The result was a reduction in the amount of time to receive Agency records from weeks to seconds. An example of EPA's proactive disclosure of Agency records is demonstrated by the redesign of the Office of Pesticide Program's electronic FOIA reading room where tens of thousands of highly sought after pesticide science and regulatory records are now available to the public on the Web, obviating the need to file a FOIA request. Since making these highly sou46665 ght after records

available on line, FOIA requests for this information have substantially declined. Other parts of the Agency are exploring opportunities to use similar technology to proactively disclose records. The Agency also operates a national FOIA Hotline, staffed by a FOIA Requester Service Center specialist, who answers questions from the public about their requests whether filed at headquarters or in EPA's ten regions and general questions concerning FOIA.

In addition, for the past several years, even prior to the recent FOIA policy change, EPA had already committed to specific FOIA improvement goals in response to E.O. 13392 (http://www.epa.gov/foia/docs/backlogfy08-10.pdf.). The Agency met all of its FOIA improvement goals ahead of schedule and continues to strive to further improve its FOIA administrative responsibilities.

In response to your request for specific documents, the following enclosures are provided:

- A CD-ROM containing an Excel spreadsheet with over 3000 pages of information from the Agency's FOIA log noting the reason for each full or partial denial, along with a one-page document that summarizes the disposition of the requests received between 01/21/2009 and 04/01/2010 and explains the FOIA exemptions listed under Column 9; and

- A copy of Agency records and communications referring or relating to the implementation of President Obama's memorandum and Attorney General Holder's Guidelines. Additional relevant information will be sent to you from EPA's Office of Inspector General.

If you have further questions, please contact me or your staff may call Tom Dickerson in the Office of Congressional and Intergovernmental Relations on 202-564-3648.

Sincerely,

Linda A. Travers
Acting Assistant Administrator

Enclosures

FOIA Log Summary

Disposition of Requests Received Between 01/21/2009 to 04/01/2010

Total number of requests "Denied in Full"	:	88
Total number of requests "Denied in Part"	:	653
Total number of requests "Granted in Full"	:	4761
Total number of requests with "Other Reasons"	:	6092

The requests that do not have a completed date are still open.

Exemptions

Exemption 1 (b)(1): Classified national defense and foreign relations information.

Exemption 2 (b)(2): Internal agency rules and practices.

Exemption 3 (b)(3): Information that is prohibited from disclosure by another federal law.

Exemption 4 (b)(4): Trade secrets and other confidential business information.

Exemption 5 (b)(5): Inter-agency or intra-agency communications that are protected by legal privileges.

Exemption 6 (b)(6): Information involving matters of personal privacy.

Exemption 7 (b)(7): Records or information compiled for law enforcement purposes, to the extent that the production of those records (A) could reasonably be expected to interfere with enforcement proceedings, (B) would deprive a person of a right to a fair trial or an impartial adjudication, (C) could reasonably be expected to constitute an unwarranted invasion of personal privacy, (D) could reasonably be expected to disclose the identity of a confidential source, (E) would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions, or (F) could reasonably be expected to endanger the life or physical safety of any individual.

Exemption 8 (b)(8): Information relating to the supervision of financial institutions.

Exemption 9 (b)(9): Geological information on wells.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 3 2010

OFFICE OF
ENVIRONMENTAL INFORMATION

The Honorable Patrick McHenry
Ranking Member
Subcommittee on Information Policy, Census, and National Archives
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman McHenry:

This is in response to your March 25, 2010, letter to Administrator Jackson seeking information concerning the Environmental Protection Agency's (EPA) Freedom of Information Act (FOIA) program.

When EPA testified before the Committee on Oversight and Government Reform, Subcommittee on Information Policy, Census, and National Archives on March 18, 2010, we provided numerous examples of the Agency's commitment to the letter and spirit of FOIA and Open Government. EPA's National FOIA program has been engaged in an improvement process to ensure greater timeliness, accountability and transparency in processing FOIA requests submitted to the Agency. In the mid-2000's, EPA had over 23,000 unanswered FOIA requests and, according to the White House, two of the oldest overdue requests in the federal government. Agency FOIA professionals, using strong leadership, improved technology, revised procedures and processes, and the support of subject matter experts across the Agency have successfully reduced the number of pending FOIA requests from 23,000 in 2001 to 783 by the end of FY 2008. By the end of FY 2009, EPA reached an all-time low of 317 unanswered FOIA requests with a 53% reduction in FY 2009 alone.

The Annual FOIA Report to the Department of Justice submitted by all Federal agencies indicates that EPA is a leader among its peers in its FOIA processing activities. This leadership position is due in no small part to the commitment of the Agency to meeting both the letter and spirit of FOIA, the Presidential Memoranda and the Attorney General's Guidelines on FOIA.

In embracing the President's mandate for greater transparency, EPA's FOIA staff worked in concert with Agency program representatives to make information publicly available from Agency data bases on EPA's Web sites without the need to file a FOIA request. The result was a reduction in the amount of time to receive Agency records from weeks to seconds. An example of EPA's proactive disclosure of Agency records is demonstrated by the redesign of the Office of Pesticide Program's electronic FOIA reading room where tens of thousands of highly sought after pesticide science and regulatory records are now available to the public on the Web, obviating the need to file a FOIA request. Since making these highly sought after records

available on line, FOIA requests for this information have substantially declined. Other parts of the Agency are exploring opportunities to use similar technology to proactively disclose records. The Agency also operates a national FOIA Hotline, staffed by a FOIA Requester Service Center specialist, who answers questions from the public about their requests whether filed at headquarters or in EPA's ten regions and general questions concerning FOIA.

In addition, for the past several years, even prior to the recent FOIA policy change, EPA had already committed to specific FOIA improvement goals in response to E.O. 13392 (http://www.epa.gov/foia/docs/backlogfy08-10.pdf.). The Agency met all of its FOIA improvement goals ahead of schedule and continues to strive to further improve its FOIA administrative responsibilities.

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If you have further questions, please contact me or your staff may call Tom Dickerson in the Office of Congressional and Intergovernmental Relations on 202-564-3648.

Sincerely,

Linda A. Travers

Linda A. Travers
Acting Assistant Administrator

Enclosures

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Exemption 9 (b)(9): Geological information on wells.

AL-10-000-7459

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 8 2010

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Darrell Issa
Ranking Member
Committee on Oversight and Government Reform
U. S. House of Representatives
Washington, D.C. 20515

Dear Congressman Issa:

On behalf of Administrator Lisa Jackson, thank you for your May 11, 2010, letter and the opportunity to address the Environmental Protection Agency's (EPA) role in the lead remediation recently completed in the Ariel Rios North building (ARN). The protection of all our employees continues to be a top priority for us and cleanup was completed in early May 2010.

The ARN, built in the 1930s, is federal property operated by the General Services Administration (GSA). EPA is currently the largest tenant having initially occupied the building in 1999 after extensive renovation by GSA. Another occupant is the United States Secret Service (USSS), which operated two firing ranges in the basement for decades. The source of the lead could not be absolutely determined but may have come from the shooting ranges which, at the request of GSA and EPA, are currently out of service pending complete renovation by GSA and USSS. Further assessments by GSA and the U.S. Public Health Service (PHS) also indicate potential degradation of lead paint and materials used in the building's original construction.

In February, GSA notified EPA of the presence of lead particulate based primarily on sampling results proximate to the shooting range. We took immediate action to determine the extent and severity of the lead requesting copies of GSA's sampling plan and data results as well as conducting our own independent sampling. We communicated directly with senior Agency officials, local unions, and our workforce; collaborated with GSA, Federal Occupational Health (FOH), the USSS, Occupational Safety and Health Administration (OSHA), and the PHS; and offered employees the opportunity to have their blood tested for lead. A total of 50 EPA employees obtained blood lead tests at our health unit. A FOH board-certified physician reviewed blood test results which were all within acceptable limits and subsequently notified each employee. Additionally, we established an intranet site to educate and inform our staff on lead-related matters, including standards and regulations, sampling data results, frequently asked questions, correspondence, helpful links, and the ability to contact us regarding questions or concerns.

EPA, GSA, and the USSS collected more than 500 air and wipe samples to properly characterize the presence of lead. Air sampling results were all below the action level of 30 micrograms per cubic meter established by the OSHA. For lead particulate matter, some wipe samples in the basement and above ceiling tiles exceeded OSHA's recommended clearance level of 200 micrograms per square foot that GSA and the USSS used. EPA elected to use a more stringent clearance level for accessible working surfaces of 40 micrograms per square foot, consistent with Section 403 of the Toxic Substances Control Act for residential dwellings that seek to protect children 6 years and younger. The recent April 22, 2010, EPA rule on Lead Renovation, Repair and Painting Program referenced in your letter applies to homes, childcare facilities, and schools rather than to commercial buildings or occupational settings.

Based upon the sampling results, GSA decided to clean portions of the basement which required relocating occupants in the affected areas. The cleanup involved disposing of ceiling tiles in accordance with EPA regulations, scraping and encapsulating lead-based paint and plaster, using high efficiency particulate air vacuums and wet wiping the substrate and appurtenances in the overhead. After completion, GSA and EPA conducted separate post cleanup sampling to verify the effectiveness of the cleaning prior to re-occupying affected work spaces. GSA also developed and implemented interim control measures for any work requiring access above the ceiling to ensure the protection of the workers and building occupants.

The responses below specifically pertain to the questions in your letter:

1) When did EPA first learn of the lead contamination in its facilities?

   GSA and EPA initially identified ventilation and potential lead concerns associated with the firing range in the basement of ARN in May 2001, which were mitigated by GSA at that time. Regarding the more recent experience, GSA officially notified EPA of the identification of lead particulate on February 17, 2010.

2) What actions did EPA take to respond?

   Please refer to paragraphs 3 and 4 above.

3) Who was in charge of coordinating EPA's response?

   EPA's Office of Administration and Resources Management.

4) How many employees have been exposed to unsafe levels of lead? Were any of the employees exposed pregnant at the time?

   Based on sampling results, we are not aware of any elevated blood-lead levels as a result of any exposures. While we were not able to require identification of employees who may be pregnant, EPA provided information associated with lead risks to women and especially those who are or may be planning to become pregnant. In addition, blood tests were recommended and made available through Agency Health Units. All blood test

results were medically reviewed and communicated to the employee(s) by a board-certified physician provided by FOH.

5) Why were employees instructed to pack up their own belongings in lead exposed areas?

In order to enable cleanup activities, occupants in the basement area where these activities were to occur were asked to plan for a relocation period of up to 30 days and to take personal belongings to preclude any damage. As all prior samples taken in this area by GSA or EPA in locations generally accessible to employees were well below the OSHA Action Level, there is no evidence to suggest that anyone would have incurred potential exposure to elevated levels of lead.

6) When was lead first discovered in the "janitor's closet" on the basement floor of the Ariel Rios Building? When were the janitors removed from their location?

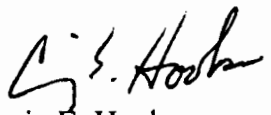
EPA was made aware of the lead in the "janitor's closet" as a result of the sampling that was done by GSA post their February 17, 2010, notification to EPA. The "janitor's closet" is a custodial area not included in EPA's leased space, controlled by GSA and not intended for use by EPA personnel. For further information concerning the "janitor's closet", please contact GSA.

7) When does EPA expect cleanup to be completed?

The cleanup was completed in early May.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Clara Jones in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3701.

Sincerely,



Craig E. Hooks
Assistant Administrator

cc: The Honorable Edolphus Towns, Chairman

A(-09-001-7766

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 22 2010

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Darrell Issa
Ranking Member
Committee on Oversight and Government Reform
United States House of Representatives
Washington, D.C. 20515-6143

Dear Congressman Issa:

Thank you for your letter of November 23, 2009 requesting information from the Environmental Protection Agency (EPA) regarding recipient reporting under Section 1512 of the American Recovery and Reinvestment Act (Recovery Act). EPA's response to your request is provided below.

1. **The language used in the Terms and Conditions for each Recovery Act-funded contracts, grants and loan agreement related to failure to report or inaccurate reporting under Section 1512 of the Recovery Act.**

EPA did not make any Recovery Act loans. It did award Recovery Act contracts and grants/cooperative agreements. In its Recovery Act contracts, EPA included the Section 1512 reporting contract clause required by FAR 4.1501.

In its Recovery Act grants and cooperative agreements, EPA included the Section 1512 term and condition required by 2 CFR Part 176 Subpart A.

2. **A list of Recovery Act awardees from the Environmental Protection Agency that did not file or have been found to have filed inaccurately under award agreements related to Section 1512 of the Recovery Act.**

As of September 30, 2009, EPA had awarded a total of 635 Recovery Act funding agreements. EPA reviewed recipient-reported information associated with these agreements in accordance with guidance issued by the Office of Management and Budget (OMB) (see Enclosure A). As required by the guidance, EPA evaluated the information to determine if there were material omissions or significant reporting errors. The Agency identified material omissions involving ten recipients that failed to file reports. The Recovery Accountability and Transparency Board

has posted the names of these recipients at http://www.recovery.gov/Transparency/RecipientReportedData/Documents/NonReportersByAgency-ReportingPeriod1.pdf (see pages 127 -128). The Agency did not identify any significant reporting errors.

3. **A list of awardees that the Environmental Protection Agency has already contacted or plans to contact regarding a lack of filing or inaccurate filing under award agreements related to Section 1512 of the Recovery Act.**

EPA has contacted the ten recipients that failed to file reports and has taken appropriate follow-up actions as required by OMB guidance (see Enclosure B).

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Sven-Erik Kaiser in EPA's Office of Congressional and Intergovernmental Relations at (202) 566-2753.

Sincerely,

Craig E. Hooks
Assistant Administrator

Enclosures

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

June 22, 2009

M-09-21

MEMORANDUM FOR THE HEADS OF DEPARTMENTS AND AGENCIES

FROM: Peter R. Orszag
Director

SUBJECT: Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009

This memorandum transmits government-wide guidance for carrying out the reporting requirements included in Section 1512 of the American Recovery and Reinvestment Act of 2009 (Recovery Act). The reports required under Section 1512 of the Act will be submitted by recipients beginning in October 2009 and will contain detailed information on the projects and activities funded by the Recovery Act. When published on www.Recovery.gov, these reports will provide the public with an unprecedented level of transparency into how Federal dollars are being spent and will help drive accountability for the timely, prudent, and effective spending of recovery dollars.

Federal efforts to provide transparency into Recovery Act spending have been underway since the Act's inception. Today, www.Recovery.gov and individual agency websites contain voluminous data on Federal agency spending, including weekly updates on all Recovery Act obligations and outlays. As significant recovery funds have now made their way into local communities and the work to rebuild our economy continues to gain momentum, it is essential that the public have access to information on the manner in which funds are being expended at the local level.

Recipient reports required by Section 1512 of the Recovery Act will answer important questions, such as:

- Who is receiving Recovery Act dollars and in what amounts?
- What projects or activities are being funded with Recovery Act dollars?
- What is the completion status of such projects or activities and what impact have they had on job creation and retention?

Based on input received from the public on previous implementing guidance issued by the Office of Management and Budget (OMB), the reporting framework in the attached guidance has been updated and enhanced to capture additional spending data from prime recipients and sub-recipients of Federal financial assistance Recovery Act

awards. Further, OMB has worked with the Recovery Accountability and Transparency Board to deploy a nationwide data collection system at the website www.FederalReporting.gov that will reduce information reporting burden on recipients by simplifying reporting instructions and providing a user-friendly mechanism for submitting required data. However, the attached guidance is not intended to serve as a detailed set of user instructions for the www.FederalReporting.gov system. Instead, additional details for interacting with the system will be provided through the solution itself.

The attached guidance does not apply to Federal government contracts. Additional guidance to Federal government contractors will be forthcoming. Further, as the President directed in his March 20, 2009, Memorandum entitled "Ensuring Responsible Spending of Recovery Act Funds," OMB conducted a 60-day review of the Administration's policy on communications with lobbyists regarding Recovery Act funds. OMB's revised guidance on lobbyist communications is also forthcoming.

Any questions about the requirements contained in the guidance can be sent to recovery@omb.eop.gov.

Thank you for your cooperation.

Attachment

Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009

Table of Contents

TABLE OF CONTENTS 1
SECTION 1 – GENERAL INFORMATION 2
SECTION 2 – BASIC PRINCIPLES AND REQUIREMENTS OF RECOVERY ACT RECIPIENT REPORTING 6
SECTION 3 – RECIPIENT REPORTING PROCESS 16
SECTION 4 – DATA QUALITY REQUIREMENTS 27
SECTION 5 – REPORTING ON JOBS CREATION ESTIMATES BY RECIPIENTS 33
APPENDIX – REFERENCE SHEET OF FREQUENTLY USED GUIDANCE TERMS 38

Section 1 – General Information

1.1 What is the purpose of this Guidance?

The purpose of this Guidance is to provide Federal agencies and funding recipients with information necessary to effectively implement the reporting requirements included in Section 1512 of the American Recovery and Reinvestment Act of 2009 ("Recovery Act," or "the Act").

This Guidance:

- Answers questions and clarifies issues related to the mechanics and chronology of recipient reporting required by the Recovery Act;
- Provides clarification on what information will be required to be reported into the central reporting solution at www.FederalReporting.gov and what information will be reported on www.Recovery.gov;
- Instructs recipients on steps that must be taken to meet these reporting requirements, including the incorporation of sub-recipient reporting requirements under Section 1512(c)(4) of the Act; and
- Establishes a common framework for Federal agencies and recipients to manage a data quality process associated with the Recovery Act recipient reporting requirements.

1.2 Does this Guidance modify any previously issued guidance by the Office of Management and Budget (OMB) related to recipient reporting?

This Guidance builds on previously issued guidance materials, covering new areas not previously addressed (e.g., data quality requirements and logistical details surrounding the www.FederalReporting.gov reporting solution), but it also clarifies, and in some cases modifies, previously issued requirements. In particular, this Guidance:

- Identifies additional data elements required pursuant to Section 1512 of the Recovery Act to enhance transparency (Section 2.3 and the supplemental materials to this Guidance);
- Modifies requirements related to recipient data reporting due on July 10, 2009 (Section 2.6); and
- Updates information on methodologies and approaches for reporting job creation/retention estimates (Section 5).

1.3 To which Federal programs does this Guidance apply?

A list of Federal programs subject to Section 1512 of the Recovery Act will be posted on OMB's website and www.Recovery.gov as supplemental materials to this Guidance.

1.4 Does this Guidance apply to both recipients of Federal assistance awards and Federal contract awards under the Recovery Act?

No. This Guidance does not apply to recipients of Federal contract awards directly from the Federal government. However, recipients of Federal contract awards directly from the Federal government will submit information required by Section 1512 of the Recovery Act through the www.FederalReporting.gov website. The relevant guidance for these recipients is provided in interim Federal Acquisition Regulation (FAR) clause 52.204-11. It is important to note that consideration of the public comments received on the interim FAR clause might result in changes to the clause when it is finalized. Therefore, further guidance, instructions, and examples specifically applying to Federal government contractors will be published in the Federal Register when the clause is finalized. The explanations and example on estimating jobs in Section 5 of this Guidance is consistent with the current interim FAR clause.

In addition, individuals receiving direct payments from the Federal government are not subject to the reporting requirements outlined in this Guidance, as defined by Section 1512(b)(1)(A) of the Act. Sole proprietorships however are subject to the reporting requirements (Section 2.2).

Recipients of loan guarantees are not subject to the reporting requirements outlined in this Guidance, as defined by Section 1512(b)(1)(A) of the Act except 100 percent guaranteed loans financed through the Federal Financing Bank

The provisions in the Guidance apply to recipients of grants, loans, tribal agreements, cooperative agreements, and other forms of assistance (other than those noted above). This Guidance also applies to sub-awards and other payments made by recipients of Federal assistance, including those awards or payments that are made in the form of a contract (i.e., contracts made by an entity other than the Federal government).
The reporting requirements do not apply to recipients receiving funds through entitlement or tax programs or to individuals.[1] The Federal agency or prime recipient awarding funds to individuals will report the aggregated amounts disbursed to individuals. Section 2.4 of this Guidance provides further instruction on aggregate reporting.

1.5 Does this Guidance contain any specific provision for a Federal agency to seek a waiver of existing legislative or administrative requirements?

No. If a Federal agency believes it is appropriate to seek a waiver of an existing requirement in order to facilitate effective implementation of the Recovery Act, the Federal agency shall pursue such waiver consistent with existing Federal processes (e.g., waivers for the Paperwork Reduction Act).

[1] To avoid using personal identification, sole proprietorships should register using a TIN or EIN.

1.6 Do the Federal agencies have flexibility to issue further program-specific guidance on recipient reporting?

This Guidance is not intended to impact requirements outside of Section 1512 of the Recovery Act. The Recovery Act may contain additional recipient reporting responsibilities that are specific to certain Federal programs. Recipients will have to comply with any reporting as outlined in the award agreement, which may result in submitting similar data under this Guidance to the Federal awarding agency. In these areas, recipients should rely on program-specific guidance and instructions issued by the relevant Federal agency.

Thus, it is anticipated that Federal agencies will, as appropriate, issue clarifying guidance to funding recipients. Additional guidance for Recovery funding recipients must be in accordance with OMB guidance. Federal agency-specific reporting guidance must not, without prior approval from OMB, require the use of any existing reporting systems to collect Section 1512 reporting that exclude or bypass the central reporting solution at www.FederalReporting.gov. See also Section 2.8.

1.7 What is the process for the public to provide input or comment on the provisions of this Guidance?

Feedback about this guidance document may be submitted to recovery@omb.eop.gov and should have the term "guidance feedback" in the title of the email. Further, the Recovery Accountability and Transparency Board ("Board") expects to issue a separate Federal Register notice as part of the Paperwork Reduction Act (PRA) clearance process. This Federal Register notice follows the original PRA notice published April 1, 2009. The public will have an opportunity to comment through the updated PRA notice which will include the new data elements added to the Section 1512 reporting model as described in Section 2 of this Guidance.

1.8 What additional Recovery Act Implementation Guidance is available?

February 20, 2009	M-09-10 Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009 http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m0910.pdf
February 25, 2009	Bulletin No.09-02 Budget Execution of the American Recovery and Reinvestment Act of 2009 Appropriations http://www.whitehouse.gov/omb/assets/bulletins/b09-02.pdf
March 2009	OMB Circular No. A-133 Single Audit Compliance Supplement http://www.whitehouse.gov/omb/circulars_a133_compliance_09toc/
April 3, 2009	M-09-15 Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009 http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-15.pdf
May 11, 2009	M-09-18 Payments to State Grantees for Administrative Costs of Recovery Act Activities http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-18.pdf

June 30, 2009[2] Addendum to the Single Audit Compliance Supplement – American Recovery and Reinvestment Act
http://www.whitehouse.gov/omb/circular_a133_compliance_09toc/

1.9 Under what authority is this Guidance being issued?

This Guidance is issued under the authority of 31 U.S.C. 1111; Reorganization Plan No. 2 of 1970; Executive Order 11541; the Chief Financial Officers Act of 1990 (Pub. L. 101-576); the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282); and the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5).

[2] The Addendum is planned for publication on June 18, 2009, and will be available at the link provided.

Section 2 – Basic Principles and Requirements of Recovery Act Recipient Reporting

2.1 What recipient reporting is required in Section 1512 of the Recovery Act?

Section 1512 of the Recovery Act requires reports on the use of Recovery Act funding by recipients no later than the 10th day after the end of each calendar quarter (beginning the quarter ending September 30, 2009) and for the Federal agency providing those funds to make the reports publicly available no later than the 30th day after the end of that quarter. Aimed at providing transparency into the use of these funds, the recipient reports are required to include the following detailed information:

- Total amount of funds received; and of that, the amount spent on projects and activities;
- A list of those projects and activities funded by name to include[3]:
    - Description
    - Completion status
    - Estimates on jobs created or retained;
- Details on sub-awards[4] and other payments.

Further information on the details of these reports is outlined in this Section, and the specific data elements to be reported on are contained in the data dictionary included in the document entitled, *Recipient Reporting Data Model.* This document will be published on OMB's website and www.Recovery.gov as supplemental materials to this Guidance.

2.2 Who is required to report under the Recovery Act?

The prime recipients of all programs identified in the list of Federal programs subject to Section 1512 of the Recovery Act in the supplemental materials to this Guidance are responsible for reporting the information required by Section 1512 of the Act and as provided in this Guidance. Prime recipients may choose to delegate certain reporting requirements to sub-recipients, as described in Section 2.3.

The **prime recipients** are non-Federal entities that receive Recovery Act funding as Federal awards in the form of grants, loans, or cooperative agreements directly from the Federal government. Federal agencies are not considered prime- or sub-recipients. The movement of Recovery Act funds between Federal agencies is not subject to Section 1512 reporting.

Payments made by prime recipients of Federal award dollars can be classified into two categories – (i) payments to sub-recipients and (ii) payments to vendors[5]. The prime

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[3] Section 1512(c)(3)(E) requires that State and local governments making infrastructure investments must provide information on the purpose, total costs, rationale for the infrastructure project and contact information of an individual.

[4] Section 1512(c)(4) requires details on the data elements required to comply with the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. 109-282).

[5] Refer to OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations for additional information.

recipient is responsible for reporting data on payments made to both sub-recipients and vendors. However, as noted in Section 2.3, the reporting requirements for payments made to sub-recipients are not the same as the reporting requirements for payments made to vendors.

A **sub-recipient** is a non-Federal entity that expends Federal awards received from another entity to carry out a Federal program but does not include an individual who is a beneficiary of such a program.[6]

Specifically, sub-recipients are non-Federal entities that are awarded Recovery funding through a legal instrument from the prime recipient to support the performance of any portion of the substantive project or program for which the prime recipient received the Recovery funding. Additionally, the terms and conditions of the Federal award are carried forward to the sub-recipient. It is possible that a sub-recipient for one award may also be a prime recipient of another Federal award provided directly from the Federal Government.

Under this Guidance, sub-recipients that receive all or a portion of Recovery funding from a prime recipient may be delegated the responsibility by the prime recipient to report information into the central reporting solution at www.FederalReporting.gov. This Guidance does not provide for such a delegation to vendors. The policy regarding delegation of reporting by the prime recipient is further described in Section 2.3 of this Guidance.

A **vendor** is defined as a dealer, distributor, merchant, or other seller providing goods or services that are required for the conduct of a Federal program.[7] Prime recipients or sub-recipients may purchase goods or services needed to carry out the project or program from vendors. Vendors are not awarded funds by the same means as sub-recipients and are not subject to the terms and conditions of the Federal financial assistance award.

The characteristics of a vendor that make it distinct from a sub-recipient are summarized below. A vendor:

(1) Provides the goods and services within normal business operations;
(2) Provides similar goods or services to many different purchasers;
(3) Operates in a competitive environment;
(4) Provides goods or services that are ancillary to the operation of the Federal program; and
(5) Is not subject to compliance requirements of the Federal program.

[6] Refer to OMB Circular A-133 for additional information and definitions. OMB Circular A-110, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-profit Organizations, as codified in 2 CFR 215, provides further clarification on the definition of a sub-recipient.

[7] Refer to OMB Circular A-133 for additional information and definitions.

In general, individuals receiving benefit payments or other types of Federal awards are excluded from reporting information under Section 1512 of the Act. In certain cases, individual loan recipients (as either prime- or sub-recipients) may be required to comply with Section 1512 reporting requirements — for example, if the recipient is a sole proprietorship. Individuals other than sole-proprietorships are not subject to Section 1512 reporting requirements, for example individuals receiving direct loans for purchase or refinancing of a single family home.

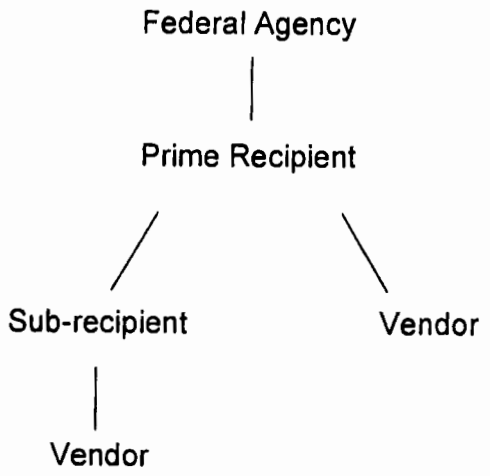
The relevant Federal agency managing a loan program with Recovery Act dollars must issue supplemental guidance detailing instances in which individual recipients of loan funds (including 100 percent guaranteed loans financed through the Federal Financing Bank) are required to meet the requirements of Section 1512 and this Guidance.

The Federal agency or prime recipients awarding funds to individuals will report the aggregated amounts disbursed to individuals. Section 2.4 of this Guidance provides further instruction on aggregate reporting for prime- or sub-recipients.

As mentioned in Section 1.3, a list of Federal programs subject to the Recovery Act recipient reporting requirements will be published on OMB's website and www.Recovery.gov as supplemental material to this Guidance. There are some Federal programs that received Recovery Act funds that do not appear on the list. These include mandatory programs, programs and accounts directly used in the operations of Federal agencies, programs contained in Division B of the Act, and other programs providing benefits to individuals, which are specifically not subject to the Section 1512 reporting requirements. The Federal agencies awarding funds for these programs will continue to report the amounts disbursed for these programs and this information will be available to the public on www.Recovery.gov.

2.3 What are the respective responsibilities of prime recipients and sub-recipients in meeting Section 1512 reporting requirements?

The accompanying illustration demonstrates the basic framework for prime recipient and sub-recipient reporting.



Prime Recipients:

The prime recipient is ultimately responsible for the reporting of all data required by Section 1512 of the Recovery Act and this Guidance, including the Federal Funding Accountability and Transparency Act (FFATA) data elements for the sub-recipients of the prime recipient required under 1512(c)(4). Prime recipients may delegate certain reporting requirements to sub-recipients, as described below. If the reporting is delegated to a sub-recipient, the delegation must be made in time for the sub-recipient to prepare for the reporting, including registering in the system. Further information on registration in the system is in Section 3.4 of this Guidance.

In addition, the prime recipient must report three additional data elements associated with any vendors receiving funds from the prime recipient for any payments greater than $25,000. Specifically, the prime recipient must report the identity of the vendor by reporting the D-U-N-S number[8], the amount of the payment, and a description of what was obtained in exchange for the payment. If the vendor does not have a D-U-N-S number, then the name and zip code of the vendor's headquarters will be used for identification. Vendors, as defined in this guidance, are not required to obtain a D-U-N-S number.

Sub-Recipients of the Prime Recipient:

The sub-recipients of the prime recipient may be required by the prime recipient to report the FFATA data elements required under 1512(c)(4) for payments from the prime recipient to the sub-recipient. The reporting sub-recipients must also report one data element associated with any vendors receiving funds from that sub-recipient. Specifically, the sub-recipient must report, for any payments greater than $25,000, the identity of the vendor by reporting the D-U-N-S number, if available, or otherwise the

[8] The Dun & Bradstreet, or D-U-N-S, number is explained in further detail in Section 3.5 of this Guidance.

name and zip code of the vendor's headquarters. Vendors are not required to obtain a D-U-N-S number. If a sub-recipient is not delegated the responsibility to report FFATA data elements for sub-awards from its prime recipients or any sub-recipient vendor information, the prime and sub-recipients must develop a process by which this information will be reported in sufficient time to meet the reporting timeframes outlined in Section 3.2.

Required Data:

The specific data elements to be reported by prime recipients and sub-recipients are included in the data dictionary contained in the *Recipient Reporting Data Model*. This document will be published on OMB's website and www.Recovery.gov as supplemental materials to this Guidance. Below are the basic reporting requirements to be reported on prime recipients, recipient vendors, sub-recipients, and sub-recipient vendors. Administrative costs are excluded from the reporting requirements. The basic reporting requirements below may contain multiple data elements as defined in the data dictionary.

Prime Recipient

1. **Federal Funding Agency Name**
2. **Award identification**
3. **Recipient D-U-N-S**
4. **Parent D-U-N-S**
5. **Recipient CCR information**
6. **CFDA number, if applicable**
7. **Recipient account number**
8. **Project/grant period**
9. **Award type, date, description, and amount**
10. **Amount of Federal Recovery Act funds expended to projects/activities**
11. **Activity code and description**
12. **Project description and status**
13. **Job creation narrative and number**
14. **Infrastructure expenditures and rationale, if applicable**
15. **Recipient primary place of performance**
16. **Recipient area of benefit**
17. **Recipient officer names and compensation (Top 5)**
18. **Total number and amount of small sub-awards; less than $25,000**

Recipient Vendor

1. **D-U-N-S or Name and zip code of Headquarters (HQ)**
2. **Expenditure amount**
3. **Expenditure description**

Sub-Recipient (also referred to as FFATA Data Elements)

1. **Sub-recipient D-U-N-S**
2. **Sub-recipient CCR information**
3. **Sub-recipient type**

4. **Amount received by sub-recipient**
5. **Amount awarded to sub-recipient**
6. **Sub-award date**
7. **Sub-award period**
8. **Sub-recipient place of performance**
9. **Sub-recipient area of benefit**
10. **Sub-recipient officer names and compensation (Top 5)**

Sub-Recipient Vendor

1. **D-U-N-S or Name and zip code of HQ**

Example:

A Federal agency awards a $1 million Recovery Act funded research grant to University A. University A conducts a portion of the research itself and uses $200,000 of the Recovery Act funds to purchase scientific equipment from XYZ Corporation. University A sub-awards the remaining $500,000 of the Recovery Act funds to University B to carry out additional research consistent with the mission of the underlying Federal program. University B uses $50,000 of these funds to support research activities by purchasing scientific equipment from the 123 Corporation.

In this example, University A is the prime recipient and must report on all data elements required by Section 1512 of the Recovery Act and this Guidance related to the award received from the Federal agency. This includes:

- Information regarding the award to University A (associated with the *prime recipient* listed above) and includes:
  - Entity ID for University A (D-U-N-S)
  - Total $ received by University A
  - Total $ for projects/activities funded by University A
  - List of projects undertaken by University A
  - Estimates on jobs created or retained by University A, University B, and applicable vendors
  - Infrastructure Investment details, if applicable to University A activities
  - The identity of the XYZ corporation, as well as the amount and description of the purchase of scientific equipment

- Information regarding the sub-award to University B, including the FFATA data elements required under Section 1512(c)(4) (associated with the *sub-recipient* listed above) and includes the identity of the 123 corporation (*sub-recipient vendor* above).

University A has the option of delegating the responsibility to report the FFATA data elements and the identity of the 123 Corporation (*sub-recipient vendor* data elements) to University B for entering into www.FederalReporting.gov. There are no additional reporting requirements for any sub-awards to sub-recipients made by University B.

2.4 What are the relevant requirements for prime recipients reporting on sub-recipient payments of less than $25,000 or to individuals?

Section 1512(c)(4) and this Guidance allows for prime recipients to aggregate reporting on 1) sub-awards less than $25,000; 2) sub-awards to individuals; and 3) payments to vendors less than $25,000. Prime recipients should provide a separate aggregate dollar total for each of the three categories.

As previously mentioned in this Guidance, it is important to note that while individual recipients of Recovery funds, either directly from a Federal agency or from a prime recipient, are not required to report into the centralized reporting solution themselves[9], the Federal agency or prime recipient awarding those funds will report by aggregating the amounts disbursed to individuals.

2.5 How will recipient reporting be submitted?

The information reported by all prime recipients (and those sub-recipients to which the prime recipient has delegated reporting responsibility) will be submitted through www.FederalReporting.gov, the online Web portal that will collect all Recovery Act recipient reports. Prime recipients must enter their data no later than the 10th day after each quarter beginning on October 10, 2009. All data contained in each quarterly recipient report will be cumulative in order to encompass the total amount of funds expended to date. This means that reports due on October 10, 2009, will include funding from February 17, 2009 (the date the Act was enacted by Congress) through September 30, 2009. Each subsequent quarterly report will also be cumulative. In other words, the report due January 10, 2010, will include the data reported through September 2009 and be updated to include data that accumulated through December 2009. For example, October's report may have contained a project that was 25% completed through the end of September. If the project is completed another 25% by the end of December, on January 10, the prime recipient will report that the project is 50% completed.

Prime recipients and delegated sub-recipients will begin reporting the quarter in which an award is made to it. If awarded funds have not been received and/or expended by the prime recipients or delegated sub-recipients within the quarter the award is made or subsequent quarters, a "$0" should be reported for the respective data elements.

2.6 What is the expectation for the reporting period ending June 30, 2009?

Prime recipients are required to collect and maintain all relevant information responsive to the reporting requirements outlined in Section 1512 of the Recovery Act and this

[9] Sole proprietorships however are subject to the reporting requirements. See Section 1.4 for additional information.

Guidance since the enactment of the Recovery Act, including activities for the quarter ending June 30, 2009. This information along with information on subsequent activities will be reported on a cumulative basis and submitted on October 10, 2009, the first reporting deadline for Section 1512 established in the Recovery Act. There is no global requirement for Section 1512 reporting on July 10, 2009, as previously indicated in M-09-15 issued on April 3, 2009.

July 2009, however, provides a critical opportunity for Federal agencies and recipients to work together to:

- Clarify logistics surrounding October 10th reporting and the deployment of the www.FederalReporting.gov solution;
- Troubleshoot potential data reporting challenges by fostering a common understanding of data definitions, reporting instructions, data quality responsibilities, etc.; and
- Share best practices for planning and implementing the Section 1512 reporting requirements.

Therefore, OMB and the Board are working together to foster a series of forums, meetings, and small-scale data collection pilots to take place during the month of July 2009. More information regarding these activities will be forthcoming and will be reported upon the www.Recovery.gov and www.FederalReporting.gov websites.

2.7 Will there be any waivers granted to any recipient if it is not able to meet the reporting deadlines?

No waivers will be granted for any recipients required to report under Section 1512 of the Recovery Act. If a recipient anticipates issues with meeting the reporting deadline, it should contact the appropriate Federal funding agency as soon as practicable to discuss how the reporting requirement will be met. Reporting extensions may be granted on a case-by-case basis by the appropriate Federal funding agency for extraordinary circumstances, such as natural disasters.

2.8 Can the Recovery Act recipient reporting elements be combined with existing Federal reporting requirements?

No. All information required by Section 1512 must be submitted through www.FederalReporting.gov. However, the recipient reporting solution does allow for recipients to enter data through custom software systems extracted in XML. See Section 3.6 for more information. This means that in some cases a recipient may have the option of leveraging an existing or separate data source (i.e., an existing system whereby the recipient is reporting information to a Federal agency) that contains information responsive to Section 1512 reporting requirements rather than re-keying information into the www.FederalReporting.gov solution. Federal agencies that seek to have recipients transfer information from existing systems into the www.FederalReporting.gov solution will be required to conduct a thorough analysis of the complexity of such arrangements as

well as the burden impact on the relevant recipient community before initiating such a requirement or option.

Federal agencies that determine that such a requirement is necessary will issue program-specific reporting guidance that is reviewed and approved by OMB before it can be effective.

2.9 How should recipients avoid "double counting" in their reports?

Prime recipients that decentralize reporting at the prime recipient level and/or delegate reporting responsibilities to sub-recipients must take special precautions to ensure coordinated reporting. The www.FederalReporting.gov recipient reporting solution will consider the last report submitted to be the final submission.

Decentralized reporting at the prime recipient level – In this scenario, the prime recipient does not establish a single point of entry for submitting required data to the www.FederalReporting.gov solution, but it allows for multiple parties at the prime recipient level to enter data. For example, a State may designate a variety of officials at different State departments or agencies to enter relevant information into www.FederalReporting.gov on the State's behalf. In this case, it may be possible that two different State officials inadvertently create separate data records reporting on the same activity. The State recipient is responsible to design and implement a process that prevents this. While prime recipients may find it prudent to register multiple individuals to report in the event the principal designee is not available, it is incumbent on the reporting authority to ensure that report submission responsibility is clearly assigned.

Delegation by prime recipient to sub-recipient – As noted in Section 2.3 of this Guidance, the prime recipient has the option of delegating reporting responsibility to the sub-recipient for those data items that relate to sub-recipient activity. If this delegation is not widely and clearly communicated, as well as closely monitored, it may be possible for mistakes to occur whereas both the prime recipient and sub-recipient are reporting separately on the same activity. The prime recipient is responsible to design and implement a process that prevents this. At a minimum, the State must maintain an updated inventory of sub-recipient delegations and crosscheck all data records to make sure no reporting is occurring at the prime recipient level for instances where a delegation has occurred.

During the corrections phase of the data reporting process, in other words, after the initial submission on the 10th of the reporting month (See Section 3.2), additional risk for double counting emerges if multiple "users" attempt to correct the same record. Although it will not be possible in the www.FederalReporting.gov solution for a user to create an additional or new record as part of a correction exercise, it is still important that the prime recipient and sub-recipient establish a policy to clearly identify which user is authorized to make correction per award identification number.

2.10 What are the ramifications of non-compliance with the recipient reporting requirements?

Federal awards, like most legal contracts, are made with stipulations outlined in the award's term and conditions. Non-compliance with the reporting requirement as established under section 1512 of the Recovery Act is considered a violation of the award agreement because awards made with Recovery funds have a specific term requiring such compliance. The award term language is found in the Code of Federal Regulations (CFR) in 2 CFR Part 176.50. The Awarding Agency may use any customary remedial actions necessary to ensure compliance, including withholding funds, termination, or suspension and debarment, as appropriate.

2.11 How will these reports be made available to the public?

All reports submitted pursuant to Section 1512 of the Recovery Act will be made available on www.Recovery.gov and on individual Federal agency recovery websites. Federal agencies are encouraged to provide a link to www.Recovery.gov to satisfy the requirement of Federal agencies to post recipient information quarterly.

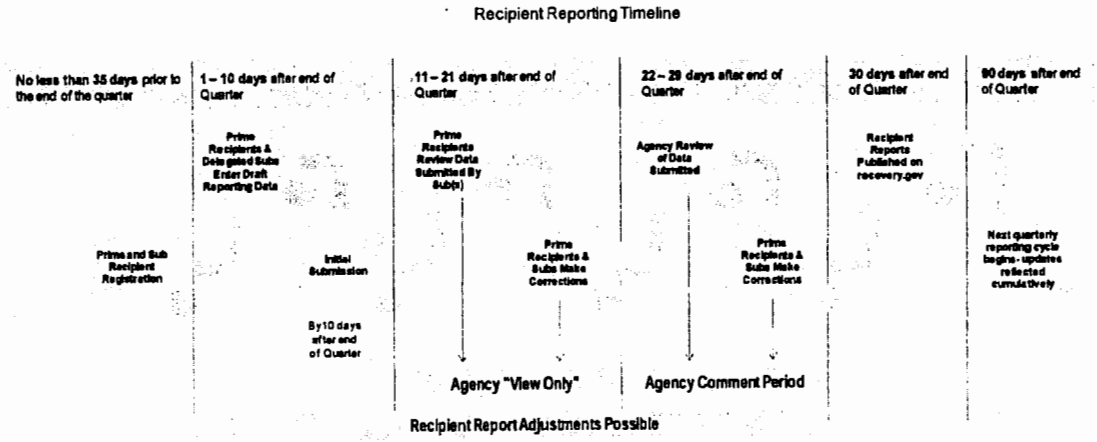
Section 3 – Recipient Reporting Process

3.1 What are the basic roles and responsibilities in the recipient reporting process?

The recipient reporting process is centralized by enabling all recipients (both prime- and those sub-recipients who have been delegated reporting responsibility) to use www.FederalReporting.gov to submit their quarterly reports. Agencies will review the submissions using the same website and underlying central data repository. This centralized approach will simplify filing requirements and will facilitate data review, analysis and transparency across the broad spectrum of Recovery Act programs and projects. The reported information will be made available to the public on www.Recovery.gov.

3.2 What are the key activities and timeframes required for quarterly reporting?

As previously mentioned in Section 2.5 of this Guidance, Section 1512 of the Recovery Act requires that prime recipients and delegated sub-recipients submit quarterly reports on their use of the funds not later than the 10th day following the end of each quarter beginning on October 10, 2009, and will be cumulative since enactment, or February 17, 2009.The statute further requires that reported information will be made available to the public not later than the 30th day after the end of each quarter. Summary statistics for reported data will appear on www.Recovery.gov prior to the end of the 30-day period, but they will be appropriately marked to indicate their review status. The timeframe of key reporting activities and their sequence and is shown below and described in the paragraphs that follow.



Registration. Reporting recipients and reviewing Federal agencies must be registered as authorized parties prior to submitting or reviewing recipient reports on www.FederalReporting.gov. The registration function will be available at www.FederalReporting.gov no later than August 26, 2009. Thereafter, prime recipients, delegated sub-recipients and Federal agencies can register on the website.

Prompt registration is encouraged. Since registration requires that prime recipients must be registered in the Central Contractor Registration (CCR) database and that all reporting entities have a D-U-N-S number (see Section 3.5 for more information on the CCR and D-U-N-S numbers), reporting recipients whom do not already meet these requirements should take immediate steps to prepare for registration. See Section 3.4 of this Guidance for further information detailing the registration process. Federal agencies will also need to register to perform their key activities within the system. Registration occurs only once, prior to the first reporting cycle. Prime recipients choosing to delegate reporting responsibilities should notify the affected sub-recipients early to allow them time to register.

During days 1-10 following the end of the quarter, recipients and delegated sub-recipients prepare and enter their reporting information. See Section 3.6 for a description of reporting methods. During this period, the data are considered to be in pre-submission status until explicitly submitted. Recipients using the Web-based form method will be allowed to store draft versions of their reports. Draft versions will only be available to the individual creating the report. Recipients using the spreadsheet or system extracted XML options may store draft versions outside the system on recipient-owned computers or workstations. The data will assume the status of "submitted" and conform with the Section 1512 reporting requirements only when the reporting entity explicitly submits it using the web site functions. Submitted reports will be viewable by the appropriate prime recipient and by the Awarding Agency[10]. Prime recipients and delegated sub-recipients that have not submitted their data reports by the end of the 10th day will be considered non-compliant with the recipient reporting requirements.

During days 11-21 following the end of the quarter, prime recipients ensure that complete and accurate reporting information is provided prior to the Federal agency comment period beginning on the 22nd day. Prime recipients will perform a data quality review as described in Section 4 of this Guidance. Prime recipients are responsible for verifying submitted information for all Recovery funds for which they are responsible, for notifying sub-recipients of reporting errors or omissions, and for ensuring any data corrections are completed in a timely manner. Prime recipients will be responsible for coordinating with sub-recipients on any identified data corrections. To facilitate corrections, the www.FederalReporting.gov solution will provide contact information for the individual who submitted the report including email contact information. After potential pilot testing of the solution, as mentioned in Section 2.6, it may be determined that the recipient reporting solution may not automatically generate email notifications for prime recipient to sub-recipient communications due to the potential volume resulting from computer-generated notifications.

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[10] Note that "Awarding Agency" is the data field consistent with the data dictionary within the supplemental materials to this Guidance.

Agencies may perform an initial review of the information in a "view-only" mode during this time period, but they will not be allowed to provide official feedback to prime recipients. During this period summary statistics for the initial data submissions will appear on www.Recovery.gov.

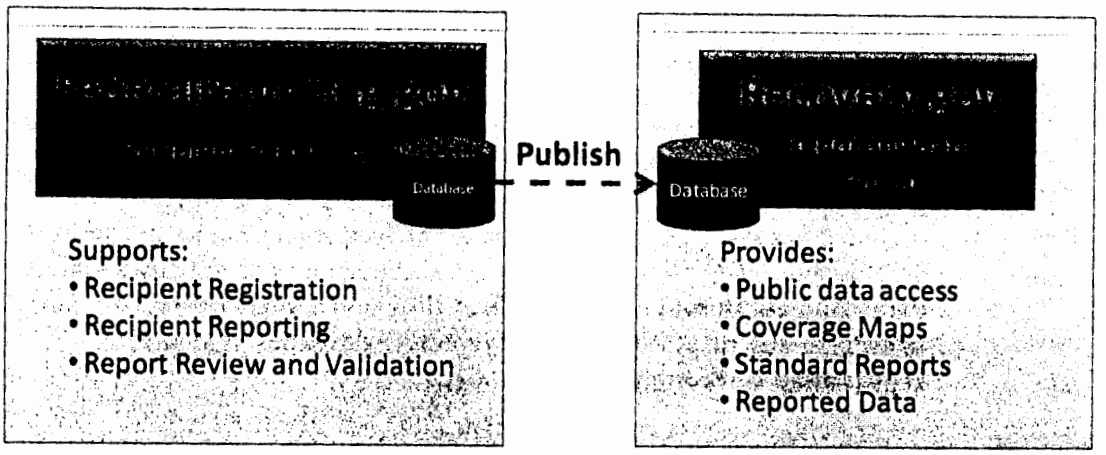
During days 22-29 following the end of the quarter, Federal agencies review and, if determined, comment on the submitted reporting information. Submitted reports will not be editable by prime recipients or delegated sub-recipients during this time period unless notified by the Federal agencies. The Federal agencies will perform a data quality review as described in Section 4 of this Guidance. The Federal agencies will notify the recipients and delegated sub-recipients of any data anomalies or questions through the www.FederalReporting.gov solution. This notification will unlock the notated report. Capability for Federal agency notation will be included as well. The original submitter must complete data corrections no later than the 29th day following the end of the quarter. Federal agency review will be indicated by the status indicators identified in Section 4.8 of this Guidance.

No later than 30 days following the end of the quarter, detailed recipient reports are made available to the public on the www.Recovery.gov website. Federal agencies are encouraged to link to www.Recovery.gov on their respective websites to fulfill their Section 1512 reporting requirements of facilitating the dissemination on recipient reports to the public. Federal agencies may also post recipient information on their respective websites after the data has been posted on the www.Recovery.gov website. Any data issues identified beyond the date of publication will be corrected or addressed in the next quarterly report.

3.3 What is *www.FederalReporting.gov* and what is its relationship to *www.Recovery.gov*?

The solution www.FederalReporting.gov is the web site that recipients will access in order to fulfill their reporting obligations as defined by Section 1512 of the Recovery Act and by this Guidance. The www.FederalReporting.gov solution will provide recipients and federal agencies with the ability to:

- Register for the site and manage their account(s)
- Submit reports
- View and comment on reports if the user represents a Federal agency or prime recipient
- Update or correct reports when appropriate



The www.FederalReporting.gov website works in conjunction with the www.Recovery.gov website to provide a comprehensive solution for recipient reporting and Recovery data transparency. Recipient reports are submitted to www.FederalReporting.gov and are ultimately published on www.Recovery.gov in accordance with the recurring quarterly timeframe described above in Section 3.2.

3.4 How does a recipient register for the *www.FederalReporting.gov* solution?

As previously mentioned in Section 3.2, prime recipients and delegated sub-recipients will need to be registered as authorized users of the www.FederalReporting.gov solution prior to submitting recipient reports into the website, and the registration function will be available on www.FederalReporting.gov no later than August 26, 2009. **Prompt registration is encouraged.** Award recipients should register within 10 business days of receiving an award once the registration function is available. The process for registering with www.FederalReporting.gov will be as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer, or Firefox) and will navigate to the website www.FederalReporting.gov.
- **Provide registration information:** The user will select the Registration link on the main page and fill-in the required registration information. All users will be asked for a preferred User Identifier (User ID), a password, an email address, and a primary phone number. Depending on the user's role in the system, some additional information may also be required.
    - Users that are representatives of State agencies will provide the Dun and Bradstreet (D&B) D-U-N-S number for their State agency. If the State agency uses more than one D-U-N-S number, the number of the State agency organization that is administering the award should be used.
    - Department of Defense (DoD) users will enter their organization's Department of Defense Activity Address Code (DODAAC).
    - Users that are representatives of prime recipients or sub-recipients will provide their organization's D-U-N-S number. These numbers will be used to lookup the user's organization in the CCR or D&B databases to populate additional information into the reporting submission.

- Prime and sub-recipients will need to register. If the Prime uses more than one D-U-N-S number, the number of the organization that received the award should be used.
- Please note that registering with CCR and/or D&B requires additional processing time for the two organizations to validate user organization registration information. Combined CCR and D&B registration time can range from a single to several days depending on the particular organization and type of registration(s). If recipients need to register with CCR and/or D&B prior to using the www.FederalReporting.gov solution, the **recipients should allow sufficient time** to complete the registrations in order to still meet Recovery Act reporting deadlines. **Advance registration is strongly recommended.**

- **Receive confirmation:** When the website registration has been successfully concluded, the www.FederalReporting.gov solution will send a confirmation of registration to the user by email.

Account Maintenance: The www.FederalReporting.gov website will also support management of a user's account and user data such as contact information. For example, the user can update an email address or the user account can be disabled. Help desk support will be available for website functions as described in Section 3.10.

3.5 What are CCR and Dun and Bradstreet, and how does a recipient register with them?

What is CCR? The Central Contractor Registration (CCR) is the primary contractor database for the US Federal Government. CCR collects, validates, stores and disseminates data in support of agency acquisition missions. (Since October 1, 2003, it is Federally mandated that any organization wishing to do business with the Federal government under a Federal Acquisition Regulation (FAR)-based contract must be registered in CCR before being awarded a contract.) Because CCR is a Federally mandated and funded program, there is no cost to registrants for registering in CCR. Further detailed information on CCR is available at this URL: http://www.ccr.gov/FAQ.aspx.

What is a CCR MPIN? A Marketing Partner Identification Number (MPIN) is a password created by a user in CCR that allows the user to access other government systems such as PPIRS (Past Performance Information Retrieval System). The MPIN is a nine-character alphanumeric code; and must include at least one alpha and one numeric character, with no spaces. The MPIN is required in recipient reporting but not as part of the registration process.

What is a D-U-N-S number and who provides it? Dun & Bradstreet (D&B) maintains a business database containing information on more than 100 million businesses worldwide. D&B provides a D-U-N-S number, a unique 9-digit identification number, for each physical location of a business organization. D-U-N-S Number assignment is free for all businesses required to register with the U.S. Federal government for contracts or grants. The D-U-N-S number is used by the www.FederalReporting.gov solution to

indentify business organizations. Further detailed information on D&B is available at this URL: http://fedgov.dnb.com/webform.

3.6 How does a recipient submit reports into www.FederalReporting.gov?

There are three basic methods to submit reports into the www.FederalReporting.gov solution. The reporting organization can choose the most convenient method for reporting among the following:

1) Online data entry in a Web browser: The website provides a straightforward data entry form, available via the user's Web browser, for report data entry.

Technical requirements: A commercial Web browser such as Microsoft's Internet Explorer, or Firefox is required for this option.

2) Excel spreadsheet: The website will make a Microsoft Excel spreadsheet available for report submission. The user can download this spreadsheet, open the spreadsheet in Microsoft's Excel spreadsheet program and fill it in. The spreadsheet can then be uploaded to the website with the user's browser at www.FederalReporting.gov. The spreadsheet is "locked" to restrict modification of the spreadsheet and allow data entry only in the required fields. **Note: Recipients must not modify the structure of the spreadsheet or risk non-compliance due to an invalid submission.**

Technical requirements: Microsoft Office's Excel (Version 2003 or newer) is required to open and edit the spreadsheet file. A Web browser such as Microsoft's Internet Explorer, or Firefox is required to access the website.

3) Custom software system extract in XML: Organizations with sufficient technical experience may choose to submit a properly formatted Extensible Markup Language (XML) file for their report submission. The supplemental materials to this Guidance contain the data dictionary and XML schema needed for formatting and structuring the XML system extracts. Additional detail about field constraints (such as the elements used in drop down menus on the Web form) will be added to those materials and posted to www.FederalReporting.gov. A service for validating the structure of XML extracts will be available on www.FederalReporting.gov prior to the submission period to ensure extracts are properly formatted. Recipients are strongly encouraged to test their report structures prior to the reporting period.

Technical requirements: A Web browser such as Microsoft's Internet Explorer, or Firefox is required to access the website. Organizations must match a specific XML schema format. The schema for the data submission will be provided on the www.FederalReporting.gov website.

Regardless of the approach taken, there is a common underlying data dictionary between all three approaches which will support common unified publishing to www.Recovery.gov in accordance with the quarterly timeline discussed in Section 3.2. See document entitled, *Recipient Reporting Data Model*. This document will be published on OMB's website and www.Recovery.gov as supplemental materials to this Guidance.

The process for filling in the reporting information **online (method 1)** is as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate to the site www.FederalReporting.gov.
- **Login:** The system will prompt the user for a valid userid and password combination to log-in.
- **Select Recipient Type:** The user will select the appropriate recipient type (e.g., Prime Recipient or Sub-Recipient).
- **Select Reporting Type:** The user will select the appropriate reporting submission (e.g., grant, loan or other form of assistance).
- **Fill in the Online Form:** The user will fill in the online form according to the screen instructions. Some basic information is mandatory such as D-U-N-S Number, Grant or Loan number. This data should be gathered in advance of using the online system
- **Confirmation:** Once the user transmits data, the reporting solution will acknowledge receipt and will check for validity of all information. Due to the anticipated volume of reports, the validation may be delayed up to 24 hours. The validation will ensure that the system can accept the report.
- **Submission:** The Web form will require that the user explicitly "submit" the entered information when completed. Recipients who have not completed the submission step by the end of the 10th day after the end of the reporting quarter will be considered non-compliant with reporting requirements. The system will acknowledge the completion of the submission step if it is successful.

The process for *downloading* the **spreadsheet (method 2)** is as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate to the site www.FederalReporting.gov.
- **Login:** The system will prompt the user for a valid userid and password combination to log in.
- **Select Recipient Type:** The user will select the appropriate recipient type (i.e., Prime Recipient or Sub-Recipient).
- **Select Reporting Type:** The user will select the appropriate type of reporting submission (e.g., grant, loan or other form of assistance).
- **Select the File:** The user will select the spreadsheet and download the template.

Once the spreadsheet has been updated, the process for *uploading* the **spreadsheet** is as follows

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate to the site www.FederalReporting.gov.
- **Login:** The system will prompt the user for a valid userid and password combination to log in.

- **Submit Report:** The user will select the report submission choice and select the upload spreadsheet option. The user will follow a standard select file process.
- **Confirmation:** The system will display a confirmation of report acceptance. The system will then validate the structure of the data for conformance to the data standards. This process may take as long as 24 hours to process based on system load, however submitters are considered compliant with reporting requirements if they submit data valid file within the required timeframe.

The process for *downloading* the **XML Schema (method 3)** is as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate go to the site www.FederalReporting.gov.
- **Login:** The system will prompt for a valid userid and password combination to log in.
- **Select Recipient Type:** The user will select the appropriate recipient type (i.e., Prime Recipient or Sub-Recipient).
- **Select Reporting Type:** The user will select the appropriate type of reporting submission (e.g., grant, loan or other form of assistance).
- **Select the File:** The user will select the XML and download the schema.

The process for *uploading* the **XML extract file** is as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate to the site www.FederalReporting.gov.
- **Login:** The system will prompt for a valid userid and password combination to log in.
- **Submit Report:** The user will select the report submission choice and select the upload XML schema option. The user will follow a standard select file process.
- **Confirmation:** The system will display a confirmation of report acceptance. The system will validate the structure of the data for conformance to the data standards. This process may take as long as 24 hours to process based on system load.

Special reporting Requirement for Prime Recipients

Prime recipients will be required to enter their MPIN from CCR at the time of report submission. This information is required to identify the submitter as a prime recipient. Prime recipients will not be able to view sub-recipient reports until the prime recipient report is submitted using a valid MPIN for the D-U-N-S associated with the award.

3.7 What if the recipient does not have Web access?

Only electronic submission across the public Internet, by the three methods defined in Section 3.6 is supported at this time. Reporting entities that do not have access to the Internet should contact the awarding agency for guidance.

3.8 How does a Federal agency or recipient review reporting submissions?

The www.FederalReporting.gov solution supports the review of recipient submissions by Federal agencies and prime recipients. The solution will enable multiple reviewers for each agency or prime recipient, although there will be only a single reviewer allowed for each individual report. The process for reviewing reporting submissions is as follows:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate go to the site www.FederalReporting.gov.
- **Login:** The system will prompt for a password and the user will login.
- **Select Report:** The user will select a report to review if action is required by the report submitter, and the reviewer is allowed to make comments in accordance with the quarterly timeline in Section 3.2. There will be a mechanism for extracting recipient reports for Federal agency review and a capability within the system to notate reports.

3.9 How does a recipient make a report correction to a submission?

A recipient may decide, or may be asked by a subsequent reviewer, to make a correction to a submission. The entity submitting the report is the data owner of the submission and is therefore responsible for applying any corrections. The recipient can update the submission with the following process:

- **Go to the website:** The user will launch their commercial Web browser software application (e.g., Internet Explorer or Firefox) and will navigate go to the site www.FederalReporting.gov.
- **Login:** The system will prompt for a password and the user will login.
- **Select an Existing Report:** The user will select a report to be re-submitted.
- **Data Entry:** If the report was submitted in an online form (method 1), the user can then edit the fields in the online form and save them again.
- **Select the Replacement File:** If the report submission is file-based (methods 2 or 3), the user will select the updated XML file or spreadsheet file to be uploaded and will submit the file according to screen instructions.
- **Confirmation:** The system will display a confirmation of report acceptance. The system will validate the structure of the data for conformance to the data standards. This process may take as long as 24 hours to process based on system load.

3.10 How does a recipient access the *www.FederalReporting.gov* solution helpdesk?

The registration and reporting processes will be supported by a helpdesk. The helpdesk contact information will be available on the www.FederalReporting.gov website at the start of registration and will provide help with user functions related to the registration

and reporting processes. Questions regarding specific Recovery awards or programs should be referred to the Federal Awarding Agency.

Federal Agency Review Process

3.11 How will agencies obtain recipient data elements?

Recovery recipient reporting data will be provided for download by Federal agency and program officials from a central data repository. These files may be used to automate data quality reviews or create agency/program specific reports. Details regarding format and download options are being developed.

3.12 What data elements will Federal agencies use to review recipient reports?

Federal agencies should develop internal policies and procedures for reviewing reported data. Federal agencies may extract the data elements below to validate recipient reports for compliance, accuracy, and consistency with Federal award data. Automated checks for accuracy may be conducted by comparing recipient data to the award data stored in agency financial systems of record. For example, recipient data may be used to ensure that all Federal agency recipients have submitted reports and to verify that all prime-recipient D-U-N-S reported have actually received Recovery funding. Also, amounts may be validated for consistency to ensure the individual or aggregated values do not exceed the agency amounts awarded or disbursed. Items the Federal agency might consider:

- Award Number
- Funding Agency Name
- D-U-N-S Number
- EIN
- CFDA
- Recipient Organization
- Project/Grant Period
- Total Cost of Infrastructure Investments
- Amount of award Current Value
- Amount of Award or Sub Award Ultimate Value (anticipated total amount of cash)
- Total amount of Sub awards less than $25,000
- Total Jobs Created/Retained

3.13 How will the other data elements be used by Federal agencies?

Federal agencies may review additional data elements highlighted below to determine if a prime recipient's report is realistic or will produce expected results. This type of review is more subjective and may need to be conducted manually. For example, the Federal agency may elect to compare data elements for consistency in reporting by comparing the

percent of money disbursed with the percent complete or comparing the project/activity code with the project's narrative description. The agency may choose to review fields for reasonableness, such as the estimated number of jobs created/retained; or choose to measure the value of infrastructure costs with the rationale for the infrastructure investment.

- Completion Status
- Estimate of number of jobs created
- Estimate of number of jobs retained
- Purpose of infrastructure investment
- Rationale for funding the infrastructure investment with ARRA funds
- NEPA Compliance Status
- NEPA Supporting Information

3.14 Can agencies use recipient reporting to make decisions impacting the recipient's awards?

Although the intent of the recipient reporting solution is primarily reporting as opposed to management, Federal agencies may use recipient reports to help assess compliance with the terms and conditions of the individual award agreements, further assess risks and to determine when to release the remaining funds. For example, for certain grant programs a Federal agency may have partially awarded each State's allocation with the intent to award the remaining available Recovery funds after each State addresses how the they will meet the reporting requirements in the Recovery Act, including the recipient reports required by Section 1512(c). In this case, the agency may publish specific guidance that only affects its grants, in accordance with these reporting requirements, to specify what information recipients must provide before receiving the balance of its Recovery grants.

Section 4 – Data Quality Requirements

4.1 What is the scope of required data quality reviews?

Data quality (i.e., accuracy, completeness and timely reporting of information) reviews required by this Guidance are intended to emphasize the avoidance of two key data problems -- material omissions and significant reporting errors. Material omissions are defined as instances where required data is not reported or reported information is not otherwise responsive to the data requests resulting in significant risk that the public is not fully informed as to the status of a Recovery Act project or activity. An example of a material omission would be a recipient, or delegated sub-recipient, who fails to report the current percentage of completion for a project and/or an activity that has been funded by the Recovery Act. Instances in which a prime recipient or sub-recipient fails to report entirely would be considered a material omission for the purposes of this Guidance.

In general, material omissions should be minimized by the www.FederalReporting.gov solution, which will require fields to be completed for successful transmission. However, a material omission may still occur to the extent submitted data is not responsive to a specific data request. For example, a recipient required to report a description of a purchase made from a vendor may not provide sufficient detail in the description for the reader to derive the nature of the purchase.

Significant reporting errors are defined as those instances where required data is not reported accurately and such erroneous reporting results in significant risk that the public will be misled or confused by the recipient report in question. An example of this would be a recipient, or sub-recipient, who reports expenditures in excess of the amount awarded by the Federal funding agency, excluding funding resulting from match requirements. Significant reporting errors may be intentional or accidental. Actions should be taken to reduce either cause.

Federal agencies should coordinate how to apply the definitions of material omission and significant reporting error in given program areas or across programs in a given agency. This will ensure consistency in the manner in which data quality reviews are carried out.

4.2 Who is responsible for the quality of data submitted under Section 1512 of the Recovery Act?

Data quality is an important responsibility of key stakeholders identified in the Recovery Act. Prime recipients, as owners of the data submitted, have the principal responsibility for the quality of the information submitted. Sub-recipients delegated to report on behalf of prime recipients share in this responsibility. Agencies funding Recovery Act projects and activities provide a layer of oversight that augments recipient data quality. Oversight authorities including the OMB, the Recovery Board, and Federal agency Inspectors General also have roles to play in data quality. The general public and non-governmental

entities interested in "good government" can help with data quality, as well, by highlighting problems for correction.[11]

- Prime Recipient
  - Owns recipient data and sub-recipient data
  - Initiates appropriate data collection and reporting procedures to ensure that Section 1512 reporting requirements are met in a timely and effective manner
  - Implements internal control measures as appropriate to ensure accurate and complete information
  - Performs data quality reviews for material omissions and/or significant reporting errors, making appropriate and timely corrections to prime recipient data and working with the designated sub-recipient to address any data quality issues

- Sub-recipient
  - Owns sub-recipient data
  - Initiates appropriate data collection and reporting procedures to ensure that Section 1512 reporting requirements are met in a timely and effective manner
  - Implements internal control measures as appropriate to ensure accurate and complete information
  - Reviews sub-recipient information for material omissions and/or significant reporting errors, and makes appropriate and timely corrections

- Federal Agency
  - Provides advice/programmatic assistance
  - Performs limited data quality reviews intended to identify material omissions and/or significant reporting errors, and notifies the recipients of the need to make appropriate and time changes

- Oversight Authorities (such as OMB, Recovery Board, and agency Inspectors General)
  - Establish data quality expectations
  - Establish data and technical standards to promote consistency
  - Coordinate any centralized reviews of data quality

4.3 Does this Guidance mandate a specific methodology for conducting data quality reviews?

No. However, the relevant party conducting a data quality review required by this Guidance (i.e., recipients, sub-recipients, Federal agencies) must use its discretion in determining the optimal method for detecting and correcting material omissions or

[11] Mechanisms for the public to provide feedback on the data will be available on Recovery.gov as well as individual agency Recovery websites.

significant reporting errors. At a minimum, Federal agency, recipients, and sub-recipients should establish internal controls to ensure data quality, completeness, accuracy and timely reporting of all amounts funded by the Recovery Act. Possible approaches to this include;

- Establishing control totals (e.g., total number of projects subject to reporting, total dollars allocated to projects) and verify that reported information matches the established control totals;
- Creating an estimated distribution of expected data along a "normal" distribution curve and identify outliers;
- Establishing a data review protocol or automated process that identifies incongruous results (e.g., total amount spent on a project or activity is equal to or greater than the previous reporting); and
- Establishing procedures and/cross-validation of data to identify and/or eliminate potential "double counting" due to delegation of reporting responsibility to sub-recipient (see Section 2.9).

4.4 What is the process and timing of data quality review efforts?

- Recipients and sub-recipients reporting Section 1512 data into the www.FederalReporting.gov solution must initiate a review of the data both prior to, and following, the formal submission of data. The post-submission review period runs from the 11th day of the reporting month to the 21st day of the reporting month for prime recipients. During this post-submission review period, significant reporting errors or material omissions that are discovered can be corrected using the www.FederalReporting.gov solution. Specific instructions for submitting new or corrected data will be provided on the www.FederalReporting.gov website. The prime recipients are responsible for reviewing data submitted by sub-recipients. Where a recipient identifies a data quality issue with respect to information submitted by the sub-recipient, the recipient is required to alert the relevant sub-recipient of the nature of the problem identified by the recipient. All corrections by recipients and sub-recipients during this phase of the review must be transmitted by the 21st day of the reporting month.

- Federal agencies will initiate a review of the data after formal submission by the recipients and sub-recipients. During the recipient and sub-recipient review period (i.e., day 11 to day 21 of the reporting month), Federal agencies will have access to review the data and should begin initial reviews at this time. However, the official agency review process begins on the 22nd day of the reporting month and runs until the 29th day of the reporting month. During this period, the Federal agency will be responsible for reviewing data submitted by recipients and sub-recipients. Where an agency identifies a data quality issue with respect to information submitted by the recipient or sub-recipient, the Federal agency is required to alert the relevant recipient of the nature of the problem identified by

the Federal agency. All corrections by recipients and sub-recipients during this phase of the review must be transmitted by the 29th day of the reporting month.

- After the 29th day, no further corrections can be made. Corrections identified that for whatever reason cannot be made by the 29th of the month will be incorporated into the following quarter's data report of the recipient or delegated sub-recipient.

Additional information on the timing of data quality reviews can be found in Section 3.2 of this Guidance.

4.5 Are recipients required to certify or approve sub-recipient data into the *www.FederalReporting.gov* solution prior to the end of the recipient post-submission review period (i.e., day 11 to day 21 of the reporting month)?

No. The recipient is required to run a data quality review process consistent with Section 3 and Section 4 of this Guidance. The recipient is further required to make necessary corrections to recipient data and to further alert sub-recipients of identified significant reporting errors or material omissions. These actions are expected to occur prior to the 22nd day of the reporting month. The agency review process will begin on the 22nd day of the reporting month regardless of the actions of the recipient and sub-recipient. Please see Section 3.2 for further guidance.

No separate statement of assurance or certification will be required of prime recipients with respect to the quality of sub-recipient data.

4.6 What are the implications or consequences of uncorrected data quality problems by recipients and sub-recipients?

As referenced throughout this Guidance, recipients and delegated sub-recipients are the owners of the data submitted. As further promulgated in OMB M-09-15, timely, complete, and effective reporting under Section 1512 of the Recovery is a term and condition of receiving Recovery Act funding.

As a result, Federal agencies will be required to continuously evaluate recipient and sub-recipient efforts to meet Section 1512 requirements as well as the requirements of OMB implementing guidance and any relevant Federal program regulations. In particular, Federal agencies will work to identify and remediate instances in which:

- Recipients that demonstrate systemic or chronic reporting problems and/or otherwise fail to correct such problems as identified by the Federal agency;
- Sub-recipients that demonstrate systemic or chronic reporting problems and/or otherwise fail to correct such problems as identified by the recipient or Federal agency; and
- Recipients that demonstrate systemic or chronic deficiencies in meeting its responsibilities to review and identify data quality problems of sub-recipients consistent with the requirements of this Guidance.

On a case-by-case basis, such findings of a Federal agency can result in termination of Federal funding and/or initiation of suspension and debarment proceedings of either the recipient or sub-recipient, or both. Further, in some cases, intentional reporting of false information can result in civil and/or criminal penalties.

See also Section 2.10 of this Guidance.

4.7 Are Federal agencies required to certify or approve data for publication on www.Recovery.gov or agency websites?

No. The Federal agency is required to run a data quality review process consistent with Sections 3 and 4 of this Guidance. These actions are expected to occur prior to the 30th day of the reporting month. The information will be posted according to the Recovery Act and this Guidance no later than the 30th day after the end of the quarter regardless of the outcome of Federal agency data quality review efforts.

4.8 How will issues identified under the data quality reviews conducted pursuant to this Guidance be communicated to the public?

This Guidance seeks to strike an appropriate balance between providing the public with transparency into the information as reported by prime recipients and sub-recipients and the longstanding requirements of the Government to ensure the quality of data disseminated to the public. Federal agencies will be required to perform data quality checks similar to those described in Section 4.3.[12] In addition, Federal agencies will be required to classify submitted data (which may be organized by award or program), using the following three categories:

- Not Reviewed by agency;
- Reviewed by agency, no material omissions or significant reporting errors identified; and
- Reviewed by agency, material omissions or significant reporting errors identified.

Within the third category, to the extent the agency identifies any data that it has reason to believe is false or misleading that has not been corrected by the recipient or sub-recipient, the Federal agency must provide such findings to recoveryupdates@gsa.gov so that the Recovery Board can make such instances public on the website www.Recovery.gov.

The system will automatically default to the first category of "Not reviewed by agency" if an agency has not chosen one of the above three categories before the 29th day of the process.

[12] Consistent with Section 3.3, it may not be necessary for a Federal agency to separately review each submitted data record by a prime or sub-recipients. At the discretion of the Federal agency, the review may encompass only aggregate information in an effort to identify outliers within a unique record. As a result, a Federal agency may, depending on the review approach or methodology, classify data as being "reviewed by agency" even if a separate and unique review of each submitted record has not occurred.

4.9 Are Federal agencies required to review prime recipient processes and procedures for collecting, reviewing, and reporting Section 1512 information?

Yes. Consistent with Federal agency standard oversight responsibilities for financial assistance programs, Federal agencies will need to review the processes and procedures of prime recipients.

Section 5 – Reporting on Jobs Creation Estimates by Recipients

5.1 What reporting is required by the Recovery Act for estimates of jobs created or retained?

There are two distinct types of jobs reports that the Recovery Act requires.

First, the Council of Economic Advisers, in consultation with OMB and Treasury, are required by the Recovery Act to submit quarterly reports to Congress that detail the impact of programs funded through Recovery funds on employment, economic growth, and other key economic indicators. OMB and agencies will continue to partner with CEA on these quarterly reports and other questions regarding macro-level jobs estimates. Agencies with questions about reporting macro-level or indirect jobs estimates should refer to CEA's guidance on reporting jobs: http://www.whitehouse.gov/administration/eop/cea/Estimate-of-Job-Creation/

The second type of job estimates should be submitted by recipients of Recovery funds for each project or activity, as required by Section 1512(c)3(D) of the Recovery Act. This section addresses the jobs estimates required to be submitted by recipients.

5.2 What information are recipients covered by Section 1512 required to report?

Recipient reporting requirements for grants, cooperative agreements, and loans were published in two separate Federal Register notices. The first notice contained proposed data elements and instructions on reporting jobs created and retained under grants, cooperative agreements, and loans (74 FR 14824). The comments on this first notice were reviewed, though an alternate data set had to be cleared on an emergency basis to accommodate the more immediate need for reporting requirements at the recipient and federal levels. The second notice contained interim final guidance and a standard award term (2 CFR 176.50) with a request for public comment. The comment period for the second notice ends on June 22, 2009 (74 FR 18449).

While this guidance does not apply to contracts, recipient reporting requirements and a standard award clause for federally awarded contracts were published in an interim final rule with request for public comment (FAR 52.204-11). The public comment period on the contract rule has now closed, and the final rule will be published in the near future.

The final detailed reporting requirements for recipients of grants, cooperative agreements, loans and contracts along with data entry instructions will be posted on www.FederalReporting.gov as explained in federal agency award terms/clauses.

The points below provide an overview of the key requirements and supplemental guidance on reporting the employment impact of the Recovery Act funded work.

- Prime recipients are required to report an estimate of jobs directly created or retained by project and activity or contract. Recipients will be required to report an aggregate number for the cumulative jobs created or retained for the quarter in a separate numeric field. Recipients will also be asked to provide a narrative description of the employment

impact. While no change is being made to the actual information required to be reported, the clarification that this information will be collected in two separate fields – one numeric and a text field for the narrative – is an update from previous Recovery Act guidance.

- A job created is a new position created and filled or an existing unfilled position that is filled as a result of the Recovery Act; a job retained is an existing position that would not have been continued to be filled were it not for Recovery Act funding. A job cannot be counted as both created and retained. Also, only compensated employment in the United States or outlying areas should be counted. See 74 FR 14824 for definitions.

- The estimate of the number of jobs required by the Recovery Act should be expressed as "full-time equivalents" (FTE), which is calculated as total hours worked in jobs created or retained divided by the number of hours in a full-time schedule, as defined by the recipient (see Section 5.3 for more information). The FTE estimates must be reported cumulatively each calendar quarter.

- Recipients of grants, cooperative agreements, and loans must include in the aggregate number and their narrative description an estimate of jobs created and retained on projects and activities managed by their funding recipients. This clarification is a change from previous guidance, based on comments received on the Federal Register notice and stakeholder input. For additional guidance on providing these estimates see Section 5.4.

- Recipients should not attempt to report on the employment impact on materials suppliers and central service providers (so-called "indirect" jobs) or on the local community ("induced" jobs). Employees who are not directly charged to Recovery Act supported projects/activities, who, nonetheless, provide critical indirect support, e.g., clerical/administrative staff preparing reports, institutional review board staff members, departmental administrators, are NOT counted as jobs created/retained. Recipients report only direct jobs because they may not have sufficient insight or consistent methodologies for reporting indirect or induced jobs. The Council of Economic Advisers is developing a macro-economic methodology to account for the overall employment impact of the Recovery Act.

- The narrative should include a brief description of the types of jobs created or retained. This description may rely on job titles, broader labor categories, or the recipient's existing practice for describing jobs as long as the terms used are widely understood and describe the general nature of the work.

- Recipients will report for all projects and activities or federally awarded contracts regardless of whether they are funded in whole or in part by the Recovery Act, but should report only on the jobs and funding attributable to an award under the Recovery Act.

Please note that certain recipients, such as those funded by Department of Transportation, have job reporting requirements in the Act that go beyond Section 1512. Recipients must follow this

guidance with respect to the reporting requirements under Section 1512, and must also comply with program and agency-specific requirements.

5.3 What methodology should recipients use when calculating the number of jobs created or retained?

The requirement for reporting jobs is based on a simple calculation used to avoid overstating the number of other than full-time, permanent jobs. This calculation converts part-time or temporary jobs into "full-time equivalent" (FTE) jobs. In order to perform the calculation, a recipient will need the total number of hours worked that are funded by the Recovery Act. The recipient will also need the number of hours in a full-time schedule for a quarter. The formula for reporting can be represented as:

$$\frac{\textit{Cumulative Recovery Act Funded Hours Worked } (Qtr\ 1...n)}{\textit{Cumulative Hours in a Full-time Schedule } (Qtr\ 1...n)} = FTE$$

Example:
Assume that a recipient is preparing its first quarterly report and that the recipient's Recovery Act funded work required two full-time employees and one part-time employee working half days for the quarter. Also assume that the recipient's full-time schedule for the quarter is 520 hours (2080 hours in a work-year divided by 4). To convert hours worked to number of FTE for the first quarterly report, aggregate all hours worked and divide by the number of hours in a full-time schedule for the quarter. In this example, full-time hours worked (520 hrs x 2 employees = 1040 hrs) + part-time hours worked (260 hrs) ÷ number of hours in a full-time schedule for the quarter (520 hrs) = 2.5 FTE reported in the first quarterly report. Because jobs are reported cumulatively each quarter, this same number of FTE would be reported for the second quarter if the same number of employees worked the same number of hours.

Reporting is cumulative across the project lifecycle, and will not reset at the beginning of each calendar or fiscal year. In the example above, the 2.5 FTE reported in the first quarterly report will stay the same through the project lifecycle, assuming the same number of employees work the same number of hours. The table below shows the FTE calculations through the lifecycle of an 18 month project that uses full-time, part-time, and temporary workers.

Period	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr
Full-Time Schedule	520	1040	1560	2080	2600	3120
Full Time Employee 1	520	1040	1560	2080	2600	3120
Full Time Employee 2	520	1040	1560	2080	2600	3120
Part Time Employee (half time)	260	520	780	1040	1300	1560
Temporary Employee (650 hrs.)	0	0	130	390	650	650
Total Hours Worked	1300	2600	4030	5590	7150	8450
Quarterly FTE	2.50	2.50	2.58	2.69	2.75	2.71

An alternative calculation based on the allocable and allowable portion of activities expressed as a percentage of the total is acceptable for recipients of assistance agreements that must comply with OMB Circular A-21, Cost Principles for Educational Institutions. OMB Circular A-21 recognizes that practices vary among educational institutions as to the activity constituting a full workload. Compensation charged to sponsored projects must conform to the institution's established policies and reasonably reflect the activity for which the employee is compensated. Charges to sponsored projects may be expressed as a percentage of their total activities. Therefore, for purposes of ARRA reporting of jobs created or retained, colleges and university may count, proportionately, the percentage of effort directly charged to ARRA awards as an FTE equivalent.

For example - A faculty member charging 50% effort on an ARRA award will be counted as .5 FTE. Hourly and part time employees shall be calculated based on actual hours worked on the sponsored agreement and the institution's definition of a full workload for employment.

The total hours reported may include paid leave.

5.4 How should recipients estimate the job impact of funding provided to sub-recipients?

Recipients must include an estimate of jobs created and retained on projects and activities managed by their funding recipients in their aggregate number and their narrative description. This information will be provided for each project and activity funded by the Recovery Act. The clarification that recipients must report jobs estimates for all sub-awarded funds is an update from previous guidance.

For example, consider a prime recipient that receives a $10 million grant from a Federal agency for a specific project or activity. Assume the prime recipient hires five FTE to administer the program at a total cost of $1 million, and distributes nine $1 million grants to sub-recipients. In this case, the prime recipient will report the direct job creation of 5 FTE, and would also provide an estimate of the total employment impact of the nine $1 million grants (using the same FTE methodology discussed in 5.3).

Prime recipients are required to generate estimates of job impact by directly collecting specific data from sub-recipients and vendors[13] on the total FTE resulting from a sub-award. To the maximum extent practicable, information should be collected from all sub-recipients and vendors in order to generate the most comprehensive and complete job impact numbers available. However, in limited circumstances, the prime recipient can employ an approved statistical methodology to generate estimates of job impact, thereby collecting data from a smaller subset of sub-recipients and vendors in order to extrapolate an estimate of job impacts to all applicable sub-recipients and vendors. A statistical methodology should only be employed in those cases

[13] Job estimates regarding vendors of prime- or sub-recipients, should be limited to direct job impacts for the vendor and not include "indirect" or "induced" jobs (see Section 5.2), e.g., hiring/retaining employees for infrastructure projects.

where a comprehensive collection of jobs data from all sub-recipients and vendors is overly costly or burdensome and thus disrupts the prime recipients' ability to effectively implement the underlying mission of the program.

The appropriate Federal agency for a given program area will issue supplementary guidance providing an acceptable statistical methodology for this purpose, including required sampling parameters. Further, OMB will explore with the Board whether the current data collection technology, www.FederalReporting.gov, can be modified in the future to allow sub-recipients to report jobs data directly to prime recipients.

In the narrative description accompanying the estimate, where the prime recipient utilizes a statistical methodology as described above, the prime recipient should note what part of the estimate was generated with actual data received versus what part of the estimate was generated through extrapolation. In addition, the narrative should provide a description of the statistical methodology used.

In addition to providing this information by project and activity as required by the Recovery Act, as a best practice it is also recommended that State governments post the employment impact of all recovery funds prominently on the State recovery website.

Appendix – Reference Sheet of Frequently Used Guidance Terms

This appendix aims to serve as a reference sheet of terms used in this Guidance document. It does not intend to redefine terms used in existing OMB Circulars, and it is meant to interpret this guidance document only.

Data quality as used in this Guidance means steps considered to improved accuracy, completeness and timely reporting of information. The data quality reviews required by this Guidance are intended to emphasize the avoidance of two key data problems -- material omissions and significant reporting errors that are also defined in this appendix.

Data Elements are the specific pieces of information that will be collected for recipient reporting under the Recovery Act requirements. The data dictionary provided in the supplemental materials to this Guidance lists these elements in a technical nature, and are also highlighted in Section 2 of this Guidance.

Direct loan means a disbursement of funds by the Government to a non-Federal borrower under a contract that requires the repayment of such funds with or without interest. The term also includes certain equivalent transactions that extend credit.

Expenditures – As defined in the data dictionary provided in the supplemental materials to this Guidance, the amount of Recovery funds received that were used to pay for projects or activities, including payments made to sub-recipients and vendors.

Material omissions are defined as those instances where required data is not reported or reported information is not otherwise responsive to the data request and such reporting gaps result in significant risk that the public will be misled or confused by the recipient report in question. In general, material omissions should be minimized by the www.FederalReporting.gov solution, which will require fields to be completed for successful transmission, as well as include edits and cross-edits to ensure data validity. However, a material omission may still occur to the extent submitted data is not responsive to a specific data request. For example, a recipient required to report a description of a purchase made from a vendor may not provide sufficient detail in the description for the reader to derive the nature of the purchase.

Recipients required to report to the Federal government are entities, other than individuals, that receive Recovery Act funding as Federal awards in the form of a grant, cooperative agreement, or loan directly from the Federal government. Recipients may be referred to as "prime recipients" in this document to help make the distinction between sub-recipients regarding the roles, responsibilities and reporting requirements.

Significant reporting errors are defined are defined as those instances where required data is not reported accurately and such erroneous reporting results in significant risk that the public will be misled or confused by the recipient report in question. An example of this would be a recipient, or sub-recipient who reports expenditures in excess of the amount awarded by the Federal funding agency, excluding funding resulting from match requirements.

Sub-recipients that receive all or a portion of the Recovery funding may report to the Federal government based on guidance and direction from the prime recipient. Sub-recipients are non-Federal entities that are awarded Recovery funding through a legal instrument from the prime recipient to support the performance of any portion of the substantive project or program for which the prime recipient received the Recovery funding. The terms and conditions of the Federal award are carried forward to the sub-recipient. This sub-award could be in the form of a sub-grant or sub-contract, but it is not considered a "federal government contract," as it is not awarded directly by a Federal agency. A sub-recipient may also be a prime recipient of other Federal awards directly from the Federal government.

Vendors, for the purposes of this guidance are entities or individuals from which the prime recipient or sub-recipient procures goods or services needed to carry out the project or program. Vendors are not awarded funds by the same means as sub-recipients and are not subject to the terms and conditions of the federal financial assistance award.

THE DIRECTOR

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

November 30, 2009

M-10-05

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Peter R. Orszag

SUBJECT: Improving Compliance in Recovery Act Recipient Reporting

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009, P.L. 111-5 ("Recovery Act"). As required by Section 1512 of the Recovery Act, recipients have submitted reports on the use of Recovery Act funding through a nationwide data collection process. This effort is unprecedented in the breadth and depth of transparency it provides to the American public.

While the response rate for the first quarter of required reporting demonstrates that a significant majority of recipients reported timely and complete reports, a preliminary review of FederalReporting.gov data indicates that a number of recipients have not filed as required by Section 1512 of the Recovery Act and OMB guidance. In order to provide the public with the transparency and accountability envisioned by the Recovery Act, we must take steps to ensure all recipients understand their reporting obligations and the consequences of non-compliance.

Recipients who have failed to submit a Section 1512 report as required by the terms of their award are considered to be non-compliant. Non-compliant recipients, including those who are persistently late or negligent in their reporting obligations, are subject to Federal action, up to and including the termination of Federal funding or the ability to receive Federal funds in the future.

Federal departments and agencies are reminded that these terms and conditions of Recovery Act awards, when coupled with other existing policies and procedures, provide a robust mix of actions available to address non-compliance. Beginning immediately, and consistent with these existing terms and polices, Federal departments and agencies must take the following actions to improve compliance with Section 1512 recipient reporting:

1. Identify non-compliant recipients. While most agencies have incorporated this step into their Recovery Act risk mitigation plans, each agency must compile a verified and detailed list of recipients who were required to report in the October period but failed to do so. Using the template and instructions found at https://max.omb.gov/community/x/LYHoFw, each agency must submit a completed template to the Office of Federal Financial Management by close of business December 4, 2009, via recovery@omb.eop.gov. This list is a first step in a two part process that will identify all recipients who received an award but did not file a report. OMB will provide guidance on additional measures agencies are to take once they are finalized.

2. Determine an appropriate outreach method and establish contact with each recipient who failed to report by the quarterly deadline, and:
    a. continue to instruct each non-reporting recipients to submit reports for the forthcoming and subsequent reporting quarters;
    b. determine the specific reasons a recipient failed to submit a report as required;
    c. provide assistance to recipients who experienced technical challenges, difficulty in understanding coding or other situations where the agency may be able to either provide direct assistance or an appropriate referral to avoid similar problems in the next reporting cycle;
    d. describe in plain language the consequences of current and continued non-compliance;
    e. confirm the non-reporting recipient is not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by the reviewing Federal department or agency; and
    f. provide documentation in appropriate administrative records.
3. Assess the severity of the non-compliance and the circumstances surrounding the non-compliance. From this assessment, Federal departments and agencies are to determine the need, if any, for future action regarding each non-filing recipient, including but not limited to:
    a. those provided in OMB Memorandum M-09-10 Section 6.4 and M-09-21 Sections 4.1 and 4.6;
    b. enforcement of terms and agreement provisions within relevant awarding documents, including—
        i. sanctions provided under 2 CFR Part 176 for recipients of grants or other non-contractual awards, and FAR 4.1501 for recipients of Federal contract awards;
        ii. inclusion of the recipient's failure to comply with the reporting requirements a part of the recipient's performance record; and
        iii. other appropriate enforcement action.
4. Beginning with the next reporting period and for each subsequent reporting period thereafter, determine the applicability of agency regulations promulgated in furtherance Executive Orders 12549 or 12689, including regulations and guidance provided at FAR Subpart 9.4 and 2 CFR 215.62 or the agency's implementation of the OMB Circular A–102, for each recipient who fails to submit required reports for two or more successive quarters.

If the non-compliance appears to be fraudulent, Federal Departments and agencies are to refer the matter to other appropriate agency officials such as the officer responsible for criminal investigation.

Agency efforts have been essential to the level of success seen in the initial round of Recovery Act recipient reporting. Through the efforts listed above, Federal department and agencies can help recipients meet their legal duty and further President Obama's and Congress' commitment to unprecedented levels of transparency in the use of the public's funds.

Thank you for your extensive engagement in this first-of-its-kind effort.

AC-07-001-8906

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

DEC 1 2 2007

The Honorable Henry Waxman
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I am writing in response to your letters of November 26, 2007, in which you request additional information to follow up on Mr. Benjamin Grumbles' testimony before an October 31, 2007, House Committee on Oversight and Government Reform hearing regarding the injection of diesel fuel into natural gas wells as a hydraulic fracturing fluid.

EPA respects your role as Chairman and is committed to providing the Committee with information necessary to satisfy its oversight activities to the greatest extent possible, consistent with Constitutional and statutory obligations. We are working diligently to ascertain additional information requested in your letters and will respond as expeditiously as possible.

Thank you again for your letter. If you have any questions, please contact me or your staff may contact Christina J. Moody of my staff at (202) 564-0260.

Sincerely,

Joyce K Frank
for Christopher P. Bliley
Associate Administrator

cc: Tom Davis
Ranking Minority Member

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AL-07-001-8906

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 11 2008

OFFICE OF
WATER

The Honorable Henry A. Waxman
Chairman
Committee on Oversight and Government Reform
United States House of Representatives
Washington, DC 20515

Dear Chairman Waxman:

Thank you for your letters of November 26, 2007 including questions on my October 31, 2007 testimony regarding the Environmental Protection Agency's (EPA) programs and activities to protect public health and the environment, as they relate to the oil and gas sector. Specifically, you were interested in EPA actions to ensure that hydraulic fracturing activities do not endanger underground sources of drinking water (USDWs). EPA shares your goal of ensuring protection of ground water that could be used as a source of drinking water, and works closely with our state partners to implement the Underground Injection Control (UIC) program to protect such waters.

Your first letter expressed concerns about the Memorandum of Agreement (MOA) that EPA entered into with major hydraulic fracturing service companies. The MOA, "*Elimination of Diesel Fuel in Hydraulic Fracturing Fluids Injected into Underground Sources of Drinking Water During Hydraulic Fracturing of Coalbed Methane Wells*," which was signed on December 12, 2003, represented a significant step in EPA's efforts to ensure protection of USDWs. In conducting a study of the practice of hydraulic fracturing of coalbed methane wells, EPA observed that companies sometimes used diesel fuel, which contains benzene, tolulene, ethylbenzene and xylene, each of which is regulated as a drinking water contaminant under the Safe Drinking Water Act (SDWA). At the urging of EPA, the companies of BJ Services Company, Halliburton Energy Services, Inc., and Schlumberger Technology Corp., which accounted for most of the work in this area, voluntarily agreed to eliminate the use of diesel fuel in hydraulic fracturing fluids injected into coalbed methane production wells in USDWs.

EPA believes that the MOA will ensure that the companies do not use diesel fuel for hydraulic fracturing in coalbed methane production wells in USDWs and that, pursuant to the MOA, where necessary, they are substituting other fluids that will not endanger USDWs. The MOA included a provision for the companies to notify EPA within 30 days after a decision to resume use of diesel fuel in their operations. EPA has received no such notice from the companies since the MOA was signed. Further, although there is no requirement in the MOA for regular notification, the service companies have communicated to EPA that they are continuing to meet the terms of the MOA (see attached letters). The Agency will continue to contact the companies periodically to monitor their implementation of the MOA.

An enclosure to this letter includes detailed responses to the questions you raised in your second letter of November 26, 2007, which focused on EPA's knowledge of hydraulic fracturing fluids. EPA did evaluate information about hydraulic fracturing fluids in completing the June 2004 report *"Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs"*. However, EPA does not maintain an inventory of hydraulic fracturing fluids used in coalbed methane development. Additionally, because Congress has exempted hydraulic fracturing and its associated fluids (other than diesel fuel), from the definition of "underground injection," the Agency has no plans for initiating collection of such an inventory.

In administering the UIC Program, EPA believes that it is sound policy to focus attention on those wells that may pose the greatest risk to USDWs. EPA initiated the study investigating hydraulic fracturing for coalbed methane gas because those wells are generally shallow and closer to USDWs than are wells used for conventional oil and gas production. The 2004 report concluded that the potential threat to USDWs posed by hydraulic fracturing of coalbed methane wells is low.

Our focus for the past several years has been on reducing risks from shallow Class V wells that have been identified as a high risk to USDWs, such as motor vehicle disposal wells and large-capacity cesspools. At this time, the Agency is also focusing significant attention on ensuring that the long term storage of carbon dioxide through underground injection does not endanger underground sources of drinking water. The program is currently developing national regulations for such injection that will be proposed in the summer of 2008. These two efforts are currently EPA's highest priorities in the UIC program.

EPA remains committed to protecting USDWs and, by extension, public health. Again, thank you for your letter. If you have further questions, please contact me or your staff may call Christina Moody, in EPA's Office of Congressional and Intergovernmental Relations, at 202-564-0260.

Sincerely,

Benjamin H. Grumbles
Assistant Administrator

Enclosure

Enclosure
EPA Response to Specific Questions Regarding Hydraulic Fracturing

1. **During your testimony, you stated that you were unaware of whether the EPA maintains an inventory of hydraulic fracturing fluids, and the chemicals used therein that are injected into underground sources of drinking water. Does EPA maintain such an inventory? If so, please provide this inventory to the Committee.**

   EPA does not maintain an inventory of hydraulic fracturing fluids. In Chapter 4 of EPA's June 2004 study "*Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*," (at http://www.epa.gov/safewater/uic/wells_coalbedmethanestudy.html) we described the range of fluids and fluid additives commonly used in hydraulic fracturing for coalbed methane reservoirs. As noted on page 4-3 of the report, material safety data sheets (MSDSs) supplied by the companies conducting such hydraulic fracturing were the source of information for a summary provided in Table 4-1 (attached). The fluids and additives listed in the table represent the pure products, not the diluted mixtures injected at specific sites which may differ to respond to local conditions (e.g., geology, stratigraphy, depth). EPA reviewed a number of data sheets and noted that many of them are different, thus containing many different lists of fluids and additives. Thus, in the final report, the Agency concluded that it could not say whether one specific chemical, or chemicals, is/are present at every hydraulic fracturing operation.

   The best sources of information on hydraulic fracturing fluid components and mixtures are the companies conducting hydraulic fracturing of coalbed methane wells. We understand that you have asked the major companies for these sheets in a separate communication. We are not aware of additional information in any database or other inventory.

2. **Does EPA have a basis for assuring Congress and the public that underground sources of drinking water are not contaminated by hydraulic fracturing fluids, and the chemicals contained therein? If so, what is that basis?**

   The Agency stands by the 2004 study which concluded that the potential threat to USDWs posed by hydraulic fracturing of coalbed methane wells is low. EPA worked to ensure that the study was carried out in a comprehensive and transparent fashion. During the course of the study, EPA could not identify any confirmed cases where drinking water was contaminated by hydraulic fracturing fluids associated with coalbed methane production. EPA did identify a potential risk to USDWs through the use of diesel fuel as a constituent of fracturing fluids where coalbeds are co-located with a USDW. As noted in our response letter, we addressed that potential risk by developing the December 2003 MOA in which the three companies whose activities represent the bulk of the market for coalbed methane wells agreed to eliminate diesel fuel in hydraulic fracturing fluids injected into coalbed methane production wells in USDWs.

It should be noted that, irrespective of the statutory exclusion enacted by the 2005 Energy Policy Act, the Administrator retains the authority under the SDWA section 1431 to take appropriate action to protect public health from any imminent and substantial endangerment caused by hydraulic fracturing.

3. **What is the total volume on an annual basis of hydraulic fracturing fluids that are injected into underground sources of drinking water?**

EPA does not have precise, current information about the total volume of hydraulic fracturing fluids that are injected into underground sources of drinking water, but based on our 2004 study of hydraulic fracturing into shallow coalbed methane wells, EPA does not believe that such fracturing is likely to endanger underground sources of drinking water.

Our 2004 study described several estimates of volumes used in the practice (see pp. 3-10 and 3-11). For example, the study notes that some literature indicates that coalbed fracture treatments use from 50,000 to 350,000 gallons of various stimulation and fracturing fluids, and from 75,000 to 320,000 pounds of sand as proppant (Holditch et al., 1988, 1989; Jeu et al., 1988; Hinkel et al., 1991; Holditch, 1993; Palmer et al., 1991b, 1993a, 1993b). More typical injection volumes, based on average injection volume data provided by Halliburton for six coalbed methane locations indicated a maximum average injection volume of 150,000 gallons per well and a median average injection volume of 57,500 gallons per well (Halliburton Inc., 2003).

4. **Does EPA have a basis for assuring Congress and the public that hydraulic fracturing fluids that are injected into underground sources of drinking water do not contain BTEX chemicals? If so, what is that basis?**

EPA believes that the signatories to the 2003 MOA are meeting the terms of the agreement and are not using diesel fuel in hydraulic fracturing fluids injected into coalbed methane wells in USDWs. One of the conditions of the MOA is that the companies will notify the Assistant Administrator for the Office of Water within 30 days after any decision to re-institute the use of diesel fuel additives in hydraulic fracturing fluids injected into USDWs for coalbed methane production. To date, none of the signatories has contacted EPA to inform the Agency of such a fact. Although not a requirement of the MOA, the Agency has periodically sought, and received, confirmation from the companies that they are still abiding by the terms of the MOA. Copies of this correspondence are attached to this response.

5. **In 2003, the EPA entered into a voluntary Memorandum of Agreement (MOA) with BJ Services Co., Halliburton Energy Services, Inc., and Schlumberger Technology Corp., to "eliminate diesel fuel in hydraulic fracturing fluids injected into coalbed methane (CBM) production wells in underground sources of drinking water." At the time EPA stated that these companies conducted 95% of hydraulic fracturing activities that occur in the United States. What is the**

current percentage of activities that they conduct? What assurances can EPA provide that no other companies are injecting diesel fuel into underground sources of drinking water?

At the time EPA entered in the MOA with the companies, our understanding from them was that they represented 95% of the hydraulic fracturing market for coalbed methane wells. We understand that other companies have entered the market. However, we do not have any new estimates from the major companies of changes in their share of the hydraulic fracturing market for coalbed methane wells, nor do we have any other specific methodology for estimating market share independently. The Ground Water Protection Council (GWPC) has developed a report identifying companies with hydraulic fracturing services. The September 2004 report, entitled "*Oilfield Service Companies Providing Acidizing, Fracturing & Stimulation Services in the United States*" provides some of the names of the companies, by State, that do hydraulic fracturing for all oil field operations, which is a much larger market than those doing such hydraulic fracturing solely for coalbed methane production While the three major companies who signed the MOA have not been using diesel since signing the MOA, we do not know if the other companies are similarly not using diesel fuel. We understand that the Ground Water Protection Council is following up with state oil and gas agencies to determine if they are aware of any companies that are using diesel fuel in coalbed methane operations.

AL-07-002-0291

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 1 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Tom Davis
Ranking Member
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Davis:

Thank you for the opportunity to respond to questions for the record that followed a November 8, 2007 hearing on the Environmental Protection Agency's (EPA's) approval of new power plants. I hope this information will be useful to you and the members of the Committee.

If you have any further questions, please contact me or your staff may contact Josh Lewis in my office at 202-564-2095.

Sincerely,

Christopher P. Bliley
Associate Administrator

Enclosure

Questions for EPA Administrator Stephen Johnson for the Hearing Record
Hearing on EPA Approval of New Power Plants
November 8, 2007, Committee on Oversight and Government Reform

1. In Massachusetts v. EPA, the Supreme Court overturned the Administration's position that greenhouse gases are not pollutants under the Clean Air Act and that therefore EPA has no authority to regulate emissions of greenhouse gases. You stated in your testimony that EPA is "evaluating the potential effects of the Supreme Court decision on a variety of Clean Air Act programs, including stationary source programs." Do you agree that this Supreme Court decision has potentially broad and significant impacts on a variety of Clean Air Act provisions? If not, why not?

Response: As EPA has noted on several occasions, the Supreme Court decision has the potential to impact a variety of Clean Air Act sections and programs, which is why the Agency is moving forward in a careful and deliberate manner.

2. Do you agree that the Court's recognition that greenhouse gases are air pollutants requires EPA to consider whether and how CAA Title I provisions, such as section 165, may apply with respect to greenhouse gases?

Response: EPA agrees that the Agency is required to consider whether and how CAA Title I provision may apply with respect to greenhouse gases, given the Court's recognition that greenhouse gases are air pollutants.

3. In light of the important legal and policy issues raised by the Supreme Court's decision, will you commit to request the State of Nevada, which is acting as the federal government's agent as the permitting authority for the White Pine plant, either to reopen the comment period or accept late comments on the White Pine proposed permit decision, to enable commenters to address the effect of the Supreme Court's decision in Massachusetts v. EPA, which was issued after the comment period closed, on the permit decision?

Response: We do not consider it necessary for the Nevada Department of Environmental Protection to reopen the public comment period in order to consider late comments on the effect of the Supreme Court's decision. EPA Region 9 will recommend that the NDEP accept and respond to all significant comments concerning the Supreme Court's ruling in *Massachusetts v. EPA* to the extent practicable.

4. In your responses to questions at the hearing, you indicated that you had not looked at the statistics on the quantity of carbon dioxide emissions that would occur if the Desert Rock and White Pine plants were built. This is surprising, as the effect of these plants on global warming is a primary focus of the Committee's ongoing investigation and the hearing. Based on the projected emissions quantities

estimated by others, the lifetime emissions from these two plants together would offset the 1.3 billion tons of greenhouse gas emissions avoided through EPA's major voluntary climate programs (Energy Star, the methane program, the Green Power Partnership, the Combined Heat and Power Partnership, and the high GWP gas programs) since President Bush took office.

a. Before you directly permit or allow to be permitted any plant with global warming impacts of this scale, will you, as EPA Administrator, commit to examine each plant's contribution to global warming if it were built? If not, why not?

b. Will you commit to take such contribution into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

c. Will you commit to urge or require states with SIP-approved permit programs to take each proposed source's potential contribution to global warming into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

Response: We recognize the importance of addressing the global challenge of climate change. The Agency continues to work on developing an overall strategy to most effectively address emissions of greenhouse gases. We believe that an overall strategy provides the best mechanism for assessing and addressing the full range of potential effects of GHG emissions.

As a general matter, EPA uses established standards or criteria to judge whether a permit should be issued, conditioned or denied on the basis of such impacts. Without such guideposts for greenhouse gas emissions, any action to delay, condition, or deny permits based on the potential effects of those emissions raises significant issues. We will continue to take a case-by-case approach to permitting decisions so that we can determine the proper course of action in the absence of the usual analytical guideposts for making permitting decisions. I am committed to ensuring that the Agency is appropriately reviewing pending permit applications and comments before issuing any final permits.

5. Has EPA calculated the CO2 emissions from Desert Rock and White Pine in terms of the total annual CO2 emissions and the pounds of CO2 per MWh?

a. If not, why not?

b. If yes, please provide those numbers for each plant.

Response: EPA Region 9 has not calculated the CO2 emissions from Desert Rock or White Pine. The Draft Environmental Impact Statements prepared for Desert Rock and White Pine estimated annual CO2 emissions. The Draft EIS for the Desert Rock facility relied on an EPA emissions factor from AP-42 and estimated that Desert Rock will emit

12.7 million tons per year of CO2. The Draft EIS prepared for White Pine relied on an emissions factor from EPA's Climate Leaders Program and estimated that White Pine will emit 20.1 million tons of CO2 annually.

6. The current and threatened future effects of global warming recognized by the IPCC include, among others, sea level rise, loss of glaciers, reduced snowpack, increased drought, changes in precipitation, increases in the severity and extent of forest fires, increases in hurricane intensity, property damage, loss of species habitat, extinction of species, loss of coral reefs, effects on agriculture, expansion in the range of disease vectors, increases in air pollution, and harm to human health.

a. Has EPA independently analyzed the full range of potential effects of the contribution to global warming from the Desert Rock and White Pine plants, if they are built?

Response: Power plants are required by law to calculate and report CO2 emissions under section 821 of the Clean Air Act Amendments of 1990 and regulations at 40 CFR Part 75. There is discretion in the review process to calculate and understand the greenhouse gas profile of new sources. However, while EPA can project CO2 emissions in tons over the projected life of a particular project based in part on assumptions concerning the plant's operating parameters, we lack, and the general climate change research community lacks, the tools and methods to credibly quantify the specific end-point impacts listed above due to the CO2 emissions from an individual power plant.

b. Does anything in the Clean Air Act prohibit EPA from conducting such an analysis?

Response: Nothing in the Clean Air Act precludes EPA or State evaluation of the potential effects of emissions on global climate change. It is a separate issue as to whether any such evaluation is required.

c. If you have not conducted such an analysis, will you commit to do so, and require the State of Nevada to do so, prior to the issuance of a permit to either plant?

d. If not, why not?

Response:

As explained above, current modeling tools and methods do not permit us to credibly estimate the full range of specific endpoint impacts listed above due to the CO2 emissions of an individual power plant.

e. To the extent that other federal agencies have a role to play in any of this analysis (e .g ., the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration for species impacts and the Park Service for impacts on National

Parks), will you commit to ensure that such agencies' views are fully considered prior to issuance of any permit by EPA or a delegated state program? If not, why not?

Response: EPA complies with the requirements of the Clean Air Act (CAA), the Endangered Species Act and any other applicable statutes. Furthermore, it is standard practice that we consider the views of other federal agencies in our permitting decisions provided they are submitted in a timely manner.

7. In 2006, EPA revised the New Source Performance Standards (NSPS) for utility boilers and declined to regulate CO2 in that rulemaking. In September 2007, the DC Circuit remanded this decision to the Agency.

a. When will EPA issue a proposed rule responding to the remand?

b. When will EPA issue a final rule responding to the remand?

c. If EPA has no schedule for responding to the remand, why not?

Response: At this time the Agency is evaluating its options for responding to the remand as part of its overall consideration of greenhouse gas regulation under the Clean Air Act. Since a decision to control GHG emissions as part of a NSPS would impact other Clean Air Act programs with potentially far-reaching implications for many industrial sectors, it is vitally important that we consider our approach to GHG control from this broader perspective.

8. In April 2007, EPA issued a proposed rule revising the NSPS for refineries. In that rulemaking, commenters asserted that EPA must regulate CO2 and methane emissions from refineries. EPA is under a deadline in a consent decree to issue the final rule by April 30, 2008.

a. Will you have formulated an "overall strategy" for addressing greenhouse gas emissions from stationary sources prior to April 30, 2008?

Response:

EPA is making progress in evaluating the availability and potential use of various Clean Air Act authorities for greenhouse gas mitigation efforts, including the NSPS program. The Agency is continuing to collect information to evaluate the scope of sources potentially affected; the flexibility, reasonableness, and effectiveness of potential options for regulation under each authority; and the potential implications of each decision, including the interrelationships between different parts of the Act. For example, we have compiled publicly available data on potential greenhouse gas emissions across industrial sectors; evaluated the use of surrogate data to predict potential CO2 emissions; identified

a range of general greenhouse gas mitigation options; and begun to examine the applicability of these mitigation options in specific industries.

As we indicated above, we are committed to developing a sound strategy for addressing greenhouse gas emissions. In developing that strategy, we have come to appreciate the complexity and interrelationship of potential approaches to greenhouse gas regulation under the Clean Air Act, and the resulting importance of developing a sound overall strategy. In this regard, as we gather information to identify the potential universe of affected facilities if GHGs are regulated under the Act, we recognize that thresholds used for the Prevention of Significant Deterioration (PSD) determinations may greatly increase the number of facilities subject to New Source Review. For example, using a 250-ton per year threshold, facilities that could be covered during new construction and major modification include large apartment buildings, schools, hospitals and retail stores, or potentially large entertainment venues. In addition, for many combustion sources, some of the most effective mechanisms for mitigating GHGs, such as carbon capture and sequestration, need significant study and development before they could be implemented in a regulatory framework.

In view of these potential effects of CAA regulation, we believe it is vitally important to have an overall strategy in place to help guide regulatory decision-making. While we continue to make progress in developing a strategy, I cannot now commit to having a fully articulated strategy in place by a certain date.

b. Will EPA include a full analysis of the global warming effects of refinery greenhouse gas emissions in the technical documents supporting the final NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As indicated in our answer to the first part of this question, the Agency is collecting information about potential greenhouse gas emissions from various industrial sectors, including refineries. Under the United Nations Framework Convention on Climate Change, EPA develops the annual U.S. inventory of greenhouse gases. We have included in that inventory our estimate of the greenhouse gas emissions from the refinery sector. We plan to include that information in the rulemaking record for the final refinery NSPS. As we explained in our answer to question 6.a., the modeling tools currently available are not adequate to credibly quantify the impact of an amount of greenhouse gas emissions on the climate change endpoint impacts listed in question 6.

9. EPA is under a deadline in a consent decree to issue a proposed rule to establish an NSPS for the Portland cement sector by May 31, 2008, and to issue the final rule by May 31, 2009. Portland cement manufacturing produces large quantities of greenhouse gas emissions, and it is to be expected that commenters will assert that EPA is required to set limits on those emissions in this rulemaking.

a. Will you have formulated an "overall strategy" for addressing greenhouse gas emissions from stationary sources prior to May 31, 2008?

Response: Please see our answer to 8.a. above.

b. Will EPA include a full analysis of the global warming effects of Portland cement greenhouse gas emissions in the technical documents supporting the proposed NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As in the case of refinery greenhouse gas emissions, we plan to include the information we have on Portland cement greenhouse gas emissions in the rulemaking record for the cement NSPS, but available models cannot at this time credibly quantify the potential impact of those emissions on specific climate change endpoint impacts.

10. In your oral testimony, you stated: "we're working very diligently for developing an overall strategy for addressing greenhouse gas emissions, given the Supreme Court decision under Massachusetts v. EPA under the Clean Air Act, and that includes stationary sources." It has now been eight months since the Supreme Court decision. There are a number of pending permitting actions and regulatory actions facing the agency regarding greenhouse gas emissions from stationary sources.

a. Have you finalized any aspect of your "overall strategy for addressing greenhouse gas emissions?" If so, please describe that aspect of your strategy.

b. Have you taken or are you working on any action pursuant to an "overall strategy for addressing greenhouse gas emissions?" If so, please describe that action or actions.

c. When will you finalize the portion of an "overall strategy for addressing greenhouse gas emissions" that addresses stationary sources?

d. In the absence of an "overall strategy for addressing greenhouse gas emissions that addresses stationary sources" are you taking any measures to assure that any permit or regulatory decision with the potential to affect greenhouse gas emissions from a stationary source or sources takes those effects into account? If so, please describe. If not, why not?

Response: We have not finalized any aspect of our overall strategy at this time. For a description of our progress in developing a strategy and how we will approach permitting and regulatory decisions in the meantime, please see our answer to questions 8.a. and 4.c. above.

11. If carbon dioxide is a pollutant subject to regulation under the Clean Air Act, this triggers applicability of the new source review requirements for major sources located in clean air areas under section 165. Some have raised concerns that in the absence of specific threshold levels for CO2 emissions established by EPA, the new

source review requirements would apply if a new or modified major source were to increase CO2 emissions by any quantity.

a. Is EPA working on a rule to establish significance thresholds for emissions of CO2 under section 165. If not, why not?

b. When will EPA issue a proposed rule to establish significance thresholds for emissions of CO2 under section 165? When will EPA issue a final rule?

Response: EPA is in the midst of evaluating the potential effects of the Supreme Court's decision on the mobile and stationary provisions of the Clean Air Act. This work includes an assessment of the implications of the interplay between any mobile or stationary source rule that regulates GHGs and the Prevention of Significant Deterioration (PSD) program under section 165 of the Clean Air Act. CO2 is different because of its global nature and because the quantity released is generally larger than for regulated pollutants. As mentioned in our response to question 8.a., the potential universe of affected facilities would be different than with currently regulated pollutants. As part of that assessment, we are considering, within the framework of our overall climate strategy, whether (and if so, when and how) to proceed regarding any rulemaking to establish PSD significance thresholds for emissions of greenhouse gases.

12. The Bali Roadmap agreed to by the United States and the other parties to the UN Framework Convention on Climate Change last week "[r]ecogniz[ed] that "deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasiz[ed] the urgency to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental, Panel on Climate Change." The IPCC identified the need for developed countries to reduce emissions by 25-40% by 2020 to avoid exceeding atmospheric greenhouse gas concentrations of 450 ppm C02-equivalent.

a. Do you agree that it will it be more difficult and costly to achieve reductions on the scale identified as necessary by the IPCC if new coal-fired plants are built without controls?

Response:
The question implies that the Bali Roadmap and IPCC identified a specific C02-equivalent ppm target when many different scenarios and targets have been evaluated through the IPCC process. Moreover, the Bali Roadmap also provides emphasis on the need for development and dissemination of technology to address climate change.

It is evident from the Agency's review and reporting responsibilities under the Framework Convention on Climate Change that many sectors of the economy emit greenhouse gases. In developing an overall strategy for addressing greenhouse gas emissions, we are compiling and assessing information about available and potential control strategies for various sectors. At this point in time, it is not evident what set of

strategies would be more or less difficult or costly to employ for achieving a particular level of reductions. Further, any assessment must also consider the need for affordable, reliable, and domestically secure energy generation and appropriate ways to promote greenhouse gas reductions. In this area as with other sectors of the economy, programs aimed at the development of technology are essential to long-term progress.

b. Will you take this concern into account in each future permit action and in developing your overall strategy for addressing stationary sources? If not, why not?"

Response: Please see my answers to questions 4.c. and 12.a.

13. With the potential addition of six new coal units in the 17th Texas Congressional District alone, there are serious concerns about the cumulative impact on air quality and public health in Central Texas. Representative Edwards believes that we must determine the cumulative environmental effect that these proposed coal plants would have on Central Texas and state as a whole. In his view, it would be inadequate to just review the impact of each plant individually. The Texas Prevention of Significant Deterioration (PSD) State Implementation Plan (SIP), under which the Texas Commission on Environmental Quality (TCEQ issues permits to power plants, was approved by EPA to be consistent with the federal requirements of the Clean Air Act. In Texas, the PSD program requires air quality impacts from an individual facility and other facilities that impact the same area to be considered in the permitting process. How will EPA ensure that a cumulative analysis of emissions from existing and new sources will be performed?

Response: The PSD permit program requires a proposed source to include in their source impact analysis the effects of its new emissions and the emissions from other existing sources in the area where the source would locate. For such purpose, an "existing" source generally includes any source that has received a permit but is not yet operating. In addition, EPA guidance recommends that the new source's analysis include emissions that would result from sources whose complete application was submitted as of thirty days prior to the date the proposed source files its PSD application. In cases where several sources are "planning" to construct in an area, it is not mandatory for a proposed source to include in its source impact analysis emissions from any potential source that has not yet applied for a permit. Some States may elect to do a cumulative analysis of all such sources simultaneously. EPA is aware of the situation in Texas and has reviewed the preliminary permits for several potential sources. We intend to continue such reviews as part of our responsibility for program oversight to ensure that the PSD program is implemented in accordance with the national requirements.

AL-07-002-0291

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 1 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Henry A. Waxman
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to questions for the record that followed a November 8, 2007 hearing on the Environmental Protection Agency's (EPA's) approval of new power plants. I hope this information will be useful to you and the members of the Committee.

If you have any further questions, please contact me or your staff may contact Josh Lewis in my office at 202-564-2095.

Sincerely,

Christopher P. Bliley
Associate Administrator

Enclosure

Questions for EPA Administrator Stephen Johnson for the Hearing Record
Hearing on EPA Approval of New Power Plants
November 8, 2007, Committee on Oversight and Government Reform

1. In Massachusetts v. EPA, the Supreme Court overturned the Administration's position that greenhouse gases are not pollutants under the Clean Air Act and that therefore EPA has no authority to regulate emissions of greenhouse gases. You stated in your testimony that EPA is "evaluating the potential effects of the Supreme Court decision on a variety of Clean Air Act programs, including stationary source programs." Do you agree that this Supreme Court decision has potentially broad and significant impacts on a variety of Clean Air Act provisions? If not, why not?

Response: As EPA has noted on several occasions, the Supreme Court decision has the potential to impact a variety of Clean Air Act sections and programs, which is why the Agency is moving forward in a careful and deliberate manner.

2. Do you agree that the Court's recognition that greenhouse gases are air pollutants requires EPA to consider whether and how CAA Title I provisions, such as section 165, may apply with respect to greenhouse gases?

Response: EPA agrees that the Agency is required to consider whether and how CAA Title I provision may apply with respect to greenhouse gases, given the Court's recognition that greenhouse gases are air pollutants.

3. In light of the important legal and policy issues raised by the Supreme Court's decision, will you commit to request the State of Nevada, which is acting as the federal government's agent as the permitting authority for the White Pine plant, either to reopen the comment period or accept late comments on the White Pine proposed permit decision, to enable commenters to address the effect of the Supreme Court's decision in Massachusetts v. EPA, which was issued after the comment period closed, on the permit decision?

Response: We do not consider it necessary for the Nevada Department of Environmental Protection to reopen the public comment period in order to consider late comments on the effect of the Supreme Court's decision. EPA Region 9 will recommend that the NDEP accept and respond to all significant comments concerning the Supreme Court's ruling in *Massachusetts v. EPA* to the extent practicable.

4. In your responses to questions at the hearing, you indicated that you had not looked at the statistics on the quantity of carbon dioxide emissions that would occur if the Desert Rock and White Pine plants were built. This is surprising, as the effect of these plants on global warming is a primary focus of the Committee's ongoing investigation and the hearing. Based on the projected emissions quantities

estimated by others, the lifetime emissions from these two plants together would offset the 1.3 billion tons of greenhouse gas emissions avoided through EPA's major voluntary climate programs (Energy Star, the methane program, the Green Power Partnership, the Combined Heat and Power Partnership, and the high GWP gas programs) since President Bush took office.

a. Before you directly permit or allow to be permitted any plant with global warming impacts of this scale, will you, as EPA Administrator, commit to examine each plant's contribution to global warming if it were built? If not, why not?

b. Will you commit to take such contribution into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

c. Will you commit to urge or require states with SIP-approved permit programs to take each proposed source's potential contribution to global warming into account to the fullest extent allowed under the Clean Air Act in any future permit decision? If not, why not?

Response: We recognize the importance of addressing the global challenge of climate change. The Agency continues to work on developing an overall strategy to most effectively address emissions of greenhouse gases. We believe that an overall strategy provides the best mechanism for assessing and addressing the full range of potential effects of GHG emissions.

As a general matter, EPA uses established standards or criteria to judge whether a permit should be issued, conditioned or denied on the basis of such impacts. Without such guideposts for greenhouse gas emissions, any action to delay, condition, or deny permits based on the potential effects of those emissions raises significant issues. We will continue to take a case-by-case approach to permitting decisions so that we can determine the proper course of action in the absence of the usual analytical guideposts for making permitting decisions. I am committed to ensuring that the Agency is appropriately reviewing pending permit applications and comments before issuing any final permits.

5. Has EPA calculated the CO2 emissions from Desert Rock and White Pine in terms of the total annual CO2 emissions and the pounds of CO2 per MWh?

a. If not, why not?

b. If yes, please provide those numbers for each plant.

Response: EPA Region 9 has not calculated the CO2 emissions from Desert Rock or White Pine. The Draft Environmental Impact Statements prepared for Desert Rock and White Pine estimated annual CO2 emissions. The Draft EIS for the Desert Rock facility relied on an EPA emissions factor from AP-42 and estimated that Desert Rock will emit

12.7 million tons per year of CO2. The Draft EIS prepared for White Pine relied on an emissions factor from EPA's Climate Leaders Program and estimated that White Pine will emit 20.1 million tons of CO2 annually.

6. The current and threatened future effects of global warming recognized by the IPCC include, among others, sea level rise, loss of glaciers, reduced snowpack, increased drought, changes in precipitation, increases in the severity and extent of forest fires, increases in hurricane intensity, property damage, loss of species habitat, extinction of species, loss of coral reefs, effects on agriculture, expansion in the range of disease vectors, increases in air pollution, and harm to human health.

a. Has EPA independently analyzed the full range of potential effects of the contribution to global warming from the Desert Rock and White Pine plants, if they are built?

Response: Power plants are required by law to calculate and report CO2 emissions under section 821 of the Clean Air Act Amendments of 1990 and regulations at 40 CFR Part 75. There is discretion in the review process to calculate and understand the greenhouse gas profile of new sources. However, while EPA can project CO2 emissions in tons over the projected life of a particular project based in part on assumptions concerning the plant's operating parameters, we lack, and the general climate change research community lacks, the tools and methods to credibly quantify the specific end-point impacts listed above due to the CO2 emissions from an individual power plant.

b. Does anything in the Clean Air Act prohibit EPA from conducting such an analysis?

Response: Nothing in the Clean Air Act precludes EPA or State evaluation of the potential effects of emissions on global climate change. It is a separate issue as to whether any such evaluation is required.

c. If you have not conducted such an analysis, will you commit to do so, and require the State of Nevada to do so, prior to the issuance of a permit to either plant?

d. If not, why not?

Response:

As explained above, current modeling tools and methods do not permit us to credibly estimate the full range of specific endpoint impacts listed above due to the CO2 emissions of an individual power plant.

e. To the extent that other federal agencies have a role to play in any of this analysis (e .g ., the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration for species impacts and the Park Service for impacts on National

Parks), will you commit to ensure that such agencies' views are fully considered prior to issuance of any permit by EPA or a delegated state program? If not, why not?

Response: EPA complies with the requirements of the Clean Air Act (CAA), the Endangered Species Act and any other applicable statutes. Furthermore, it is standard practice that we consider the views of other federal agencies in our permitting decisions provided they are submitted in a timely manner.

7. In 2006, EPA revised the New Source Performance Standards (NSPS) for utility boilers and declined to regulate CO2 in that rulemaking. In September 2007, the DC Circuit remanded this decision to the Agency.

a. When will EPA issue a proposed rule responding to the remand?

b. When will EPA issue a final rule responding to the remand?

c. If EPA has no schedule for responding to the remand, why not?

Response: At this time the Agency is evaluating its options for responding to the remand as part of its overall consideration of greenhouse gas regulation under the Clean Air Act. Since a decision to control GHG emissions as part of a NSPS would impact other Clean Air Act programs with potentially far-reaching implications for many industrial sectors, it is vitally important that we consider our approach to GHG control from this broader perspective.

8. In April 2007, EPA issued a proposed rule revising the NSPS for refineries. In that rulemaking, commenters asserted that EPA must regulate CO2 and methane emissions from refineries. EPA is under a deadline in a consent decree to issue the final rule by April 30, 2008.

a. Will you have formulated an "overall strategy" for addressing greenhouse gas emissions from stationary sources prior to April 30, 2008?

Response:

EPA is making progress in evaluating the availability and potential use of various Clean Air Act authorities for greenhouse gas mitigation efforts, including the NSPS program. The Agency is continuing to collect information to evaluate the scope of sources potentially affected; the flexibility, reasonableness, and effectiveness of potential options for regulation under each authority; and the potential implications of each decision, including the interrelationships between different parts of the Act. For example, we have compiled publicly available data on potential greenhouse gas emissions across industrial sectors; evaluated the use of surrogate data to predict potential CO2 emissions; identified

a range of general greenhouse gas mitigation options; and begun to examine the applicability of these mitigation options in specific industries.

As we indicated above, we are committed to developing a sound strategy for addressing greenhouse gas emissions. In developing that strategy, we have come to appreciate the complexity and interrelationship of potential approaches to greenhouse gas regulation under the Clean Air Act, and the resulting importance of developing a sound overall strategy. In this regard, as we gather information to identify the potential universe of affected facilities if GHGs are regulated under the Act, we recognize that thresholds used for the Prevention of Significant Deterioration (PSD) determinations may greatly increase the number of facilities subject to New Source Review. For example, using a 250-ton per year threshold, facilities that could be covered during new construction and major modification include large apartment buildings, schools, hospitals and retail stores, or potentially large entertainment venues. In addition, for many combustion sources, some of the most effective mechanisms for mitigating GHGs, such as carbon capture and sequestration, need significant study and development before they could be implemented in a regulatory framework.

In view of these potential effects of CAA regulation, we believe it is vitally important to have an overall strategy in place to help guide regulatory decision-making. While we continue to make progress in developing a strategy, I cannot now commit to having a fully articulated strategy in place by a certain date.

b. Will EPA include a full analysis of the global warming effects of refinery greenhouse gas emissions in the technical documents supporting the final NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As indicated in our answer to the first part of this question, the Agency is collecting information about potential greenhouse gas emissions from various industrial sectors, including refineries. Under the United Nations Framework Convention on Climate Change, EPA develops the annual U.S. inventory of greenhouse gases. We have included in that inventory our estimate of the greenhouse gas emissions from the refinery sector. We plan to include that information in the rulemaking record for the final refinery NSPS. As we explained in our answer to question 6.a., the modeling tools currently available are not adequate to credibly quantify the impact of an amount of greenhouse gas emissions on the climate change endpoint impacts listed in question 6.

9. EPA is under a deadline in a consent decree to issue a proposed rule to establish an NSPS for the Portland cement sector by May 31, 2008, and to issue the final rule by May 31, 2009. Portland cement manufacturing produces large quantities of greenhouse gas emissions, and it is to be expected that commenters will assert that EPA is required to set limits on those emissions in this rulemaking.

a. Will you have formulated an "overall strategy" for addressing greenhouse gas emissions from stationary sources prior to May 31, 2008?

Response: Please see our answer to 8.a. above.

b. Will EPA include a full analysis of the global warming effects of Portland cement greenhouse gas emissions in the technical documents supporting the proposed NSPS rule? If not, what would be your justification for refusing to consider such effects?

Response: As in the case of refinery greenhouse gas emissions, we plan to include the information we have on Portland cement greenhouse gas emissions in the rulemaking record for the cement NSPS, but available models cannot at this time credibly quantify the potential impact of those emissions on specific climate change endpoint impacts.

10. In your oral testimony, you stated: "we're working very diligently for developing an overall strategy for addressing greenhouse gas emissions, given the Supreme Court decision under Massachusetts v. EPA under the Clean Air Act, and that includes stationary sources." It has now been eight months since the Supreme Court decision. There are a number of pending permitting actions and regulatory actions facing the agency regarding greenhouse gas emissions from stationary sources.

a. Have you finalized any aspect of your "overall strategy for addressing greenhouse gas emissions?" If so, please describe that aspect of your strategy.

b. Have you taken or are you working on any action pursuant to an "overall strategy for addressing greenhouse gas emissions?" If so, please describe that action or actions.

c. When will you finalize the portion of an "overall strategy for addressing greenhouse gas emissions" that addresses stationary sources?

d. In the absence of an "overall strategy for addressing greenhouse gas emissions that addresses stationary sources" are you taking any measures to assure that any permit or regulatory decision with the potential to affect greenhouse gas emissions from a stationary source or sources takes those effects into account? If so, please describe. If not, why not?

Response: We have not finalized any aspect of our overall strategy at this time. For a description of our progress in developing a strategy and how we will approach permitting and regulatory decisions in the meantime, please see our answer to questions 8.a. and 4.c. above.

11. If carbon dioxide is a pollutant subject to regulation under the Clean Air Act, this triggers applicability of the new source review requirements for major sources located in clean air areas under section 165. Some have raised concerns that in the absence of specific threshold levels for CO2 emissions established by EPA, the new

source review requirements would apply if a new or modified major source were to increase CO2 emissions by any quantity.

a. Is EPA working on a rule to establish significance thresholds for emissions of CO2 under section 165. If not, why not?

b. When will EPA issue a proposed rule to establish significance thresholds for emissions of CO2 under section 165? When will EPA issue a final rule?

Response: EPA is in the midst of evaluating the potential effects of the Supreme Court's decision on the mobile and stationary provisions of the Clean Air Act. This work includes an assessment of the implications of the interplay between any mobile or stationary source rule that regulates GHGs and the Prevention of Significant Deterioration (PSD) program under section 165 of the Clean Air Act. CO2 is different because of its global nature and because the quantity released is generally larger than for regulated pollutants. As mentioned in our response to question 8.a., the potential universe of affected facilities would be different than with currently regulated pollutants. As part of that assessment, we are considering, within the framework of our overall climate strategy, whether (and if so, when and how) to proceed regarding any rulemaking to establish PSD significance thresholds for emissions of greenhouse gases.

12. The Bali Roadmap agreed to by the United States and the other parties to the UN Framework Convention on Climate Change last week "[r]ecogniz[ed] that "deep cuts in global emissions will be required to achieve the ultimate objective of the Convention and emphasiz[ed] the urgency to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental, Panel on Climate Change." The IPCC identified the need for developed countries to reduce emissions by 25-40% by 2020 to avoid exceeding atmospheric greenhouse gas concentrations of 450 ppm C02-equivalent.

a. Do you agree that it will it be more difficult and costly to achieve reductions on the scale identified as necessary by the IPCC if new coal-fired plants are built without controls?

Response:
The question implies that the Bali Roadmap and IPCC identified a specific C02-equivalent ppm target when many different scenarios and targets have been evaluated through the IPCC process. Moreover, the Bali Roadmap also provides emphasis on the need for development and dissemination of technology to address climate change.

It is evident from the Agency's review and reporting responsibilities under the Framework Convention on Climate Change that many sectors of the economy emit greenhouse gases. In developing an overall strategy for addressing greenhouse gas emissions, we are compiling and assessing information about available and potential control strategies for various sectors. At this point in time, it is not evident what set of

strategies would be more or less difficult or costly to employ for achieving a particular level of reductions. Further, any assessment must also consider the need for affordable, reliable, and domestically secure energy generation and appropriate ways to promote greenhouse gas reductions. In this area as with other sectors of the economy, programs aimed at the development of technology are essential to long-term progress.

b. Will you take this concern into account in each future permit action and in developing your overall strategy for addressing stationary sources? If not, why not?"

Response: Please see my answers to questions 4.c. and 12.a.

13. With the potential addition of six new coal units in the 17th Texas Congressional District alone, there are serious concerns about the cumulative impact on air quality and public health in Central Texas. Representative Edwards believes that we must determine the cumulative environmental effect that these proposed coal plants would have on Central Texas and state as a whole. In his view, it would be inadequate to just review the impact of each plant individually. The Texas Prevention of Significant Deterioration (PSD) State Implementation Plan (SIP), under which the Texas Commission on Environmental Quality (TCEQ issues permits to power plants, was approved by EPA to be consistent with the federal requirements of the Clean Air Act. In Texas, the PSD program requires air quality impacts from an individual facility and other facilities that impact the same area to be considered in the permitting process. How will EPA ensure that a cumulative analysis of emissions from existing and new sources will be performed?

Response: The PSD permit program requires a proposed source to include in their source impact analysis the effects of its new emissions and the emissions from other existing sources in the area where the source would locate. For such purpose, an "existing" source generally includes any source that has received a permit but is not yet operating. In addition, EPA guidance recommends that the new source's analysis include emissions that would result from sources whose complete application was submitted as of thirty days prior to the date the proposed source files its PSD application. In cases where several sources are "planning" to construct in an area, it is not mandatory for a proposed source to include in its source impact analysis emissions from any potential source that has not yet applied for a permit. Some States may elect to do a cumulative analysis of all such sources simultaneously. EPA is aware of the situation in Texas and has reviewed the preliminary permits for several potential sources. We intend to continue such reviews as part of our responsibility for program oversight to ensure that the PSD program is implemented in accordance with the national requirements.

AL-08-000-2044

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 17 2008

OFFICE OF
WATER

The Honorable James L. Oberstar
Chairman
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Oberstar:

Enclosed, for insertion in the hearing record, are the Environmental Protection Agency's responses to the questions that you forwarded to us following the February 7, 2008, hearing regarding "Agency Budgets and Priorities for FY 2009."

If you have any questions about the enclosed, please do not hesitate to contact me or have your staff call Greg Spraul in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Thank you

Sincerely,

Benjamin H. Grumbles
Assistant Administrator

Enclosure

EPA Response to Questions
From Representative James L. Oberstar
House Committee on Transportation and Infrastructure
Hearing on Agency Budgets and Priorities for FY09
February, 2008

1. **Question**: The water quality and wildlife habitat restoration goals for the Chesapeake Bay have had difficulty in being met, yet in the President's fiscal year 2009 budget request, funding for the EPA's Chesapeake Bay Program has been reduced compared to last year's enacted levels. What will the implications of this cut be for achieving the goals for rehabilitating the Chesapeake? What is the role of nonpoint source pollution in not achieving these goals? What impact will the reduction in Section 319 [nonpoint source pollution] grants have on the Chesapeake Bay?

   Answer: The Chesapeake Bay Program FY09 budget request is $29.0 million which is the highest request in the history of the program. The President's budget is lower than the FY 2008 enacted budget because it does not include $1.969 million for the Chesapeake Bay Small Watershed Grants Program which Congress added in the FY 2008 enacted budget. EPA projects that the elimination of the Small Watershed Grants will have no measurable impact on program performance goals in FY 2009.

   Nonpoint source pollution, primarily from agriculture and stormwater runoff from developed and developing lands, is the primary source of nutrient and sediment pollution to the Bay, with agriculture accounting for approximately 40% of the total nutrient loads to the Bay. Point sources account for approximately 20% of the nutrient loads to the Bay, and through the efforts of EPA and its state partners, the point source reduction goals for phosphorus will be met by 2010, and 95% of the point source nitrogen goal will be met by 2010. To address slower progress in achieving the nonpoint source nutrient and sediment reduction goals, the President's budget request for FY09 contains $8 million for an Innovative Nonpoint Source Reduction grants program.

   The reduction to the Section 319 grants program will be applied proportionally to all states and, for Bay states, will be offset by the Innovative Nonpoint Source Reduction grants program, created in FY08.

2. **Question**: The Watershed Approach is one of EPA's "4 Pillars of Sustainable Infrastructure." What are the implications of the administration's zeroing out the Targeted Watershed Grants budget on EPA's commitment to a watershed approach?

   Answer: EPA remains committed to the watershed approach as the most effective framework to address water resource challenges. Established as a special initiative in 2003, the Targeted Watershed Grants (TWG) Program was not intended to be a permanent and ongoing program, but rather as a means for local watershed groups to implement on-the-ground restoration and protection activities while also developing

efforts that would lead to self-sustainable practices. Reports from the TWG grant recipients, as well as some preliminary results of a TWG program evaluation, indicate a strong need for more training and capacity building activities for watershed groups. In response, the Agency included in the last year's TWG Request for Proposals (RFP) a separate request specific to capacity building projects to take into consideration these issues -- and thus continue to meet the watershed organizations' needs by providing necessary training and education that will lead to self-sustaining practices.

3. **Question**: In your response to the 2005 EPA Office of the Inspector General's Watersheds evaluation, you note EPA's support for watershed plans through the use of Section 319 funds, and EPA's support for watershed priorities through the use of Clean Water SRF funds. Yet, in the President's budget request for fiscal year 2009, the administration proposes to significantly reduce both of these funding sources from not only current funding levels, but also from previous presidential request levels. What are the implications of these funding cuts for restoring watersheds, and supporting watershed plans and priorities, and is this consistent with your response to the 2005 OIG report?

   Answer: EPA will continue to provide strong support for States' development and implementation of watershed plans and watershed projects to maintain and restore our nation's water quality.

   Since the program's inception in 1988, EPA has invested about $26 billion in the Clean Water State Revolving Fund (CWSRF), more than three times the original authorized level of $8.4 billion. The original funding authorization for the program expired in 1994. The Federal seed money has enabled the States to establish a permanent funding source for addressing their critical water quality needs. When combined with the Federal funds, the inflow of monies from state contributions, bond proceeds, the recycling of loan repayments into new loans and other sources has generated $65 billion in funds available to communities to restore watersheds and support watershed plans and priorities. In 2007 alone, CWSRFs provided $5.3 billion to important water quality projects. The President's FY 2009 budget request affirms the Administration's commitment to provide $6.8 billion in federal funding to the CWSRF from 2004 through 2011. EPA continues to encourage states as they make their funding decisions to give greater consideration for high priority water quality projects, and green infrastructure in particular.

   The national nonpoint source program remains strongly focused on the development and implementation of watershed-based plans to solve water quality problems and thereby restore the health of impaired waters. EPA will work with states to ensure continued focus on high priority activities to restore impaired waters. Specifically, EPA and the state nonpoint source agencies will continue to devote $100 million annually to the development and implementation of watershed-based plans that are focused on restoring waterbodies that are currently on the states' impaired waters lists. EPA also notes that it expects that the states will continue to meet their targets for sediment and nutrient reductions as set forth in EPA's strategic plan.

AL-09-000-6805

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 3 2009

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable James L. Oberstar
Chairman
Committee on Transportation and Infrastructure
Unites States House of Representatives
Washington, DC 20515

Dear Chairman Oberstar:

Thank you for your letter of May 6, 2009, providing questions for the record of the Committee on Transportation and Infrastructure. Please find enclosed the U.S. Environmental Protection Agency's (EPA's) responses to the questions posed by the Committee pursuant to the April 29, 2009, hearing titled, "Recovery Act: 10-Week Progress Report for Transportation and Infrastructure Programs." I hope this information will be useful to you and the Members of the Committee.

If you have further questions, please contact me, or your staff may contact Carolyn Levine EPA's Office of Congressional and Intergovernmental Relations at (202) 564-1859.

Sincerely,

Arvin R. Ganesan
Deputy Associate Administrator

Enclosure

cc: The Honorable John L. Mica, Ranking Member
Committee on Transportation and Infrastructure

Environmental Protection Agency Responses to Questions for the Record
From the April 29, 2009
House Committee on Transportation and Infrastructure
Hearing on "Recovery Act: 10-Week Progress Report for Transportation and Infrastructure Programs"

Questions from Congressman John J. Hall:

1. Secretary LaHood and Administrator Jackson, thank you both for being here and for working so hard to get right the infrastructure part of the Recovery Act, which in my opinion is the portion of the Recovery Act that will create the most jobs. The primary infrastructure components of the Recovery Act for the most part used existing formulas and programs to distribute funds. The result was an enormous amount of money, in some cases as much or more than the normal program funding, delivered to your agencies with a very strict timeline to spend down the money. So far, that seems to be working. As this Committee looks to reauthorize both the surface transportation program and water infrastructure programs at the EPA, could you each tell us about some lessons learned that we may want to incorporate into future legislation. For example, does the 120 day "use it or lose it" language make sense in every bill?

Response: While the Recovery Act does not include a 120 day "use it or lose it" provision for water infrastructure, it does require that Clean Water and Drinking Water State Revolving Funds (SRFs) monies be under contract or construction within one year of enactment. This one-year "use it or lose it" requirement clearly makes urgent the moving of funds to communities in order to create jobs and build needed infrastructure. It is a valuable and essential part of the Act.

However, such a provision is not needed for the regular, non-ARRA programs. Incorporating the provision into the SRF programs for ARRA funds requires States to rank potential projects according to readiness to proceed. While this is always an important factor for funding projects in the base program, raising the importance of this factor may have the effect of pushing essential projects, those needed for protection of our water resources or public health protection, further down on a State's priority list, and move less essential projects that are ready to go to construction higher on the list. I believe the States are in the best position to determine the balance between those projects most needed to serve the environment and the public health, and those that may proceed to construction quickly.

2. Administrator Jackson, I want to thank you in particular for working so closely with New York EFC, whose President Matthew Millea is joining us today. In Mr. Millea's testimony, he praises you and your team for swiftly and cooperatively developing criteria and definitions for the "green infrastructure" set aside within the water infrastructure section of the Recovery Act. My question is this: are these definitions and guidances transferable to other agencies or departments and, if not, what mechanisms can we set up either through the regulatory process or through statute, so that we can quickly and easily get good green infrastructure built as part of other programs. It would be a shame if we

did not take advantage of some of the work you have done in implementing the Recovery Act in, for example, the upcoming surface transportation bill.

Response: Based upon existing program definitions of green stormwater infrastructure, energy efficiency, water efficiency and innovative environmental projects, definitions and guidance on green infrastructure requirements for ARRA and the SRFs were quickly developed by EPA to inform State SRF managers and potential assistance recipients about the green projects targeted by the ARRA funding. These resources, along with training webcasts for both state and general audiences, are available on the EPA recovery website http://www.epa.gov/water/eparecovery. The information on green infrastructure is easily transferrable to other agencies that work with water infrastructure financing. One of the best ways to incorporate green infrastructure into other water infrastructure finance programs is to provide information and incentives to communities to pursue green approaches to water pollution control and drinking water protection.

Environmental Protection Agency Responses to Questions for the Record
From the April 29, 2009
House Committee on Transportation and Infrastructure
Hearing on "Recovery Act: 10-Week Progress Report for Transportation and Infrastructure Programs"

Questions from Congressman Pete Olson:

1. Administrator Jackson, it is my understanding that the Buy American provisions of the stimulus are slowing down a number of projects. What steps is EPA taking to provide better guidance to speed up this process?

Response: For the first time, EPA must apply Buy American provisions to the Clean Water and Drinking Water State Revolving Fund programs. Because of this, many State programs and communities have been struggling to understand how this provision will impact their programs and projects. The Buy American provision is complex because of its broad scope and the need for consistency with US obligations under international agreements. As authorized by the statute, EPA has developed a waiver process that appropriately balances Congress' dual purposes of using ARRA funds to purchase American-made goods while awarding grants and putting the funds to use as quickly as possible. Since many key components of wastewater and drinking water systems are manufactured outside of the US, we anticipate receiving a high volume of waiver requests.

On April 28, 2009, EPA issued a process memo on Buy American implementation and how to obtain a waiver. Additionally, EPA is conducting a series of webcasts with States and the water community, one of which was held on May 19, 2009, to ensure that all of the requirements are understood, the process is clear, and that the Buy American provisions can be implemented as smoothly as possible.

EPA is considering issuing national waivers in appropriate circumstances. EPA issued a national waiver on April 1, 2009. This waived the Buy American requirements for those projects that were initially financed on or after October 1, 2008 and prior to passage of ARRA on February 17, 2009. This waiver corresponds with the ARRA provision that allows refinancing of projects with ARRA funds, the purpose of which was to allow projects to get underway prior to passage of the ARRA.

2. Administrator Jackson, it is my understanding that the EPA has interpreted the Buy America provision to mean that any mixing of stimulus funds with State Revolving Fund money automatically requires the more restrictive Buy America provisions of the stimulus to apply and that US international treaty obligations including the WTO Government Procurement Agreement do not apply to State Revolving Fund projects. What steps are you taking to ensure that the more restrictive Buy America provisions of the stimulus are not being spread to other non-stimulus processes?

Response: Based on the ARRA language in section 1605, which requires that American iron, steel, and manufactured goods be used in any project receiving ARRA funding, any project that is funded in whole or in part with ARRA funds must comply with the Buy American provisions. However, there are many situations in which major construction activities are clearly undertaken in segregable phases that are distinct in purpose, time, or place. In those situations, contracts or assistance agreements funded with non-ARRA monies would carry separate requirements and not be subject to the Buy American provisions.

International trade agreements apply to procurement undertaken by signatories to the trade agreements. For an SRF assistance recipient to be able to meet the obligations of the Buy American provision by citing an international agreement, the recipient must be subject to the agreement. Because the overwhelming majority of assistance recipients are local governments that are not subject to such agreements, such agreements typically do not play a role in SRF projects and the Buy American requirements apply. However, if a State agency receives SRF assistance and is conducting the procurement, where the State agency is covered by a trade agreement, it would not apply the Buy American requirements to products from those countries. Additionally, there are 7 U.S. cities that are covered by an agreement with the European Communities (EC), which means that those cities would not apply the Buy American requirements to products from the EC Member States.

Congressman Shuster

Please provide in writing what EPA is doing to streamline approval processes for (other Agency) stimulus projects.

Answer: EPA is ready to assist federal agencies in realizing the Recovery Act's full promise in a timely and responsible manner. This can best be done on a project specific basis. Our experience to date is that the "shovel ready projects" moving forward have already had the required environmental reviews and approvals. On April 20, 2009, EPA sent a letter to federal agencies asking them to comply with applicable environmental laws and requirements, including NEPA; to think about green practices (tools and best practices available on EPA recovery website) and to collaborate with us by letting us know their planned projects. We are committed to helping other agencies meet all applicable requirements, and to provide timely reviews and approvals as these projects move forward.

AL-11-001-9286

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 23 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your November 15, 2011 letter, cosigned by 12 of your colleagues, regarding the continued availability of over-the-counter (OTC) inhalers for the treatment of asthma. Your letter requests that the Environmental Protection Agency (EPA) exercise its enforcement discretion to allow for continued distribution of existing inventories of the over-the-counter (OTC) inhaler Primatene Mist beyond the December 31, 2011, date set by the Food and Drug Administration's (FDA's) 2008 rulemaking.

On November 22, 2011, we received a similar request from the National Association of Chain Drug Stores (NACDS). We responded to NACDS to share some context for how such requests are considered by the EPA in other settings, and to summarize information about the December 31 transition that has been made public by various stakeholders, including the American Lung Association and the American College of Allergy, Asthma and Immunology. We enclose for your information our letter to NACDS.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3668.

Sincerely,

Arvin Ganesan
Associate Administrator

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 20 2011

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Kevin N. Nicholson, R. Ph., Esq.
Vice President
Government Affairs and Public Policy
National Association of Chain Drug Stores
413 North Lee Street
P.O. Box 1417-D49
Alexandria, Virginia 22313-1480

Dear Mr. Nicholson:

Thank you for your letter of November 22, 2011, expressing your concern over asthmatics' access to Primatene Mist, an over-the-counter (OTC) inhaler, and requesting that your member pharmacies of the National Association of Chain Drug Stores (NACDS) be allowed to sell current stocks of Primatene Mist after December 31, 2011. I wanted to update you on the status of your request, which we have discussed with our colleagues at the Food and Drug Administration (FDA).

Before addressing the public health concerns you raise, I wanted to provide some context regarding when the Environmental Protection Agency (EPA) grants this type of relief. In general, the EPA has a policy that disfavors "No Action Assurances" except: (1) "where expressly provided by applicable statute or regulation," or (2) "in extremely unusual cases in which a no action assurance is clearly necessary to serve the public interest." Policy Against "No Action" Assurances, Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring (Nov. 16, 1984). "Public interest" encompasses well-documented public health concerns.

We share your concern for Americans who struggle with asthma, and we recognize that after December 31, 2011, Primatene Mist will be prohibited from being sold or distributed. We have discussed and will continue to discuss this matter with our colleagues at the FDA. Before making a decision in this matter, we wanted to provide you a summary of what we have heard throughout FDA's process that led to their final rule in November 2008, as well as since, to provide you an opportunity to respond to or supplement the record.

The FDA's rulemaking in this case was completed in 2008, was not challenged, and was responsive to requests made by stakeholders in the process of its development. FDA has shared its view that this rulemaking proceeded in an orderly, transparent and open fashion that included relevant medical and public health authorities, as well as stakeholders such as Armstrong and other manufacturers of inhalers containing chlorofluorocarbons (CFCs).

As stated in its final rule, the FDA does not believe that continued use of OTC epinephrine metered dose inhalers (MDIs) is necessary to save lives, to reduce or prevent asthma morbidity or to significantly increase patient quality of life. This is particularly the case in light of the availability of albuterol MDIs as therapeutic alternatives, and the possibility that, in the absence of the OTC drug product, additional patients may seek assessment and treatment for their asthma conditions from health care professionals and reduce their asthma morbidity as a result.

In September 2011, EPA held a meeting including other government agencies such as the Department of State and the FDA. The meeting was widely attended by key stakeholders such as patient organizations, medical specialty associations and retailers and retail representatives including your own organization, the NACDS. While this was an important opportunity to hear various perspectives, we did not hear concerns in this meeting or after that would indicate an expected [illegible] disruption of public health. To the contrary, in an October 28, 2011, letter to Senators Pat Roberts and Jim DeMint, a broad-based coalition of patient advocacy groups including the Allergy & Asthma Network, Mothers of Asthmatics, COPD Foundation/Alpha-1 Foundation, American Association for Respiratory Care, Asthma Allies and the American Latex Allergy Association expressed concern instead that efforts to delay the phase-out of epinephrine CFC MDIs do "nothing to address and solve the problem of patients' access to NIH guideline-level care" and called epinephrine CFC MDIs an "outdated, inferior CFC-propelled drug no longer recommended for the treatment of asthma."

We are aware that the national asthma guidelines published by the National Institutes of Health's (NIH) National Heart, Lung, and Blood Institute [illegible] of epinephrine MDIs. Accordingly, a November [illegible], 2011, letter to Senators [illegible] DeMint and to both the EPA and the FDA from the American College of Allergy, Asthma and Immunology notes that given the availability of albuterol MDIs as therapeutic alternatives, the absence of OTC epinephrine may spur additional patients to seek assessment for their asthma conditions from health care professionals and reduce their asthma morbidity as a result. [illegible] "We would like to see that inhaled epinephrine is banned since it is not in patients' best interests to use this product to manage their asthma symptoms."

We recognize the concern you raise with respect to cost and access. However, in the October 28 letter, leading patient advocacy groups note that the average dose of epinephrine will provide relief for 15 to 30 minutes while the average dose of a prescription bronchodilator alternative will provide relief for 3 to 6 hours. They conclude that "Primatene Mist is not a therapeutic alternative." Further, in a November 4, 2011, letter to the FDA, the International Pharmaceutical Aerosol Consortium (IPAC), an international association of companies [illegible] for the treatment of respiratory illnesses including asthma, noted the availability of albuterol and other prescription products that will help users of epinephrine CFC MDIs [illegible] to CFC-free alternatives. An IPAC member company, Teva Pharmaceuticals, shared in a November 28, 2011, letter to EPA Administrator Lisa P. Jackson that although Primatene Mist buyers are sometimes characterized as uninsured, low-income patients, a recent survey [illegible] uninsured: 83% had a personal physician, and [illegible] and 2010, Primatene Mist [illegible] Mist (CFC) will not be available after December 31, 2011. Talk to your doctor or pharmacist about safer asthma medications." In light of this, some stakeholders have even raised concerns that extending the deadline beyond December 31, 2011, will confuse patients.

This information, shared by many leading medical authorities, major pharmaceutical manufacturers, as well as by leading regulatory and scientific organizations – the FDA and the NIH – responsible for the safety of medications and for establishing standard of care guidelines for treatment of disease, seems to us substantial. We intend to continue to consult with our colleagues at FDA on the health concerns raised in your letter. If you have additional relevant information on this topic, we invite you to share it with us. We look forward to continuing to work with you and NACDS, medical and patient health organizations, manufacturers of asthma treatments, the FDA and medical professionals to monitor the situation and to review any new relevant information as we approach the December 31, 2011, date set by the FDA's 2008 rule.

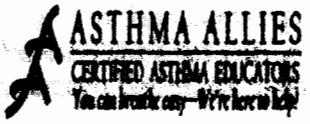
Thank you for your letter,

Sincerely,

Cynthia Giles
Assistant Administrator,
Office of Enforcement
and Compliance Assurance

Enclosures

cc: The Honorable Bart Stupak, Attorney for Amphastar and Armstrong Pharmaceuticals, Venable LLP
Commissioner Margaret A. Hamburg, U.S. Food and Drug Administration



October 28, 2011

Honorable Pat Roberts
109 Hart Senate Office Building
Washington, DC 20510-1605
RE: S. 1752 Freedom to Breathe Act of 2011

Honorable Jim DeMint
167 Russell Senate Office Building
Washington, DC 20510
RE: Amendment OTC Epinephrine Inhalers

Dear Senator Roberts and Senator DeMint:

Thank you for your interest and concern for patients living with asthma.

Allergy & Asthma Network Mothers of Asthmatics, Alpha-1 Foundation/COPD Foundation, American Association of Respiratory Care, American Latex Allergy Association and Asthma Allies do not support the Freedom to Breathe Act of 2011 or the amendment as both would continue access to an Over The Counter (OTC) bronchodilator, Primatene Mist, developed over 50 years ago that is no longer recommended for use by patients with asthma. Twenty years ago, National Guidelines for the Diagnosis and Management of Asthma were developed by the National Institutes of Health and since then have been updated three times as a result of new evidence-based science about the disease of asthma. Neither NIH guidelines nor the Global Initiative for Asthma (GINA) recommend epinephrine inhalers for the treatment of asthma.

On December 31, 2011, after nearly 20 years' warning, epinephrine inhalers (Primatene Mist and its generic copies made by Armstrong Pharmaceuticals) will no longer be sold in the United States because they contain CFCs and do not meet the criteria for an essential use exemption from US and international treaties signed by Congress to eliminate ozone-depleting CFC propellants.

Of the 20 different brands and types of prescription-only inhalers currently sold in the US, 19 are now CFC-free. Pharmaceutical manufacturers were required to comply with laws and change their products or have them removed them from the market. More than

24 million asthma and COPD patients and their medical care providers were required by law to change treatment plans, pay for additional office visits, and pay higher co-pays and out of pocket costs for newly approved medications.

Badrul Chowdhury MD, director of FDA's Division of Pulmonary, Allergy and Rheumatology Products stated, "There is no technical barrier preventing a non-CFC version of inhaled epinephrine." The manufacturer failed to develop a non-CFC alternative even though they were granted a three-year extension beyond the 2008 deadline other manufacturers met for their bronchodilators, albuterol and levalbuterol.

Inhaled epinephrine, the only nonprescription drug inhaler available, is **not** recommended for the treatment of asthma. It is one of the grandfathered vestiges predating FDA, but it is still subject to the same laws, regulations and treaty that banned every available prescription CFC-containing inhaler for asthma and COPD.

It is stated in your press release that millions of patients will be affected if OTC epinephrine goes away; however, no one really knows if that is true. Armstrong, at several FDA meetings, reported they didn't know how many actual patients use their canisters or how many canisters each patient buys, much less the age, income, or regional locations of epinephrine inhaler users.

Armstrong's customers, as they refer to them, are the wholesalers and retailers — not patients. The numbers of 1.7 to 2.3 million stated in the press release are numbers the manufacturer provided FDA at a meeting. Nobody really knows how many people use this product and the company can only make a guess based on numbers of canisters sold divided by how many canisters they "think" each patient buys.

Two inhalations of epinephrine provide breathing relief and serious side effects for approximately 15-30 minutes, whereas two inhalations of prescription bronchodilators, which is the recommended medication by NIH, last 3-6 hours with less unwanted cardiac stimulation. Primatene Mist is not a cheaper alternative.

Assertions that Medicaid families and thus states will be hard hit should OTC epinephrine evaporate are highly suspect. Inhaled epinephrine is not the drug of choice or last resort for Medicaid patients. Medicaid patients have prescription coverage and access to medical care. Prescription bronchodilators and inhaled corticosteroids recommended by NIH for asthma are covered under Medicaid.

The real problem Medicaid families face is that pharmacies do not always dispense the medication or inhalation devices their doctors prescribe. Patients also tell us that they don't always receive referrals to allergists and pulmonologists, as recommended in NIH guidelines. We would love your help to ensure that NIH Asthma Guidelines-based, cost-effective and patient-centered care is available to every patient — while saving state and federal government funds currently wasted on chronically urgent care, as shown at AANMA's congressional briefing (http://www.aanma.org/advocacy/congressional-asthma-and-allergy-caucus/) earlier this month.

Fifty years ago, epinephrine inhalers were all we had to treat asthma. But like most older medications, it has been replaced with far safer and more effective medications

that treat both the noisy obvious symptom of asthma, bronchospasm, as well as the underlying, smoldering silent cause of symptoms, airway inflammation. Knowledge of the disease of asthma has drastically changed the way it is treated, and 1950s treatments are no longer considered safe.

Today's treatment plans also are not based solely on one or more inhaled or oral medications. They require identifying the cause(s) of symptoms, removing environmental or occupational exposures, repairing airway inflammation using anti-inflammatories and restoring the patient to full and healthy function.

Asthma is not a disease for do-it-yourselfers. Asthma is a serious, potentially life-threatening disease that kills 11 people every day and it deserves serious attention.

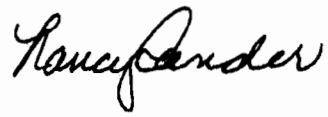
Rather than defend a manufacturer's right to continue making an outdated, inferior CFC-propelled drug no longer recommended for the treatment of asthma, AANMA urges Congress to issue vouchers through physicians, clinics and hospitals to offset patient expenses associated with purchasing NIH guideline-recommended medications for asthma.

The Freedom to Breathe Act of 2011 does nothing to address and solve the problem of patients' access to NIH guideline-level care, but rather grants special favors to a manufacturer — the only one who will benefit from the Freedom to Breathe Act of 2011.

AANMA is prepared to help in any way to ensure patients with asthma receive NIH guideline-level care and appropriate medical treatment.

Thank you for your time and attention to our concerns. We look forward to discussing this most important issue with you. Please feel free to contact AANMA at 703-641-9595 or Sandra Fusco-Walker, AANMA's Director of Patient Advocacy, at 703-641-9595 x1524.

Sincerely,



Nancy Sander, President and Founder
Allergy & Asthma Network Mothers of Asthmatics

John W. Walsh, President and CEO
Alpha-1 Foundation
COPD Foundation

Karen J. Stewart, President
American Association of Respiratory Care

Sue Lockwood, Executive Director and Co-Founder
American Latex Allergy Association

Gerri Dawnielle Rivers, Co-Founder
Asthma Allies

ACAAI American College of Allergy, Asthma & Immunology

Follow the Leader Into the Future

AAAAI AMERICAN ACADEMY OF ALLERGY ASTHMA & IMMUNOLOGY

November 22, 2011

Honorable Pat Roberts
109 Hart Senate Office Building
Washington, DC 20510-1605
RE: S. 1752 Freedom to Breathe Act of 2011

Honorable Lisa Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Honorable Jim DeMint
167 Russell Senate Office Building
Washington, DC 20510
RE: Amendment OTC Epinephrine Inhalers

The Honorable Margaret H. Hamburg, M.D.
Commissioner
Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993

Dear Senator Roberts, Senator DeMint, Administrator Jackson and Commissioner Dr. Hamburg:

The United States Food and Drug Administration's decision to remove over the counter epinephrine asthma inhalers will take effect on January 1, 2012. This action has been proposed to eliminate the CFC propellants in inhalers that could affect the ozone layer. Over the counter epinephrine is the only asthma inhaler remaining on the market with a CFC propellant. All other manufacturers of asthma medications have switched to different delivery systems and have eliminated CFC propellants from their metered doses inhalers in favor of HFA which likely does not effect the environment. We would like to see that inhaled epinephrine is banned since it is not in patients' best interest to use this product to manage their asthma symptoms.

Optimal asthma care requires consultation with health care professionals including asthma specialists and the use of appropriate medications. Evidenced based guidelines do not recommend the use of inhaled epinephrine for treatment or control of either acute or chronic asthma symptoms.

It is important to recognize that appropriate care of asthma with more effective rescue medications and chronic controller medications will ultimately decrease morbidity and mortality due to this common disease. Not only will this benefit patients, but this will provide considerable cost savings to the health care system and the economy as a whole due to decreases in lost productivity at work and school, urgent care visits and hospitalizations, all of which result from inadequate asthma control.

In summary, although the cost of epinephrine inhalers are approximately 50 -70% less than prescription albuterol, the use of these inhalers for the management of asthma will ultimately cost the health care system considerably more and imperil the lives of those patients with asthma who rely on this treatment and do not seek the most appropriate care. As representatives of asthma specialists, we support the removal of over the counter epinephrine inhalers from the market and urge optimal care for patients with asthma.

Sincerely,

Stanley M. Fineman, MD, MBA
President, ACAAI

Dennis K. Ledford, MD
President, AAAAI

International Pharmaceutical Aerosol Consortium
1500 K Street NW • Suite 1100 • Washington DC • 20005
Telephone +1 202 230 5133 • Facsimile +1 202 842.8465
Internet: http://www.ipacmdi.com

November 4, 2011

Via Email

Commissioner Margaret A. Hamburg
U.S. Food and Drug Administration
Office of the Commissioner
10903 New Hampshire Avenue
Silver Spring, MD 20993-0002

Dear Commissioner Hamburg,

This letter is submitted on behalf of the International Pharmaceutical Aerosol Consortium (IPAC) to express strong support for FDA's Final Rule establishing 31 December 2011 as the deadline for the transition of CFC-based epinephrine metered-dose inhalers (MDIs) (*brand name: Primatene Mist*). IPAC is an association of companies that manufacture medicines for the treatment of respiratory illnesses, such as asthma and chronic obstructive pulmonary disease (COPD). IPAC was formed more than two decades ago in response to the mandates of the *Montreal Protocol on Substances that Deplete the Ozone Layer*. IPAC is firmly committed to the transition from CFC MDIs to CFC-free alternatives, pursuant to the Montreal Protocol, and has actively engaged in the transition process in the United States. IPAC's member companies have invested substantial resources to develop CFC-free alternatives in order to accomplish the phase-out of CFC-based MDIs in furtherance of the United States' international commitments under the Protocol.

IPAC is extremely concerned about recent efforts within the US Congress to delay or suspend the phase out of epinephrine CFC MDIs and believes that such proposals would have negative implications for patient health. IPAC is encouraged that the amendment proposed by Senator DeMint and considered last week by the Senate was defeated, but wishes to share some perspectives on this issue in case similar delays are introduced.

IPAC notes that FDA undertook a careful, deliberative, and thoughtful open public rulemaking process that included input from patient and physician stakeholders and other key experts to establish the transition deadline for Primatene Mist. This deadline has provided three full years to transition patients to one of the several CFC-free alternatives available. Since the Final Rule was issued in 2008, FDA has worked hard – in collaboration with patients, physicians, and other interested stakeholders – to prepare for a smooth transition for Primatene Mist users. In

addition, available patient assistance programs (and product samples) will help many users of Primatene Mist successfully transition to safe and effective CFC-free alternatives.

Even if Congress were to override FDA's well-considered deadline on Primatene Mist, it would only briefly forestall the inevitable. Due to a global ban on CFC production, safe and adequate supplies of pharmaceutical-grade CFCs do not exist for the continued manufacture of Primatene Mist. It is therefore important for users to transition now pursuant to the deadline established by FDA. Even a small shift of the end 2011 deadline (e.g. 3 to 6 months) could be quite counterproductive for the following reasons: (i) it would introduce confusion and uncertainty for, most importantly, patients, and also for the supply chain; and (ii) it could hamper EPA efforts to enforce the transition when it actually occurs.

In the past, EPA and FDA have firmly denied MDI companies' requests for any extension to transition deadlines (e.g., to use up existing already-produced stockpiles of CRC MDIs), and there is no reason that there should be a different result in the case of Primatene Mist. FDA has made a significant effort to raise awareness of the 31 December 2011 deadline and changing that now would send very mixed signals to patients, consumers, health care providers and other stakeholders.

The phase-out of Primatene Mist and other ozone-depleting MDIs was initiated more than two decades ago. The "essential use" process established under the Montreal Protocol has provided the MDI industry ample time to reformulate and seek approvals of CFC-free alternatives. After long ago "seeing the writing on the wall", MDI manufacturers worked diligently to research and develop CFC-free products. Most companies (including all IPAC members) have invested hundreds of millions of dollars to accomplish this important objective. Introducing even a brief delay at this late stage would send a very negative signal to the manufacturers that responded to the US Government's call to be a partner in meeting the Montreal Protocol commitments.

For the sake of the environment, compliant manufacturers and, most importantly for the patients, FDA must not waiver in their commitment on this matter merely for the economic interests of a few.

Sincerely,

Maureen Donahue Hardwick
IPAC Secretariat and Legal Counsel

cc: Badrul Chowdhury, *Office of New Drugs, CDER*
Lisa P. Jackson, *EPA Administrator*
Gina A. McCarthy, *Assistant Administrator for Office of Air and Radiation, US EPA*
Sarah Dunham, *Director of the Office of Atmospheric Programs*
Drusilla Hufford, *Director, Stratospheric Protection Division, US EPA*
Dan Reifsnyder, *Deputy Assistant Secretary for Environment and Sustainable Development, US Department of State*
John Thompson, *Foreign Affairs Officer, Office of Environmental Policy, US Department of State*

November 28, 2011

The Honorable Lisa Jackson
Administrator
Environmental Protection Agency
Ariel Rios Federal Building
1200 Pennsylvania Avenue, NW
Room 3000
Washington, DC 20460

Dear Administrator Jackson:

I am writing on behalf of Teva Respiratory, a brand division of Teva Pharmaceuticals, to provide a profile of Primatene Mist CFC users. As you know, concerns have been raised about the impact on patients of the regulation that would prohibit the selling of over-the-counter epinephrine inhalers, primarily Primatene Mist, after December 31, 2011. Regretfully, there seems to be a lot of misperceptions and faulty assumptions about who the Primatene Mist CFC customer is and his/her access to appropriate medication alternatives.

In order to prepare for the transition, Teva Respiratory conducted a market research survey to better understand how to best educate patients and health care providers of the transition from Primatene Mist CFC to albuterol HFA. While this information is proprietary, I did want to share some of the top line findings in order to provide a better understanding of the current Primatene Mist user.

We surveyed consumers between the ages of 20 and 75 who have purchased and used Primatene Mist CFC within the past two years. The findings included:

- Primatene Mist CFC users are well educated, well above the general population
  - 28% had graduated college compared to 19% of the U.S. population
  - 21% had done post graduate work compared to 10% of the U.S. population;
- The median number of Primatene Mist CFC inhalers used in the past 18 months is 2;
- 84% of Primatene Mist CFC users are insured;
- 80% of Primatene Mist CFC users have prescription drug coverage;
- 83% of Primatene Mist CFC users have a personal physician and 72% have seen their physician in the past year;

425 Privet Road, Horsham, PA 19044 Phone: 215.591.3000 Fax: 215.293.6539 www.tevapharm-na.com

- Tier 2 copays for insured patients average $20-$25 (similar to retail costs of Primatene Mist CFC inhalers)
  - For the 16% of those not insured, low income patients (200% or less of the Federal Poverty Level) would qualify for The Teva Assistance Program for free albuterol HFA inhalers;

- 88% of Primatene Mist CFC users have a respiratory diagnosis and nearly 40% are already taking a prescription inhaler;

- Only 11% of Primatene Mist CFC users cited cost as a factor when citing reasons for using the product over a prescription inhaler.

The data clearly suggests that the majority of Primatene Mist CFC users are already in the health care system have access to a physician and visit their physician on a regular basis.

Many of the concerns raised about this transition are similar to those raised during the 2008 "CFC to HFA" albuterol switch. Due to the hard work and efforts of all the stakeholders – the federal government, patient groups, medical societies, pharmacies and drug manufacturers – it was extremely successful with virtually no disruption in access or harm to patients. Teva Respiratory, and indeed all of our competitors, initiated numerous programs to educate patients and health care providers. Although the scale was much greater for the 2008 transition – 50 million albuterol units compared to 2-3 million Primatene Mist CFC units – the effort has been similar. Significant resources were invested to drive awareness of the albuterol CFC-HFA transition, just as they have been in this switch, with the goal of ensuring that all were prepared. Patients and health care providers were ready for the transition in 2008 and they are ready for the switch this year.

I hope you find this information helpful. Please do not hesitate to contact me should you have additional questions.

Sincerely,

Mark Salyer
Executive Vice President and General Manager

cc: Margaret Hamburg, MD
Commissioner
Food and Drug Administration

Cynthia Giles
Assistant Administrator, Office of Enforcement and Compliance Assurance
Environmental Protection Agency

Regina McCarthy
Assistant Administrator, Office of Air and Radiation
Environmental Protection Agency

425 Privat Road, Horsham, PA 19044 Phone: 215.591.3000 Fax: 215.293.6538 www.tevapharm-na.com

AL-12-000-0674

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 30 2012

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

The Honorable John Shimkus
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of January 13, 2012, to the U.S. Environmental Protection Agency's (EPA's) Administrator, Lisa P. Jackson, regarding the reporting date for the EPA's Chemical Data Reporting (CDR) rule. The Administrator has asked that I respond directly to your inquiry.

As you are aware, the EPA published the final CDR rule on August 15, 2011. The rule requires chemical companies to report a range of information on the chemicals they manufacture, use, and process, and establishes a five month window for reporting which begins on February 1, 2012, and concludes on June 30, 2012. Companies may submit their reports at any time during that period. The EPA provided a five month reporting period for this first round of reporting to provide additional time for companies to review and understand changes in the reporting requirements, gather the necessary information, and file through the agency's electronic reporting system.

As your letter notes, the agency held a webinar in mid-November with several hundred participants. The EPA made every effort to respond to the questions posed and provide all participants with an opportunity to pose questions. In addition, the EPA has a variety of guidance documents available on its Chemical Data Reporting web page to help companies comply with the reporting requirements (see www.epa.gov/cdr). Since the November 2011 webinar to assist industry in reporting for the 2012 CDR rule, the agency has posted six on-line training modules designed to walk companies through the Chemical Data Reporting process, as well as a set of frequently asked questions about the 2012 CDR reporting requirements. The training modules address basic information, including an overview of the CDR rule, new reporting requirements and how to complete Form U for 2012, as well as electronic reporting issues (e.g., registering with the EPA's Chemical Data Exchange for CDR reporting) and special topics, such as joint submissions. These training modules provide more detail than the webinar slides and can be viewed at any time.

The EPA has also established a general help email address for CDR questions: ecdrweb@epa.gov. The agency will continue to refine and add guidance materials to the website as necessary. Some of the questions included in your letter were addressed at the webinar in November and in more detail at a January 19, 2012, discussion with industry on issues relating to byproducts. I am also enclosing responses to the specific questions you included in your letter. These Q&As will be also added to the agency's web site so that the answers are publicly available.

We believe that the current five month window for companies to report, along with their ability to engage the agency directly on any questions or issues they may have, provides an adequate opportunity for reporting by June 30, 2012.

Again, thank you for your letter. I hope this information has been helpful to you. If you have additional questions, please contact me, or your staff may contact Mr. Sven-Erik Kaiser in the EPA's Office of Congressional and Intergovernmental Relations at (202) 566-2753.

Sincerely,

James J. Jones
Acting Assistant Administrator

Enclosure

Enclosure: Responses to Committee on Energy and Commerce Questions

Q. 1. Must a manufacturer report on its entire byproduct stream or just on the amount sent for recycling?

Response: If the person generating the byproduct stream did not newly manufacture a chemical substance in that byproduct stream, they do not need to report that substance. For example, where a byproduct is a mixture containing a previously manufactured solvent used in the manufacturing process, the solvent sent for recycling would not be subject to reporting.

Assuming the only post-manufacture commercial purpose of the byproduct stream is to recycle a portion of it, the portion not recycled need not be reported.

Q. 2. Must a metal extracted from a byproduct be reported under the rule?

Response: Typically, extraction of a metal compound is done through a chemical reaction involving that metal compound. If the extraction involves changing one chemical substance (e.g., metal compound) into a different chemical substance, then that different chemical substance has been manufactured and should be reported.

Q. 3. Is double reporting required for extracted substances if sold as individual chemicals?

Response: No. Whenever a substance is manufactured, as defined by TSCA and EPA regulations, it must be reported. EPA does not require double reporting for a single instance of manufacture.

Q. 4. What is an "exporter" under the rule?

Response: The CDR Rule does not define nor reference a definition for exporter because there are no reporting obligations under the Rule for exporting. Manufacturing includes importing, but not exporting.

Q. 5. Is reporting required if the same chemical changes concentration?

Response: No. Change in concentration does not trigger a need to report.

Q. 6. Must a used solvent that is resold be reported?

Response: The act of selling does not constitute manufacture under TSCA, and therefore, would not trigger a CDR reporting obligation.

AL-12-000-0674

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 30 2012

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

The Honorable Fred Upton
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of January 13, 2012, to the U.S. Environmental Protection Agency's (EPA's) Administrator, Lisa P. Jackson, regarding the reporting date for the EPA's Chemical Data Reporting (CDR) rule. The Administrator has asked that I respond directly to your inquiry.

As you are aware, the EPA published the final CDR rule on August 15, 2011. The rule requires chemical companies to report a range of information on the chemicals they manufacture, use, and process, and establishes a five month window for reporting which begins on February 1, 2012, and concludes on June 30, 2012. Companies may submit their reports at any time during that period. The EPA provided a five month reporting period for this first round of reporting to provide additional time for companies to review and understand changes in the reporting requirements, gather the necessary information, and file through the agency's electronic reporting system.

As your letter notes, the agency held a webinar in mid-November with several hundred participants. The EPA made every effort to respond to the questions posed and provide all participants with an opportunity to pose questions. In addition, the EPA has a variety of guidance documents available on its Chemical Data Reporting web page to help companies comply with the reporting requirements (see www.epa.gov/cdr). Since the November 2011 webinar to assist industry in reporting for the 2012 CDR rule, the agency has posted six on-line training modules designed to walk companies through the Chemical Data Reporting process, as well as a set of frequently asked questions about the 2012 CDR reporting requirements. The training modules address basic information, including an overview of the CDR rule, new reporting requirements and how to complete Form U for 2012, as well as electronic reporting issues (e.g., registering with the EPA's Chemical Data Exchange for CDR reporting) and special topics, such as joint submissions. These training modules provide more detail than the webinar slides and can be viewed at any time.

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Sincerely,

James J. Jones
Acting Assistant Administrator

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AL-11-000-7458

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 27 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U. S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of May 9, 2011 in which you request extensive information, and certain specific documents, regarding the Environmental Protection Agency's (EPA's) recent and pending new rules that impact the electric power sector. We appreciate your interest in these important air quality rules.

The EPA is committed to providing you with the information necessary to satisfy the Committee's oversight activities to the extent possible, consistent with Constitutional and statutory obligations. Let me assure you that this request is a high priority, and work on it is currently in progress. However, because of the expansive nature of the request, EPA will need additional time to respond.

Again, thank you for your letter. If you have any questions about this, please contact me or your staff may call Tom Dickerson of my staff at (202) 564-3638.

Sincerely,

Arvin Ganesan
Deputy Associate Administrator
for Congressional Affairs

cc: The Honorable Henry A. Waxman
Ranking Member

AL-11-000-7458

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 27 2011

DEPUTY ADMINISTRATOR

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of May 9, 2011 to Administrator Lisa Jackson requesting information relating to recent and pending new EPA rules affecting the electric power sector. I am pleased to respond on Administrator Jackson's behalf.

As you know, the EPA is in the process of developing a series of rules – under the Clean Air Act (CAA), the Clean Water Act (CWA), and the Resource Conservation and Recovery Act (RCRA) – to protect public health and the environment from pollution produced by power plants. On July 6, 2011, the EPA promulgated the Cross-State Air Pollution Rule to protect public health and help States meet air quality standards. Three other rules have been proposed, but not yet finalized, including the long-overdue Mercury and Air Toxics Standards for power plants under section 112 of the CAA, standards for power plant cooling water intake systems under section 316(b) of the CWA, and standards for disposal of coal combustion residuals under RCRA. In addition, the EPA has committed to proposing New Source Performance Standards for greenhouse gas emissions from power plants by September 30 of this year.

Collectively, these rules will achieve major public health and environmental benefits for Americans that are significantly greater than the costs. For example in a single year (2014), the Cross-State Air Pollution Rule alone is projected to produce benefits valued at $120 billion to $280 billion and to avoid:

- Up to 34,000 premature deaths
- 15,000 heart attacks
- 400,000 cases of aggravated asthma
- 19,000 cases of acute bronchitis
- 19,000 hospital and emergency room visits
- Over 1.8 million days when people miss work or school

In developing these rules affecting the power sector, the EPA has focused on identifying any potential adverse impact on electric reliability. Reliability impacts have been analyzed in the Regulatory Impact Analyses that the EPA has conducted for the air and water rules it has proposed thus far, and the Agency will build upon these analyses as it finalizes power sector regulations. These analyses project that the EPA's rules will result in only a modest level of retirements – of older, dirtier, less efficient power plants – and that these retirements are not expected to have an adverse impact on electric generation resource adequacy. The EPA has benefited from discussions with the Department of Energy and the Federal Energy Regulatory Commission with regard to electric reliability issues and has incorporated information from the North American Electric Reliability Corporation (NERC) into its rulemakings.

As you know, a variety of other entities have published analyses of the impacts of the Agency's rules affecting the power sector over the course of the past year. I would like to take advantage of this opportunity to briefly summarize this external work.

In August 2010, the Analysis Group released a report commissioned by several utilities on the reliability impacts of the Transport Rule and Mercury Air Toxics Standard. Their analysis concluded that the *"electric industry is well-positioned to comply with EPA's proposed air regulations without threatening electric system reliability."* This month, they updated that report based on the actual Mercury Air Toxics Standard proposal, recent financial statements from industry, and recent activity in the markets for additional electricity capacity. This update *"reaffirms the major conclusion of the prior report that the electric industry can comply with EPA's air pollution rules without threatening electric system reliability provided that EPA, the industry and other agencies take practical steps to plan for the implementation of these rules and adopt appropriate regulatory approaches."*[1]

The EPA is aware of other industry studies suggesting, contrary to the EPA and other groups' analyses, that these rules will result in substantial power plant retirements that will have adverse effects on electric reliability in some regions of the country. While the particulars of these analyses differ, in general they share a number of serious flaws that call their conclusions into question:

- First, these studies often make assumptions about the requirements of the EPA rules that are inconsistent with, and dramatically more expensive than, the EPA's actual proposals.
- Second, in reporting the number of retirements, many analyses fail to differentiate between plant retirements attributable to the EPA rules and inefficient and costly plants that that are already scheduled for retirement because owners make the business decisions not to pay to clean up their emissions.
- Third, many analyses do not account for the whole host of tools, including new generation, demand response, energy efficiency, transmission upgrades and energy storage, that can be used to maintain reliability.

For example, the NERC report released last fall attributed the "greatest potential impact" to the not-yet-proposed section 316(b) cooling water intake rule. The analysis incorrectly assumed that

[1] Analysis Group, June 2011, "Ensuring a Clean, Modern, Electric Generating Fleet while Maintaining Electric System Reliability" (emphasis added).

in order to deal with the entrainment aspects of cooling water withdrawal, the EPA's rule would require installation of cooling towers at virtually all existing power plants. This assumption alone accounts for up to 40 gigawatts of projected retirements in the NERC report, and several other studies share this same assumption. In reality, the proposed rule requires a plant-by-plant determination of appropriate technology for entrainment by permitting authorities (mostly States) and requires these authorities to take costs and impacts on electric reliability into account. Because the now proposed 316(b) rule is based on site-specific decisions to determine if cooling towers are appropriate, it is not possible to predict how much capacity will be affected, but it will clearly be much less than originally predicted. Moreover, industry has applauded this flexible, site-specific approach. The NERC report also failed to include many relevant response measures available to States, State Public Utility Commissions, and utilities, and relied on an out-of-date long-term reliability assessment[2] (also done by NERC) that understated future electric generating capacity slated to come online and overstated future growth in electricity demand.

We also understand that staff of the Federal Energy Regulatory Commission (FERC) prepared a draft internal analysis around the same time as the NERC report was released. Based on the brief discussions my staff had with FERC staff about this analysis last year, the analysis appeared to have many of the same limitations described above. Among other issues, it was developed before the EPA proposed most of the rules in question and assumed some requirements that were far more stringent that what the EPA actually proposed. For instance, like the NERC study, it appeared to assume that the EPA's 316(b) cooling water intake rule would require installation of expensive cooling towers at most or all existing power plants. In addition, unlike the analyses that the EPA does in support of its rules, which take account of the actual economics that govern decisions at the plant in relation to local power markets, the draft FERC staff analysis was based on subjective judgments about the importance of various factors, greatly undermining its accuracy. These observations should in no way be taken as criticisms of FERC, but rather as an acknowledgment of the limitations of this particular draft analysis, which was based on very limited information. The EPA has benefited from its interactions with FERC and will continue to work the Commission so that we can jointly assess and address any potential localized reliability concerns.

The most recent analysis conducted on these issues is last month's report by the Bipartisan Policy Center. That report identified a variety of significant flaws in many of the previous industry studies of reliability and concluded that "*scenarios in which electric system reliability is broadly affected are unlikely to occur*."[3] I am providing a copy of that report as an attachment.

Finally, although the EPA's analyses and other recent analyses that reflect our proposed rules indicate that significant adverse impacts on electric reliability are highly unlikely, there are multiple tools to address any such issues should they arise in a particular, localized case. As a letter EPA received in March from several utilities emphasized, "If there are specific local reliability concerns, state and federal regulators have an array of tools to moderate impacts on the electric system, where necessary."

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[2] http://www.nerc.com/page.php?cid=4%7C61

[3] Bipartisan Policy Center, June 2011, "Environmental Regulation and Electric System Reliability"

Detailed responses to your specific questions and requests are provided in the enclosures. Again, thank you for your letter. Please contact me with any questions, or your staff may contact Tom Dickerson in the EPA's Office of Congressional and Intergovernmental Affairs at (202) 564-3638.

Sincerely,

Bob Perciasepe

Bob Perciasepe

Enclosures

cc: The Honorable Henry A. Waxman
Ranking Member

Responses to Information Requests

1. On January 12, 2010, Administrator Jackson released a memorandum to all EPA employees announcing seven priorities for the agency. One of these priorities was "Improving Air Quality," and she stated: "EPA will develop a comprehensive strategy for a cleaner and more efficient power sector, with strong but achievable emission reduction goals for S02, NOx, mercury and other air toxics."

a. Has EPA developed a comprehensive strategy? If yes, provide a copy of the document(s) reflecting that strategy.

The EPA's strategy for a cleaner more efficient power sector is laid out in the preamble for the proposed Transport Rule (later finalized as the Cross-State Air Pollution Rule), Section III. E, "Anticipated Rules Affecting the Power Sector." (See: http://www.gpo.gov/fdsys/pkg/FR-2010-08-02/pdf/2010-17007.pdf#page=1.) In it, the EPA discusses the comprehensive requirements that will yield substantial health and environmental benefits that can be achieved while maintaining a reliable and affordable supply of electric power across the economy. As we say in the preamble, the rules under the CAA will substantially reduce the emissions of SO2, NOX, mercury, and other air toxics. To the extent that the Agency has the legal authority to do so while fulfilling its obligations under the Act and other relevant statutes, the Agency will also coordinate these utility-related air pollution rules with upcoming regulations for the power sector from the EPA's Office of Water (OW) and its Office of Resource Conservation and Recovery (ORCR). The EPA expects that this comprehensive set of requirements will yield substantial health and environmental benefits for the public, benefits that can be achieved while maintaining a reliable and affordable supply of electric power across the economy. In developing and promulgating these rules, the Agency will be providing the power industry with a much clearer picture of what the EPA will require of it in the next decade. In addition to promulgating the rules themselves, the Agency will engage with other federal, state and local authorities, as well as with stakeholders and the public at large, with the goal of fostering investments in compliance that represent the most efficient and forward-looking expenditure of investor, shareholder, and public funds, resulting, in turn, in the creation of a clean, efficient, and completely modern power sector.

b. Has EPA prepared any analysis of the effect of this coordinated power sector effort on jobs, the economy, or the competitiveness of U.S. industry? If yes, provide any such analysis.

The EPA does a regulatory impact assessment (RIA) that includes information on the economic impacts of all major regulations.

- The RIA for the final Cross-State Air Pollution Rule (originally proposed as the Transport Rule) can be found on the EPA's website at: http://www.epa.gov/airtransport/pdfs/FinalRIA.pdf.
- The RIA for the proposed Mercury and Air Toxics Standards Rule can be found at: http://www.epa.gov/ttn/ecas/regdata/RIAs/ToxicsRuleRIA.pdf.
- The RIA for the proposed Cooling Water Intake Rule can be found at: http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/upload/econandbenefits.pdf.
- The RIA for the proposed Coal Combustion Residue Rule can be found at: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-RCRA-2009-0640-0003.

c. Has EPA prepared any analysis of the impact of greenhouse gas (GHG) regulation on the regulation of criteria pollutants and air toxics? If yes, provide any such analysis.

The EPA has not yet done an analysis of the New Source Performance Standard for greenhouse gases because the content of the rule is under consideration and it has not been proposed.

2. EPA has adopted and is planning to adopt a series of regulations affecting the electric utility industry. These rules include the proposed Transport Rule announced in July 2010 and planned additional transport rules to address revised air quality standards; the proposed utility national emissions standards for hazardous air pollutants and new standards of performance announced, in March 2011; GHG regulations including GHG New Source Performance Standards for power plants which EPA plans to propose in July 2011; the proposed coal ash rule announced in June 2010; National Ambient Air Quality Standards (NAAQS) for ozone, particulate matter, sulfur dioxide (S02), and nitrogen dioxide (N02); and the cooling water intake structures rule announced in March 2011 under Section 316 of the Clean Water Act.

a. Has EPA undertaken any analysis of the cumulative impacts of all of these regulations together with other regulation that EPA has adopted on the energy sector? If yes, provide a copy of all such analyses.

The EPA's general practice when analyzing a new rule is to incorporate into the modeling the effects of previously finalized rules. In certain circumstances, the EPA also includes the effects of proposed rules. For example, the analysis of the proposed MATS rule included the effects of the proposed Transport Rule (which has now been finalized as the Cross-State Air Pollution Rule). The EPA has also prepared several peer-reviewed analyses of the cumulative cost and benefits impacts of Clean Air Act programs. Most recently, this year the EPA released such an analysis of post-1990 Clean Air Act programs. Results of that analysis show benefits of these

programs, including the Title III programs, exceed their costs by a wide margin and at limited impact to affected industries. For more information, please refer to: http://www.epa.gov/oar/sect812/prospective2.html.

b. Has EPA undertaken any analysis of the potential cumulative impacts of these regulations, on the energy sector, on domestic manufacturing and energy-intensive and trade-exposed industries, including but not limited to the chemicals, glass, iron and steel, cement, aluminum, metal casting, and pulp and paper industries? If yes, provide a copy.

The EPA performs an assessment of the economic impacts of all major regulations. Once a regulation has been proposed it becomes part of the baseline against which future regulations are analyzed. The Regulatory Impact Analyses (RIAs) for the proposed Mercury Air Toxics Standards (MATS) Rule and the final Cross-State Air Pollution Rule provide extensive information about the costs and benefits of these individual proposed or final rules. For example, this information includes estimated costs for electric generating units to comply with the proposed regulations, and electricity price estimates for electricity consumers. The MATS analysis includes both the proposed MATS and the proposed Transport Rule, since the Transport Rule proposal (later finalized as the Cross-State Air Pollution Rule) was included in the baseline. The analyses for each proposed or final rule can be found at: http://www.epa.gov/ttnecas1/ria.html.

Similarly, the RIA for the 316(b) rulemaking examined the impacts of that rule on the energy and certain manufacturing sectors. See the supporting document, *Economic and Benefits Analysis for Proposed Section 316(b) Existing Facilities Rule*, in particular, Chapters 4, 5 and 6. The document can be found at: http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/upload/econandbenefits.pdf.

The RIA for the Coal Combustion Residues proposed rule includes an estimate of the impact of the rule on 13 industries that use coal combustion residues. That RIA can be found at: Document ID nr. EPA-HQ-RCRA-2009-0640-0003, at: http://www.regulations.gov.

The EPA will continue to analyze the combined impacts of power plant regulations by incorporating previously finalized rules into the baseline of regulatory impact analyses. This allows the public to understand the specific impacts of the proposed rule and the overall picture for the power sector and affected industries. The EPA has also prepared a peer-reviewed analysis of the cumulative cost and benefits impacts of Clean Air Act programs in 2020 for regulations imposed as of late 2005. Results of that analysis show benefits of these programs, including the Title III programs, exceed their costs by a wide margin and at limited impact to affected industries. For more information, please refer to: http://www.epa.gov/oar/sect812/prospective2.html.

c. Has EPA consulted with North American Electric Reliability Corporation (NERC), or any regional entity, on issues related to electric reliability? If yes, describe the consultation including the context in which the consultation occurred, the date on which it occurred, issues discussed, and conclusions drawn.

NERC conducted courtesy briefings to stakeholders, including the EPA, to discuss their "2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations," and outlined preliminary results of the draft report. Their outreach took place prior to the report's release in October of 2010. The EPA uses NERC information and data extensively when conducting detailed power sector analyses and has incorporated numerous assumptions and data parameters into the Integrated Planning Model (IPM), which is used by the EPA to support certain regulations affecting the power sector. These parameters and assumptions include:

- Representation of NERC regions.
- NERC's forecasts of peak energy demand, by region.
- NERC's annual joint limits to the transmission capabilities between model regions.
- NERC's assessment of power plant "availability."
- NERC's reserve margin requirements.
- Facility level data, taken from NERC Electricity Supply and Demand database.

More detail on these assumptions can be found in the documentation for IPM on EPA's website: http://www.epa.gov/airmarkets/progsregs/epa-ipm/BaseCasev410.html#documentation

3. In the proposed Transport Rule, 2 EPA included a discussion of "Rules Affecting the Power Sector," and stated that: "The rules under the CAA will substantially reduce the emissions of S02, NOx, mercury, and other air toxics. To the extent that the Agency has the legal authority to do so while fulfilling its obligations under the Act and other relevant statutes, the Agency will also coordinate these utility-related air pollution rules with upcoming regulations for the power sector from EPA's Office of Water (OW) and its Office of Resource Conservation and Recovery (ORCR)."

a. Describe any efforts EPA has made to coordinate these power sector rules and provide documentation reflecting such efforts.

The EPA's regulatory development process features the use of workgroups that include staff from interested offices from across the agency. Staff and managers from the air, water and waste offices are involved in development of the power plant rules. The following is a link to a description of the EPA's regulatory development process: http://www.epa.gov/ttnecas1/econdata/Rmanual2/3.1.html.

b. Has EPA prepared any analyses of the cumulative impacts of these rules on the U.S. economy, jobs and/or the competitiveness of U.S. businesses? If yes, provide copies of all such analyses. If not, state whether EPA plans to prepare such an analysis and when it will be prepared.

As explained above, the EPA performs an assessment of the economic impacts of all major regulations. Once a regulation has been proposed it becomes part of the baseline against which future regulations are analyzed. The RIA for the proposed Mercury Air Toxics Rule and Transport Rule provide information on the job impacts of the individual proposed rules. For example, this information includes estimated job losses in certain sectors of the economy and job gains due to installation of pollution control equipment and associated materials. The analyses for each of these proposed rules can be found at: http://www.epa.gov/ttnecas1/ria.html. As indicated in the response to question 2.b., above, the EPA also has analyzed the impacts of the 316(b) rulemaking on the economy and jobs.

The EPA will continue to analyze the combined impacts of power plant regulations by incorporating previously finalized rules into the baseline of regulatory impact analyses. This allows the public to understand the specific impacts of the proposed rule and the overall picture for the economy and affected industries. The EPA has also prepared a peer-reviewed analysis of the cumulative impacts of Clean Air Act programs in 2020 for regulations imposed as of late 2005 including impacts on the US economy. Results of this analysis show that the impacts on the U.S. economy are small, and that the impact on affected industries is limited. For more information, please
refer to:
http://www.epa.gov/oar/sect812/prospective2.html.

c. Has EPA prepared any analyses of the cumulative impacts of these rules on the coal industry, coal producing states, and/or states that rely primarily on coal for generation of electricity? If yes, provide copies of all such analyses. If not, state whether EPA plans to prepare such an analysis and when it will be prepared.

The RIAs for the EPA's rules look closely at the effect on the coal industry, coal producing states, and states that rely primarily on coal for generation of electricity. The EPA uses the Integrated Planning Model (IPM), which provides a detailed framework and includes a painstaking bottom-up assessment for coal, including coal supply estimates and demand regions (84 coal supply curves), coal quality characteristics, assignment of coals to power plants, the coal transportation network, and also reflects coal exports, imports, and non-electric sector demand. EPA's recently proposed Mercury and Air Toxics Standards (MATS) for power plants includes a thorough impact assessment for coal of both the proposed MATS and the proposed Transport Rule, since the Clean Air Transport Rule proposal was included in the baseline.

More detail on EPA's coal assumptions can be found in Chapter 9 of the documentation for IPM on EPA's website:

http://www.epa.gov/airmarkets/progsregs/epa-ipm/BaseCasev410.html#documentation

4. Has EPA consulted at any time since January 2009 with the Federal Energy Regulatory Commission, Department of Energy, Council on Environmental Quality, Office of Management and Budget, or any other federal agency or department on issues regarding the potential impacts of its GHG or other power sector rules referenced above on electricity reliability? If yes:

a. **Describe each consultation, including where it occurred, the date on which it occurred, and the participating agencies.**

b. **Describe in detail the outcome of those consultations.**

c. **Provide all documents relating to those consultations.**

A list of meetings involving the EPA and one or more of these entities at which electric reliability issues relating to the EPA's power sector rules were discussed is provided in Appendix A. Documents related to these meetings are provided in the enclosed CD and are listed in Appendix A.

5. Is EPA participating in any interagency task forces or other working groups to address issues related to the impacts of EPA's power sector rules on electric reliability? If so, provide a detailed response including but not limited to:

a. The members of the interagency task force(s) or working group(s);
b. When the interagency task force(s) or working group(s) were formed;
c. The statutory authority under which the task force(s) or working group(s) have been formed;
d. The dates on which the task forces or agencies have met to address issues related to the impacts of EPA's power sector rules on electric reliability; and,
e. Any minutes, communications or other documentation relating to the work of the task force(s) or working group(s).

No, the EPA is not participating in any formal interagency task forces or other working groups of this nature. The response to question 4 above identifies meetings that EPA staff have had with staff from FERC, DOE, and CEQ with regard to electric reliability issues related to EPA regulations.

6. What emergency authority exists to waive environmental regulations if they threaten electric reliability? To the extent such authority exists, what is EPA's role in

decisionmaking to invoke that authority, and how would EPA coordinate with other relevant agencies?

The Clean Air Act provides a range of tools to ensure the protection of public health and compliance with environmental regulation while maintaining a reliable electric supply. Many of these tools have been previously employed to address electric reliability concerns.

Perhaps most directly relevant to electric reliability concerns is the flexibility provided by the Clean Air Act's enforcement provision, Section 113. While this provision does not specifically address electric reliability, as discussed in response to question 7, it does provide the Administrator with significant discretion in enforcement of the Act, which has been exercised previously to address reliability issues. Section 113 provides the EPA (and delegated authorities) with a broad toolkit that can be used separately from, or in conjunction with, other authorities available to the EPA and other agencies. Pursuant to Section 113, the EPA may use its enforcement authorities to craft a case-specific administrative order or civil judicial settlement (in the latter instance working with the Department of Justice) to bring a source into compliance in a manner that maintains the reliability of the electric grid.

In using its Section 113 authorities and evaluating compliance requirements, the EPA has a long history of working closely with other agencies and key stakeholders. On future matters where electric reliability may be an issue, the EPA would expect to work on a case-by-case basis with sources with direct compliance obligations and oversight agencies with responsibility to assure a reliable supply of electricity, such as: State Public Utility Commissions, State environmental agencies, Regional Transmission Organizations, Independent System Operators, the North American Electric Reliability Corporation, the Federal Energy Regulatory Commission (FERC) and the Department of Energy (DOE).

In addition, other sections of the Clean Air Act incorporate flexibility mechanisms that may be relevant. For example, Section 110(f) establishes a process by which a Governor may petition the President to determine that a "national or regional energy emergency exists of such severity" that suspension of any part of a State Implementation Plan (SIP) and certain acid rain-related requirements may be necessary and other means of responding to the energy emergency may be inadequate. Upon issuance of the determination by the President, a Governor may suspend applicability of SIP or certain acid-rain requirements to a source if the Governor finds that a temporary energy emergency involving high levels of unemployment or loss of energy supply to residential dwellings exists in the vicinity of the source and such unemployment or loss can be alleviated by the emergency suspension. The Administrator of the EPA may disapprove a suspension if she determines that it does not meet the requirements of section 110(f)(2). Any such suspension is limited to a maximum of four months.

Section 112 of the Clean Air Act provides that existing sources subject to standards to control hazardous air pollutants must comply with those standards as expeditiously as practicable, not to exceed three years from the effective date of the regulations. However, if a source is unable to comply within three years, the permitting authority, may grant an extension for up to a one year if such time is necessary for the installation of controls. This provision does not address electric reliability per se, but provides flexibility that may be relevant in this area.

The enforcement authorities under Section 309 of the Clean Water Act likewise provide flexibility to ensure that the environmental objectives and requirements of the statute can be achieved without compromising electric reliability. In the event that a permittee is unable to meet statutory or permit requirements immediately, the EPA may issue a compliance order, or enter into a civil judicial settlement (in the latter instance working with the Department of Justice) to bring a source into compliance with these requirements in a reasonable time.

Your letter references the EPA's forthcoming standards under Section 316(b) of the Clean Water Act for cooling water intake structures at power plants and at other industrial facilities. The EPA's proposed rule would expressly require the permitting authority to consider local energy reliability concerns in establishing site-specific standards on cooling water intake structures. In addition, even where closed-cycle cooling is required, the proposed regulations provide the permit writer with the discretion to consider energy reliability and latitude in establishing a compliance schedule. Finally, the Clean Water Act authorizes the EPA to consider energy impacts in establishing technology-based effluent limitations guidelines and standards for categories of direct and indirect dischargers, including power plants, under Sections 301, 304, 306 and 307 of the Act.

7. In the past, has EPA exercised emergency authority to waive environmental regulations to ensure reliability of energy supply? If yes, please identify each such instance, including the dates, facilities involved and the nature of the action taken by EPA.

The EPA has a history of working with other regulatory agencies, States and the regulated community to ensure that critical power plants can operate when needed to resolve reliability issues and avoid power outages. The following examples document some of the EPA's actions in this regard.

During the 2001 energy shortfall in the West, in response to various State proclamations of emergency and orders from energy regulatory agencies, the EPA worked with the States, Independent System Operators and local air pollution agencies to formulate case-specific approaches that allowed critical projects to move forward quickly in order to minimize likelihood of blackouts. These approaches took the form of orders that acknowledged the violation of state air pollution limits and other requirements, in instances where sources were employing, or agreed to employ, appropriate air pollution-minimizing control technologies. In most of these agreements, sources also agreed to come into full compliance by a date certain, and in most cases agreed to specific emission limits during the noncompliant periods and to conduct, or to fund, environmentally beneficial projects and/or to purchase allowances that would offset pollution emitted during the time that the source was out of compliance.

More recently, the EPA has used its enforcement tools to address reliability issues that might arise when plants are temporarily shut down in order to install emissions controls and to ensure reliable operation. In 2005 and 2006, the EPA worked with DOE, FERC, the District of Columbia Public Service Commission (DCPSC), the Virginia Department of Environmental Quality (VADEQ), and Mirant Potomac River LLC (Mirant) to assess Mirant's impact on the

Clean Air Act's National Ambient Air Quality Standards (NAAQS) and allow continued operation of its generating units at a level that both ensured electric reliability and minimized emissions of air pollutants. In response to an unexpected and sudden shutdown by Mirant of generating units to address NAAQS concerns, DOE ordered the utility to immediately restart and operate and promptly sought the EPA consultation and involvement. Together, the EPA and DOE and the aforementioned entities resolved the matter through a number of steps that included a short-term informal agreement and formal administrative orders by the EPA and DOE that each accounted for the parallel authority of the other. The EPA order, which is provided on the enclosed CD, established a set of operating limitations and procedures designed to both protect air quality and provide the company with the operating flexibility needed to ensure reliable electrical service.

In 2008, the EPA entered into the attached consent decree with American Electric Power (AEP) that required the installation of pollution controls in AEP's eastern fleet of coal-fired generating units. To address AEP's concern that then unknown and unknowable factors might create a situation in which temporary removal of a unit from service for control installation could create a serious reliability problem, the EPA included specific language in the consent decree to excuse, under specific circumstances, strict compliance due to such events as failure by a permitting authority to issue a necessary permit and orders by regulatory and governmental authorities, acting under and authorized by applicable law, to operate a unit.

Importantly, such approaches must follow a narrow set of principles, so that the protections afforded by our nation's public health and environmental laws are not abrogated. By way of illustration of such principles, included in the enclosed CD is a memo from the Sylvia Lowrance, Acting Assistant Administrator for Enforcement and Compliance Assurance that guided the approach the EPA used during the 2001 period.

In addition, during the late 1970s, President Carter issued several determinations under section 110(f) of the Clean Air Act that regional energy emergencies existed, thereby allowing Governors in the affected States to suspend applicability of certain regulatory requirements to sources in those areas. For example, in February 1979, the Florida Governor sought a suspension on behalf of Florida Power & Light and other utilities because of limited availability of low-sulfur oil needed to meet emission limits in Florida's State Implementation Plan (SIP). President Carter issued a determination that a regional energy emergency existed, and the Governor suspended portions of portions of the SIP to allow the utilities to burn higher sulfur oil. See 44. Fed. Reg. 21,245 (April 6, 1979). President Carter also issued determinations that regional energy emergencies existed in Ohio, Oregon, and Pennsylvania due to limited supply of low-sulfur oil needed to meet emission limits in those states.

8. If EPA or other federal authorities exercise such emergency authority to direct utilities or electricity generators to continue to operate to ensure reliability of electricity supply:

> **a. Will the utility or electricity generators be protected from penalties for violations of the environmental regulations or will they potentially be subject to penalties?**

b. Will the utility or electricity generators be protected from civil or criminal enforcement actions by federal or state regulators or will they potentially be subject to enforcement actions?

c. Will the utility or electricity generators be protected from citizen suits or actions by third parties or will they potentially be subject to suits or third party actions?

As discussed in the response to question 6, the EPA's enforcement authorities under Section 113 of the Clean Air Act and Section 309 of the Clean Water Act are valuable tools that can be applied in a case-specific manner that ensures the reliable supply of electricity while protecting public health and bringing sources into compliance with environmental regulations. To the extent that the EPA uses such authorities, its response would be guided by the particular situation at hand. Decisions about the particular kind of enforcement tool utilized and the appropriateness of a penalty would be highly fact specific. We would expect that principles similar to those discussed in the response to question 7 would guide the Agency's actions.

With regard to the question about citizen suits, Section 304 of the Clean Air Act provides third parties, after a 60-day notice, the authority to bring a civil action against any person who is alleged to have violated or to be in violation of Clean Air Act emissions standards or limitations, orders related thereto and certain permitting requirements. However, such an action can only be maintained if the EPA or a State is not already "diligently prosecuting" a civil action to bring the source into compliance. In the event that the EPA or a State has undertaken a civil action, a citizen/third party has the right to intervene in the action. If a citizen suit were brought and challenged, the question whether the EPA or a State is "diligently prosecuting" the relevant matter is ultimately a judicial decision and turns on what actions either governmental agency has taken. There were not any citizen challenges to any of the cases noted in the answer to Question 7, above. Aside from any legal bar to citizen suits, the EPA believes that the facts and circumstances that would motivate the EPA to utilize its enforcement authorities in a flexible manner to ensure reliability would have a significant impact on both the inclination of a citizen to challenge the underlying conduct of an electric generator or other regulated entity as well as a court's disposition of any such challenge.

The citizen suit provision of the Clean Water Act (Section 505) operates similarly and implicates similar considerations.

Appendix A
Response to Question 4

Meetings and Phone Calls Between EPA and FERC, DOE, and CEQ

The following is a list of meetings and phone calls between the EPA and one or more of FERC, DOE, and CEQ, at which issues related to the potential impacts of the EPA's power sectors rules on electric reliability were at least one of the subjects of discussion. As to OMB, the subject of impacts on electric system reliability is discussed in the EPA's Regulatory Impact Analyses for various rules affecting the power sector, which were submitted to OMB and were subject to interagency review. Apart from conversations regarding the relevant text in technical support documents for rules, the EPA did not consult with OMB on this subject.

Date	Location	Participants	Purpose/Subject
8/18/10	CEQ	CEQ, DOE, EPA, and FERC staff	CEQ convened a meeting to discuss the EPA's analysis of pending rules affecting power plants, including impacts on costs, generation mix, reliability, and other factors.
9/8/10	FERC	EPA and FERC staff	The EPA staff met with FERC staff to follow up on the 9/8/10 meeting at CEQ. The EPA staff discussed the EPA's modeling approach and FERC staff discussed tools used by FERC in reliability analysis.
10/5/10	CEQ	CEQ, DOE, EPA, and FERC staff	CEQ convened a meeting to discuss potential impacts of the EPA rules on the power sector. DOE's Energy Information Administration (EIA) presented its Annual Energy Outlook (AEO) 2010 reference case for the power sector and some special energy efficiency cases from that report.
10/20/10	CEQ	CEQ, EPA, and FERC staff	CEQ convened a meeting to explore options for consultation between the EPA and FERC with regard to the impacts of the EPA air regulations on electric reliability.
10/26/10	Phone	FERC Chairman Jon Wellinghoff and EPA Assistant Administrator Gina McCarthy	Discussion of NERC's report on the reliability impacts of the EPA regulations
10/27/10	FERC	CEQ, EPA, FERC staff	FERC staff presented an informal preliminary assessment of potential reliability issues associated

			with the EPA regulations for power plants. The EPA discussed its analysis and the type of information that could be made available for further analysis.
11/4/10	Phone	EPA and FERC staff	Follow-up discussion of the information provided at the 10/27/10 meeting at FERC and how it could be used for further analysis.
11/29/10	EPA	FERC Commissioners Norris and LaFleur and FERC staff; EPA Assistant Administrator Gina McCarthy and EPA staff	The EPA provided an overview of the EPA's pending regulations for power plants under the Clean Air Act.
1/12/11	EPA	DOE, EPA	Discussion of potential DOE-EPA engagement with respect to modeling and analysis related to potential the EPA power sector regulations.
2/2/11	EPA	DOE, EPA	The EPA provided overview of draft proposed Mercury and Air Toxics Standards rule for DOE staff that had not attended to 1/12/11 meeting.
2/8/11	EPA	DOE, EPA	The EPA provided briefing on draft proposed Mercury and Air Toxics Standards rule.
2/10/11	Phone	DOE, EPA	Follow-up discussion from 2/8/11 meeting.
2/14/11	NARUC Winter Committee Meeting (Washington, DC)	EPA and FERC staff	The EPA and FERC staff had lunch together during the National Association of Regulatory Utility Commissioners' winter committee meeting. They discussed ways in which the EPA staff could participate in regional transmission planning processes.
2/16/11	FERC	CEQ, DOE, EPA, and FERC staff	CEQ convened a meeting to discuss the impacts of the forthcoming Transport Rule/Cross-State Air Pollution Rule and proposed Mercury and Air Toxics Standards Rule. The EPA provided a presentation of its preliminary modeling of the proposed rules.
2/17/11	DOE	DOE, EPA	The EPA provided preliminary modeling analysis of proposed Transport Rule/Cross-State Air Pollution Rule and Mercury and Air Toxics

			Standards Rule.
2/25/11	Phone	DOE, EPA	Follow-up discussion regarding previous meeting between CEQ, DOE, the EPA, and FERC.
3/3/11	EPA	DOE and EPA staff	Meeting to discuss potential DOE tools and capacity to assess potential resource adequacy effects of the EPA power sector rules
3/4/11	Phone	DOE, EPA	The EPA provided preview of preliminary modeling results for proposed Transport Rule/Cross-State Air Pollution Rule and Mercury and Air Toxics Standards Rule.
3/8/11	DOE	DOE, EPA	The EPA provided updated results from preliminary modeling results for the proposed Transport Rule/Cross-State Air Pollution Rule and Mercury and Air Toxics Standards Rule.
3/14/11	Phone	EPA and FERC staff	Biweekly teleconference regarding assessment of power sector impacts of the EPA rules. The EPA discussed final modeling for its proposed Mercury and Air Toxics Standards Rule for power plants, signed on 3/16/11.
3/18/11	EPA	DOE and EPA staff	Follow-up meeting from 3/3/11 meeting to discuss potential DOE tools and capacity to assess potential resource adequacy effects of the EPA power sector rules
3/30/11	Phone	EPA and FERC staff	Biweekly teleconference regarding assessment of power sector impacts of the EPA rules. The EPA provided a brief update on its recently issued proposed cooling water intake rule under Section 316(b) of the Clean Water Act.
4/4/11	FERC	EPA and FERC staff	FERC staff discussed how various utility planning authorities address proposed plant closures under utility tariffs and other mechanisms.
4/13/11	Phone	EPA and FERC staff	Biweekly teleconference regarding assessment of power sector impacts of the EPA rules. Further discussion of modeling of recently proposed Mercury and Air Toxics Standards Rule.
4/27/11	Phone	EPA and FERC staff	Biweekly teleconference regarding assessment of power sector impacts of the EPA rules. Follow-up discussion of the EPA's modeling of its proposed Mercury and Air Toxics Standards Rule.
5/3/11	FERC	FERC Commissioners	Discussion of the EPA's proposed Clean Air Act power sector rules and potential impacts on

		LaFleur and Moeller and FERC staff; EPA Assistant Administrator Gina McCarthy and EPA staff; DOE staff	electric sector costs and reliability.

Documents

On the enclosed CD, the EPA is providing the following documents that the Agency is able to provide at this time in response to the request, in question 4, for documents related to the meetings and phone calls identified above. Where documents are associated with one of the meetings or calls listed above, this is noted. The Agency will continue to work with your staff to accommodate your interest in this subject matter.

EPA Documents

- Key Preliminary Results from Modeling Future Utility Controls Aug 18.pdf (August 18, 2010 meeting)
- Reducing Air Pollutants from Power Plants.pdf (August 18, 2010 and November 29, 2010 meetings)
- Parsedfile_TR SB Limited Trading 2014.xls. (preliminary IPM model output for Transport Rule) (October 27, 2010 meeting)
- Reducing Air Pollution from Power Plants (January 12, 2011 meeting)
- Coal Combustion Residuals Proposed Regulation (January 12, 2011 meeting)
- Clean Water Act Regulations Affecting Electric Utilities (January 12, 2011 meeting)
- FERC-DOE_Review.docx (February 16, 2011 meeting)
- ParsedFile_BC_24.xlsx. (preliminary IPM model output for the Transport Rule and Mercury and Air Toxics Standards Rule) (February 16, 2011 meeting)
- ParsedFileDescription.docx. (provides information on preliminary IPM model output for the Mercury and Air Toxics Standards Rule) (February 16, 2011 meeting)
- Resource Adequacy and Reliability_v3.docx. (EPA draft assessment based on IPM modeling) (February 16, 2011 and February 17, 2011 meetings)
- Toxics and TR Closures-134 CAMD Units Heat Inputs-Feb 15 2011.xlsx. (preliminary IPM modeling output on Transport Rule and Mercury Air Toxics Standards Rule) (February 16, 2011 meeting)
- Documentation Supplement for EPA Base Case v.4.10 PTR – Updates for Proposed Toxics Rule – Draft (February 17, 2011 meeting)
- Toxics Rule: Energy Efficiency Sensitivity – Draft (March 8, 2011 meeting)
- ParsedFile_Toxs_2015Base.xlsx (IPM output for modeling "base case" for Transport Rule and Mercury and Air Toxics Standards rule) (sent to FERC April 4, 2011)

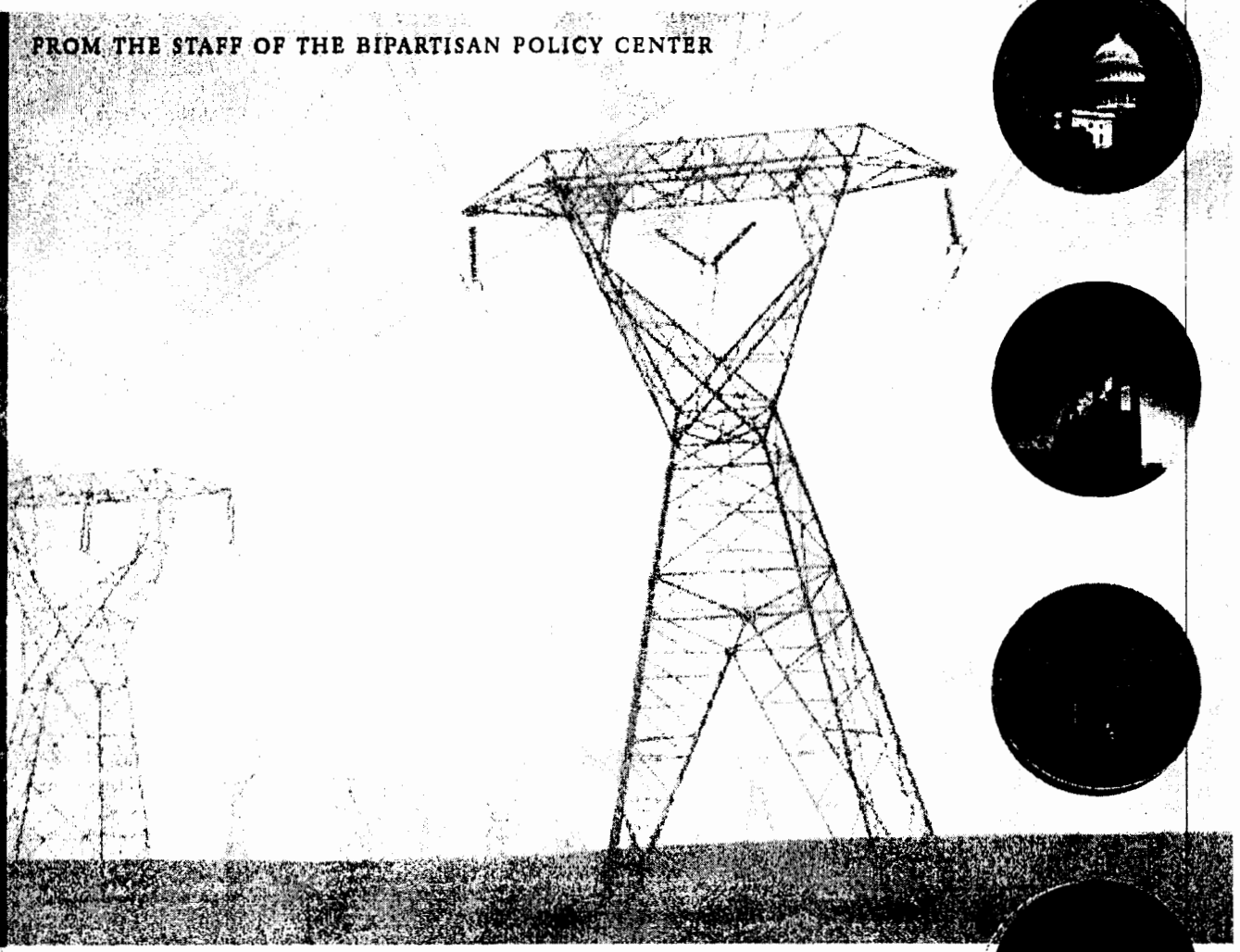
- ParsedFile_Toxs_2015Policy.xlsx (IPM output for modeling "policy case" for Transport Rule and Mercury and Air Toxics Standards rule) (sent to FERC April 4, 2011)
- Addressing the Environmental Impacts of the Power Sector.pdf. (May 3, 2011 meeting)

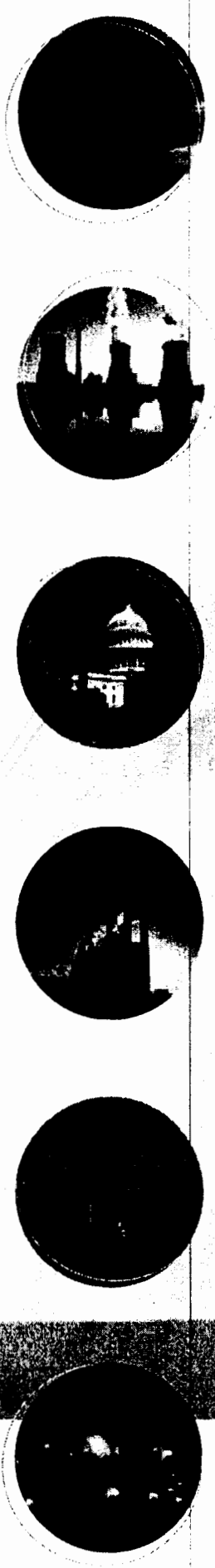
Other Documents

- Email from FERC staff to EPA staff asking questions regarding EPA modeling of power sector rules (April 13, 2011)
- Email from EPA staff to FERC staff confirming receipt of April 13, 2011 email (April 13, 2011)
- Email from EPA staff to FERC staff providing responses to questions posed in April 13, 2011 email (April 21, 2011)
- Database Questions Response.docx. (attachment to email) (EPA response to questions from FERC regarding IPM modeling) (April 21, 2011)
- FERC RMR Gen Retire Inquiry (follow-up to April 4, 2011 meeting)
- Emails from FERC staff to EPA staff forwarding third-party articles, announcements, or studies:
    - 3/30/11
    - 3/31/11
    - 4/11/11
    - 4/13/11 (2)
    - 4/18/11
    - 4/26/11 (2)
    - 4/28/11
    - 4/29/11
    - 5/2/11
    - 5/5/11 (3)
    - 5/9/11

Environmental Regulation and Electric System Reliability

FROM THE STAFF OF THE BIPARTISAN POLICY CENTER





BIPARTISAN POLICY CENTER

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Disclaimer

This report was prepared by the staff of the Bipartisan Policy Center to promote a better understanding of the possible impacts of U.S. Environmental Protection Agency regulation of the electric power sector and to identify a range of strategies for managing associated reliability concerns. The views expressed here do not necessarily reflect those of the BPC Energy Project or our workshop co-sponsors, presenters, and participants.

Acknowledgements

The Bipartisan Policy Center would like to express its thanks for the strong support of its funders. In addition, we are grateful to the National Association of Regulatory Utility Commissioners and Northeast States for Coordinated Air Use Management for co-sponsoring the workshop series. Thanks also to each of the experts, listed in Appendix A, that participated in the workshop series and informed this report. Special appreciation is due to Marika Tatsutani for editing the report.

Table of Contents

Executive Summary 2

Section I. Introduction 8

Section II. Overview of Challenges Facing the U.S. Electricity Sector 10

- A. The Impact of Natural Gas Prices
- B. Current and Potential Future Energy Policies
- C. Forthcoming EPA Regulations for the Electric Power Sector

Section III. Results of Power Sector Analysis 19

- A. Current Trends in the Power Sector
- B. Studies on the Impact of EPA Regulations
- C. Impacts of Retirements on Resource Adequacy
- D. The Staging of Retrofits

Section IV. Addressing Reliability Concerns: The Roles of Federal, State, and Regional Authorities 28

- A. Federal Agencies
- B. Interagency Cooperation
- C. State Authorities
- D. Regional Organizations
- E. Coordination of Federal, State, and Regional Authorities

Section V. Conclusions and Recommendations 38

- A. Flexibilities in the Clean Air Act and Clean Water Act
- B. Planning and Coordination
- C. Siting and Permitting for New Infrastructure
- D. Legislative Opportunities

Appendix A - List of Expert Speakers from BPC Workshops on Environmental Regulation and Electric System Reliability 42

Appendix B - BPC Modeling using ICF's Integrated Planning Model 44

- A. Assumptions for Analysis
- B. Description of Scenarios
- C. Select Results of BPC Analysis

The electric power sector in the United States faces a changing market environment, one that features reduced or flattened demand, low natural gas prices, new environmental regulations, and continued uncertainty about the future regulation of carbon. Among the regulations recently proposed or currently under development by the U.S. Environmental Protection Agency (EPA) are rules to address air pollution transport, air toxics, coal ash, and cooling water intake structures at existing plants.[1] These regulations are expected to result in significant public health and environmental benefits that, when monetized, are well in excess of compliance costs.[2]

[1] These rules are being proposed under the Clean Air Act and other statutory authorities, which require EPA to protect public health, welfare, and the environment from adverse impacts of power plants.

[2] For example, EPA estimates the health and environmental benefits of the proposed Transport Rule range from $120 to $290 billion in 2014, while compliance costs for that year are estimated to be $2.8 billion (estimates are in 2006 dollars). See United States Environmental Protection Agency. Proposed Air Pollution Transport Rule: Reducing Pollution, Protecting Public Health. http://www.epa.gov/airquality/transport/pdfs/TRPresentationfinal_7-26_webversion.pdf.

Key benefits of the suite of EPA regulations include the avoidance of tens of thousands of premature deaths annually, reductions in pollution-related illnesses, and improved visibility and ecosystem health. These new conditions in the power sector are expected to increase the number of coal-fired power plants that will be retired in the next several years; in fact, a number of plant shutdowns have recently been implemented or announced.

Environmental compliance deadlines are likely to have a strong influence on the timing of these retirements, as plant owners will not want to make significant capital investments in some older, marginal units that might otherwise be shut down soon for economic reasons. This has led to concerns that the power sector could face reliability issues as utilities comply with new regulations. Others have argued that power companies and regional, state, and federal authorities have recourse to a range of technology options and planning approaches that can help them avoid reliability impacts from the impending suite of environmental regulations.

To shed light on these complex issues, the Bipartisan Policy Center (BPC), together with the National Association of Regulatory Utility Commissioners (NARUC) and Northeast States for Coordinated Air Use Management (NESCAUM), hosted a series of workshops to assess the possible impacts of regulation and identify a range of strategies for managing associated reliability concerns.[3] The three workshops featured presentations by leading experts on electric power system reliability, electricity market operations, power sector technology, and pollution control policies and regulations (see Appendix A).[4] Building on the presentations and public dialogue at these workshops, our review of a range of existing analyses, and our own analytic work, BPC has developed a number of findings and recommendations. Our main conclusions are summarized below.

IMPACTS ON THE RELIABILITY OF THE ELECTRIC SYSTEM DUE TO EPA REGULATIONS ARE MANAGEABLE.

BPC analysis indicates that scenarios in which electric system reliability is broadly affected are unlikely to occur. Previous national assessments of the combined effects of EPA regulations reach different conclusions, in part because they make quite different assumptions about the stringency and timing of new requirements and about the availability and difficulty of implementing control technologies. In some cases these assumptions deviate from the specifics of EPA's recent proposals in meaningful ways. Moreover, market factors, such as low natural gas prices, are as relevant as EPA regulations in driving coal plant retirements. A number of recent developments are especially relevant from the standpoint of addressing reliability concerns:

- EPA's proposed cooling water regulations are far less stringent than assumed in the vast majority of analyses, many of which considered worst-case scenarios in which cooling towers would be required on all existing units.
- Some commercially available, lower-cost technologies (e.g., dry sorbent injection) for treating hazardous air pollutants were not factored into most previous analyses. Including them significantly reduces retirement projections.
- Most of the units projected to retire are small, older units that are already operating infrequently. Some of these units may be needed to meet peak demand on the hottest and coldest days or to provide volta ge support. In some cases, there may be viable mechanisms, other than one-to-one capacity replacement, available to serve these needs.[5]
- The industry has significant amounts of existing natural gas generating capacity that is currently under-utilized and may be available to take up the slack, depending on the region.
- Some previous assessments do not account for market responses to future retirements, specifically to the potential for adding new capacity to meet reserve margins. Assuming timely permitting, the need for modest new capacity resources could be met with quick-to-build natural gas turbines, as well as demand side resources.[6]

[3] BPC gratefully acknowledges NARUC and NESCAUM as co-conveners of the workshop series. However, the report is solely a product of the staff of the Bipartisan Policy Center and does not necessarily represent the views of NARUC, NESCAUM, or any of the workshop participants.

[4] Information from each of the workshops, including video and presentations, is available at www.bipartisanpolicy.org.

[5] For example, demand response and energy efficiency programs, energy storage, and transmission upgrades.

[6] Although many gas turbines have been built within 3 years in the recent past, some in industry have raised concern that the permitting process for new construction, including greenhouse gas best available control technology (BACT) determinations, might take up to two to three years, added on top of two year construction for a new gas turbine. BPC modeling projects only 200 MW of new gas capacity would be needed, beyond the 1200 MW of new gas turbines expected in the business as usual scenario to be built by 2015.

SUMMARY OF FORTHCOMING EPA REGULATIONS

TRANSPORT RULE – On July 6, 2010, EPA proposed the Transport Rule, a replacement for the Clean Air Interstate Rule (CAIR) which was previously remanded in a 2008 court decision.[7] The newly proposed Transport Rule would require 31 states and the District of Columbia to meet state pollution limits for sulfur dioxide (SO_2) and nitrogen oxides (NO_x) as a means to ensure compliance with National Ambient Air Quality Standards (NAAQS) for ground-level ozone and fine particulate matter (PM).

UTILITY AIR TOXICS RULE – On March 16, 2011, EPA proposed the Utility Air Toxics Rule under a court-ordered deadline to control hazardous air pollutants, including mercury, acid gases and non-mercury metals.[8] As specified by the Clean Air Act, the Utility Air Toxics Rule provides that plants must comply with emission limitations for hazardous air pollutants within three years, but allows an additional year for plants to come into compliance if such time is necessary to install pollution controls.

COAL COMBUSTION WASTE DISPOSAL REGULATIONS – On June 21, 2010, EPA published a proposed rule to take comment on whether or not coal combustion waste should be regulated as hazardous waste.[9] These wastes, which primarily consist of coal ash, are generated in large quantities by the power sector. According to the proposal, ash could be regulated as "special waste" under the Clean Air Act's hazardous waste provisions (Subtitle C). Alternatively, EPA could deem the coal ash non-hazardous and regulate under Subtitle D, with self-implementing requirements that are not subject to federal enforcement.

CLEAN WATER ACT SECTION 316(B) COOLING WATER INTAKE STRUCTURES – To protect fish and aquatic ecosystems, EPA proposed regulations on March 28, 2011 for cooling water intake structures at electric generating units (EGU) and other industrial facilities that draw large amounts of water out of rivers, lakes, and oceans. This proposed regulation responds to a settlement agreement that was reached after EPA's earlier cooling water proposals were litigated.

GREENHOUSE GAS PERFORMANCE STANDARDS – On December 23, 2010, EPA announced that it will propose greenhouse gas performance standards for power plants by July 2011 and finalize standards by May 2012. This action is being taken under a settlement agreement. At public "listening sessions" to inform this rulemaking process, EPA indicated that its greenhouse gas performance standards would not be designed to induce "game-changing" technology improvements; rather the Agency aims to bring older plants up to modern standards of efficiency.

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[7] See *New South Carolina v. Environmental Protection Agency*, Slip. op. (D.C. Cir. 2008).

[8] U.S. Environmental Protection Agency, Proposed Utility Air Toxics Rule, National Emissions Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units, Signed March 16, 2011. Page 22. Available at: [illegible] utility/pdf/toxicsrule.pdf.

[9] For additional information and the proposed rule see http://www.epa.gov/wastes/nonhaz/industrial/special/fossil/index.htm.

A NUMBER OF TOOLS FOR ADDRESSING RELIABILITY CONCERNS ARE AVAILABLE TO INDUSTRY AND TO STATE AND FEDERAL REGULATORS.

EPA should take advantage of its existing statutory authorities to structure clear regulations that include sensible timelines and encourage cost-effective compliance strategies. Specifically, EPA should finalize the flexibilities proposed in its Utility Air Toxics Rule (which sets "maximum achievable control technology" standards for hazardous air pollutants) and 316(b) cooling water rule. Where needed and allowed by statute, EPA and state permitting agencies should grant utilities time extensions – with as much advance notice as possible – to install pollution control technologies and to build the new capacity required to achieve compliance.[10]

Regional, state, and utility analyses should continue to examine the potential localized impacts of retirement and retrofit schedules, as well as opportunities to attract non-conventional capacity resources, such as demand resources, distributed generation, and grid-scale energy storage capacity. While most studies have taken a national approach to reliability assessments, more study is warranted to assess localized reliability impacts in the most vulnerable regions, and efforts should be made to refine and improve analytical tools.

If specific issues are identified, federal and state agencies should consider implementing strategies to assure reliability while utilities complete upgrades or bring new generation online. As a backstop, DOE has emergency powers to keep essential generation on-line, and the President has emergency powers to delay requirements in order to protect national security. In addition, EPA may enter into consent decrees – which set forth the steps needed to resolve non-compliance – to enforce the provisions of the Rule. Such consent decrees, however, should aim to eliminate any economic advantage that companies may otherwise have as a result of operating out of compliance. Consent decrees are negotiated once a company is deemed in violation, and stakeholders may not view this legal mechanism as an acceptable option that could be built into company planning. However, consent decrees do offer an additional means of backstop reliability protection.

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[10] Some stakeholders endorse efforts to preempt reliability concerns and provide extra time up front in the process, rather than wait for problems and rely on emergency powers and consent decrees.

NEVERTHELESS, THE ELECTRIC POWER SECTOR AND ITS REGULATORS FACE PLANNING CHALLENGES IF THE AIM IS TO AVOID LOCALIZED RELIABILITY PROBLEMS AND MINIMIZE IMPACTS ON ELECTRIC RATES.

A rapidly shifting market and regulatory environment will create planning challenges for the electric power industry. The compliance deadlines of the Utility Air Toxics Rule, in particular, will accelerate and concentrate the decision-making timeframe for plant retirements, retrofits, and new infrastructure into a short period over the next few years. At the same time, many states are weighing new or stronger approaches to incentivize clean energy, energy efficiency, and/or non-conventional capacity resources. This convergence of issues and planning needs offers an opportunity for the industry and its regulators to work together to optimize policies and investment decisions so as to minimize consumer costs, avoid stranded assets, and maximize the benefits achieved by modernizing the nation's electric power infrastructure. At the same time, it will undoubtedly also present challenges, particularly in heavily affected regions where the resources available to support thoughtful planning and regulatory processes–both in terms of people and funding–are already under severe pressure.

Compliance planning can and should begin early and should take into account existing regulations as well as the expected regulations. If plant owners begin planning now and obtain a one year extension from their permitting authority, they will have almost five years from the date of the proposed rule to the date of the extended compliance deadline. Multi-pollutant planning and efforts to integrate non-conventional capacity resources and transmission planning will help to minimize rate impacts for electric consumers. At the same time, federal, regional, and state entities have appropriate roles to play in supporting planning efforts and mitigating anticipated reliability challenges and costs.

Specifically, state public utility commissions (PUCs) and regional transmission organizations or independent system operators (RTO/ISOs) should coordinate closely with power companies to ensure early multi-pollutant compliance planning and to coordinate retrofit outage schedules. To help with the pacing of control retrofits, states should continue to look for incentives and opportunities to encourage retrofit installations that begin well in advance of compliance deadlines.

Federal agencies, including the Department of Energy (DOE), the Federal Energy Regulatory Commission (FERC), and EPA, should provide analytic and technical support and coordinate with state and regional authorities to facilitate a smooth transition.

This convergence of issues and planning needs offers an opportunity for the industry and its regulators to work together to minimize consumer costs, avoid stranded assets, and maximize the benefits achieved by modernizing the nation's electric power infrastructure.

In light of the tight timeframes involved, state legislatures as well as EPA, DOE, and FERC should pursue strategies to help state utility regulators deal with increased workloads, particularly in the years 2012 through 2014, in order to facilitate timely decisions and allow the design and building of pollution controls and infrastructure, as needed.

DUE TO DIFFERENCES AMONG THE STATES, THERE IS NO SINGLE APPROACH TO COMPLIANCE AND RELIABILITY THAT WILL WORK EVERYWHERE. HOWEVER, A NUMBER OF STRATEGIES ARE ALREADY BEING EMPLOYED TO SUPPORT EARLY PLANNING IN DIFFERENT TYPES OF MARKETS.

In regulated states, the integrated resource planning (IRP) process informs state utility regulators who approve rate plans. State policy makers should consider a multi-pollutant approach for rate recovery and planning decisions. States should also advance policies that encourage and place responsibility with utilities for long term decision-making that avoids stranded assets and minimizes consumer costs. In addition, state regulators should recognize the value of long-term natural gas supply contracts to provide price stability and facilitate project financing. Finally, traditionally regulated states should encourage the development of non-conventional capacity resources as one means to help preserve a reliable bulk electricity system and minimize consumer costs.

In restructured states, the transparency of regional or state wholesale markets makes it easier to anticipate planned retirements and outages; in addition, competitive markets create financial incentives for timely investment in new transmission, generation, and non-conventional capacity. In these states, RTOs and ISOs typically facilitate orderly planning for power plant retirements by requiring utilities to provide advance notice if they intend to retire a unit and by conducting reliability impact studies. In light of the large number of pollution control equipment installations expected under upcoming EPA regulations, these regional entities should also play a more active role in coordinating outages, including between neighboring regions that might rely on each other to meet electricity demand during this transition period.

ENSURING A SMOOTH TRANSITION TO A CLEANER ELECTRIC POWER SECTOR WILL REQUIRE NEW INVESTMENTS IN SUPPLY AND DEMAND-SIDE CAPACITY, AS WELL AS TRANSMISSION AND OTHER INFRASTRUCTURE. STATE AND FEDERAL AGENCIES SHOULD LOOK FOR OPPORTUNITIES TO STREAMLINE THE SITING AND PERMITTING OF NEW INFRASTRUCTURE.

A smooth transition to a cleaner and more efficient generation system will require investments in energy efficiency, demand response strategies, and cleaner new generation capacity along with associated transmission and pipeline infrastructure. Fortunately retired capacity will not need to be replaced on a one-to-one basis to meet energy needs, simply because many of the units likely to be retired are not operating at full capacity now and many other existing units are under-utilized.[11] In some instances, of course, the retirement of an existing generator may give rise to new capacity or transmission needs within a relatively brief period of time. And while the industry has generally been able to add capacity on the scale and within the timeframes needed in the past, policy makers at the state and federal levels should explore approaches to facilitate this process by streamlining procedures for siting and permitting new infrastructure.

THERE MAY BE A SHORT WINDOW OF OPPORTUNITY TO ENACT A LEGISLATIVE FIX THAT COULD GUARANTEE THE ENVIRONMENTAL BENEFITS OF THE CLEAN AIR ACT AND PROVIDE A LOWER COST TRANSITION FOR THE POWER SECTOR.

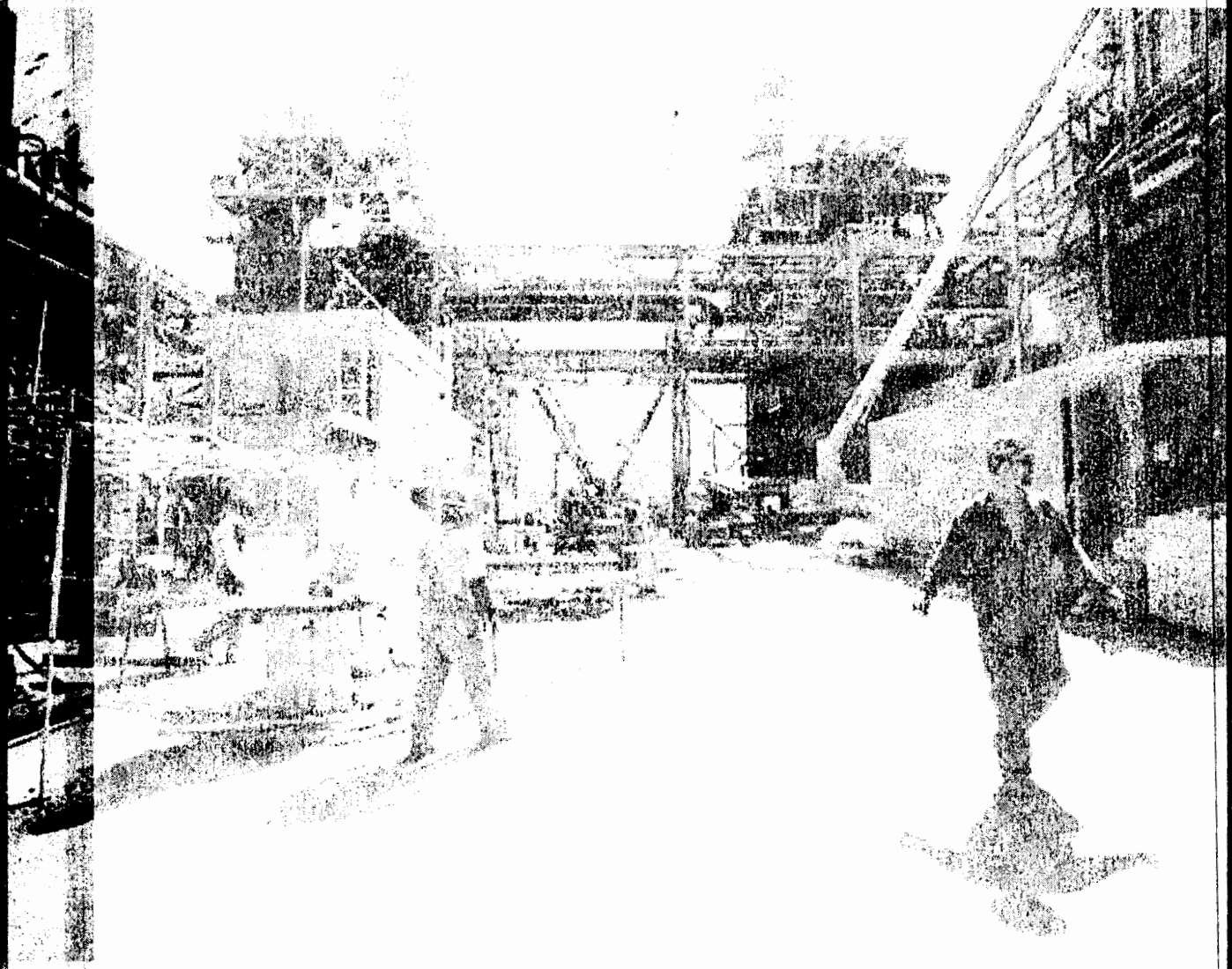
Although BPC believes that the benefits of power sector regulation, including new regulations such as the Utility Air Toxics Rule, far outweigh the cost, we also recognize that associated compliance costs will not be trivial. EPA estimates that compliance costs for the Utility Air Toxics Rule alone will total $10.9 billion annually. For the average electricity consumer, this translates to an increase of $3 to $4 per month.[12] BPC estimates annual costs of $14.5 billion in 2015 and $18.1 billion in 2025 to comply with the suite of EPA air, water, and waste rules.[13]

Some workshop participants suggested that a legislative fix could provide equivalent or greater environmental benefits at a lower cost than regulatory approaches under existing law, particularly for air pollutants. To be successful, multi-pollutant legislation would need to provide certainty on requirements and timing, and encourage rational and timely investment decisions in pollution controls and new capacity. Further, multi-pollutant legislation should ultimately guarantee the environmental benefits available under current authority, while offering a smoother transition. Several market-based, multi-pollutant legislative proposals have been debated in recent years. While recognizing that it would be politically difficult to advance new legislation, the BPC believes that this approach could provide public health and economic benefits and should be explored in the coming months.

[11] According to EPA, for units projected to retire from the Utility Air Toxics rule, the average capacity factor is 56 percent, the average age is 51 years, and the average size is 109 Megawatts.

[12] U.S. Environmental Protection Agency. Power Plant Mercury and Air Toxics Standards: Overview of Proposed Rule and Impacts. http://www.epa.gov/airquality/powerplanttoxics/pdfs/overviewfactsheet.pdf.

[13] See Section III and Appendix B for details on BPC analysis of the impacts of EPA regulations.



SECTION I

There continues to be debate about the effect of upcoming EPA regulations on power plant retirements and on the relative impact of these regulations compared to other factors, such as low natural gas prices and the continuing uncertainty surrounding carbon dioxide (CO_2) control. This is reflected in the range of conclusions reached by different analyses and in the spectrum of views that exists regarding whether compliance with the new regulations will present a challenge for the industry or not. Analysts disagree about how many existing coal plants are likely to be retired rather than retrofitted with new pollution controls. They also make different assessments about the ability of under-utilized existing generation, new capacity resources, and transmission upgrades to compensate for retired plants.

This report summarizes the current state of knowledge about challenges facing the electric power sector as it seeks to maintain reliability without jeopardizing important progress on public health and environmental protections.

Further, some analysts predict that the need to retrofit large numbers of power plants with pollution control equipment within a short timeframe could leave some plants unavailable for a period after the deadline until their compliance obligations are met. This is particularly a concern for Air Toxics requirements, which will take effect in 2015.

The result, according to some analysts, could be power shortages in some regions of the country that would create hardships for consumers and damage the economic recovery. However, other analysts contend that reliability concerns are unfounded or at the least overstated because under-utilized natural gas capacity, transmission from neighboring regions, and other resources are sufficient to compensate for the expected coal retirements. According to this view, even if there are legitimate localized reliability concerns, these concerns can be mitigated through a variety of technical, policy, and regulatory approaches.

Several of the EPA regulations that may have the greatest impact on coal plant retirements have not yet been finalized. However, with the issuance of recent EPA proposals for air, water, and waste regulations, including the March 16, 2011 Utility Air Toxics Rule proposal and the March 28, 2011 proposal on cooling water intake structures, the details are becoming clearer. These recent proposals provide some additional clarity on how new environmental regulations will affect power generation planning.

This report summarizes the current state of knowledge about challenges facing the electric power sector as it seeks to maintain reliability without jeopardizing important progress on public health and environmental protections. Section II of this report describes major market factors and regulations affecting the power sector and Section III summarizes and provides insights on key studies that attempt to predict the impact of EPA regulation and other variables. Section IV identifies strategies for mitigating reliability concerns and discusses the roles of regulators and stakeholders in facilitating a smooth power sector transition. The report concludes with a series of findings and recommendations on how best to meet these challenges.

SECTION II

In the next decade, our nation's electric power system is expected to transition to a more modern fleet of generators. A key element of this anticipated transformation is the retirement of a significant amount of older and increasingly uneconomic coal-fired capacity. The transition itself will be driven by a range of factors, including low natural gas prices, state renewable portfolio standards, and the possibility of some form of future regulation of greenhouse gases. In addition, many coal plants already face economic challenges as they near the end of – and in some cases, exceed – their design life expectancies.

Finally, forthcoming EPA regulations for air quality, cooling water, and coal combustion waste will put additional pressure on plants that don't yet employ state-of-the-art pollution controls. It is difficult to determine the relative impacts of these factors, but a new era of low and stable natural gas prices—the result of a substantial increase in domestic supply—is expected to be an influential driver of electric power sector market conditions and resource choices for the next several decades.

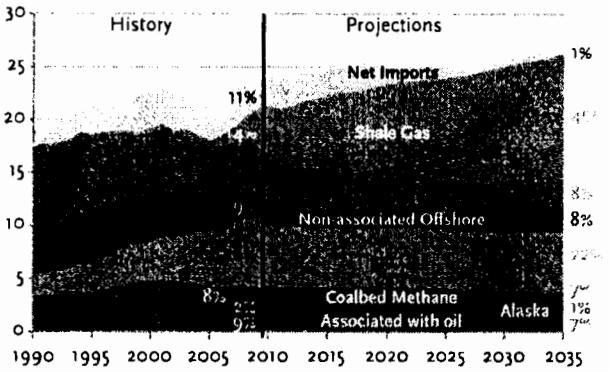
A. THE IMPACT OF NATURAL GAS PRICES

The discovery of vast shale gas basins in the United States, combined with technological advances in horizontal drilling and hydraulic fracturing that make it possible to access these resources, has dramatically changed the domestic natural gas supply outlook (see Figure 1). As new shale gas resources have been developed in recent years, natural gas prices have declined (see Figure 2). They are now projected to remain at levels lower than during the previous decade.[14]

Domestic reserves of natural gas are projected to support more than 100 years of demand at present levels of consumption.[15] Annual U.S. consumption of natural gas across all sectors currently totals approximately 22 trillion cubic feet (Tcf); the electric sector accounts for roughly one-third of this total, or nearly 7 Tcf of annual demand.[16] To give some sense of the current supply context, a recent MIT study titled *The Future of Natural Gas* estimates that approximately 400 Tcf of shale gas in the United States could be developed economically with gas prices at or below $6 per million British thermal units (MMBtu) at the well-head.[17] ICF International, Inc. also recently estimated that almost 1,500 Tcf of total gas can be produced at prices below $5/MMBtu and that the same volume of shale gas alone could be produced at prices below $8/MMBtu.[18]

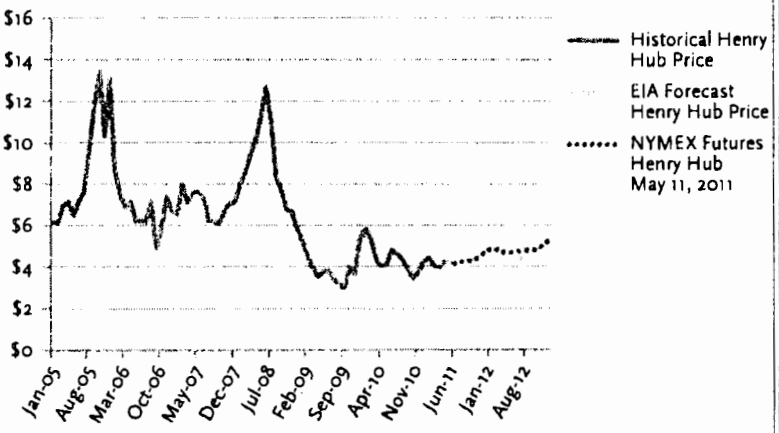
Natural gas plays an interesting role in the power sector's changing supply outlook, as both a driver of coal plant retirements and a solution to potential resource and reliability concerns. Lower gas prices will make some existing coal-fired capacity uneconomic. They may also encourage utilities to increase capacity utilization at existing natural gas-fired plants and, where both types of units are available, dispatch natural gas plants in place of some coal plants. Natural gas has already increased

FIGURE 1: FORECASTED U.S. NATURAL GAS PRODUCTION



Source: U.S. Energy Information Administration. History: Annual Energy Review 2009. Projections: Annual Energy Outlook 2011.

FIGURE 2: PROJECTED NATURAL GAS PRICES



Sources: U.S. Energy Information Administration. Short Term Energy Outlook. May 10, 2011. NYMEX Henry Hub Natural Gas Futures. May 11, 2011.

[14] U.S. Energy Information Administration. Annual Energy Outlook (AEO) 2011. Natural Gas Supply, Disposition, and Prices. The EIA AEO 2011 projects natural gas prices will be nearly $1.24/MMBtu lower, on average through 2030, than their AEO2010 estimate.

[15] Colorado School of Mines. Potential Gas Committee. Potential Supply of Natural Gas in the United States. 2009.

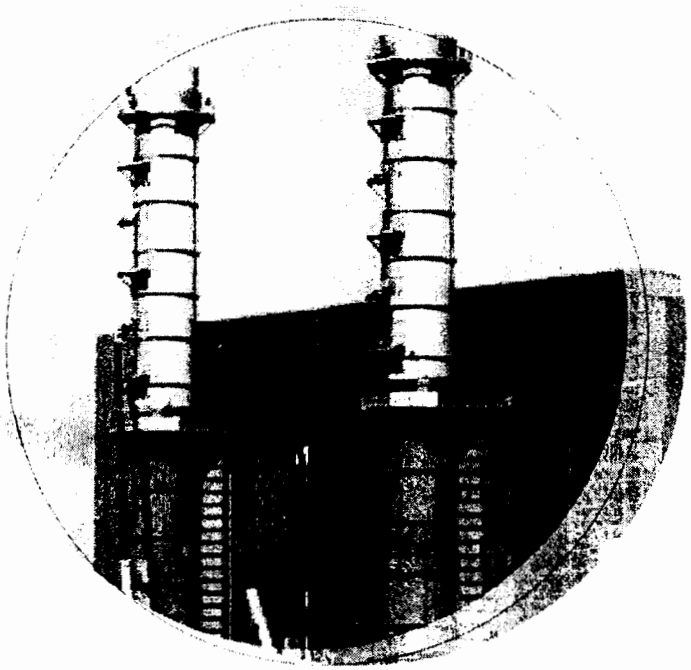
[16] U.S. Energy Information Administration. Natural Gas Consumption by End Use. Data released April 29, 2011.

[17] Massachusetts Institute of Technology. The Future of Natural Gas: An Interdisciplinary MIT Study. Xii.

[18] ICF International. 2010 Natural Gas Market Review, prepared for the Ontario Energy Board. August 2010.

its share of the generation fuel mix during the past few years, displacing some coal generation.[19] In addition, as coal plants retire due to changing economics, low gas prices may provide strategic opportunities to transition to gas-fired capacity at a relatively low cost.

Projections of future low natural gas prices are also changing the market dynamics for investment in renewable and nuclear power technologies, which have relatively higher capital costs. In an environment of low and stable gas prices, these low- and no-carbon sources may have difficulty competing with natural gas absent further incentives or policy interventions (e.g., renewable portfolio standards).



B. CURRENT AND POTENTIAL FUTURE ENERGY POLICIES

State renewable electricity standards have spurred continued growth in clean energy resources, despite low natural gas prices. Such standards, together with federal policies to incentivize clean energy, also impact electric sector investment decisions. As of January 2011, twenty-nine states and the District of Columbia have a Renewable Electricity Standard (RES) or similar policy to promote utility investment in renewable energy, energy efficiency, or other clean resources.[20] Legislation to establish a national renewable electricity standard or clean energy standard has also been introduced at the federal level. Some of these proposals would include nuclear and advanced fossil fuel-based systems with carbon capture and sequestration. The Obama Administration has proposed this latter type of clean energy standard, which would incorporate a broader portfolio of generation resources, including natural gas (as opposed to a portfolio standard that is limited to renewables).

C. FORTHCOMING EPA REGULATIONS FOR THE ELECTRIC POWER SECTOR

EPA has already proposed multiple regulations for the power sector. These regulations will lead to capital investments in new technologies and pollution controls over the next fifteen or so years. The four rules that are expected to have the greatest impact are the Transport Rule, the Utility Air Toxics Rule to ensure compliance with National Emission Standards for Hazardous Air Pollutants (NESHAP), Coal Combustion Waste Disposal Regulations (known as the coal ash rule), and Clean Water Act Section 316(b) regulations for Cooling Water Intake Structures. With the exception of the ash rule, EPA has been directed by the courts to conduct these rulemakings in response to litigation over earlier rulemakings.

CLEAN AIR TRANSPORT RULE

On August 2, 2010, EPA proposed a replacement for the Clean Air Interstate Rule (CAIR), which had been previously remanded in a 2008 court decision. The new Clean Air Transport Rule (CATR), which EPA expects to finalize in the summer of 2011, will require 31 states and Washington, DC to meet new state-level pollution limits for sulfur dioxide (SO_2) and nitrogen oxides (NO_x). Specifically, power plant emissions of SO_2 will have to be reduced by 71 percent from 2005 levels by 2014 and power plant NO_x emissions will have to be reduced by 52 percent from 2005 levels. These reductions are intended to ensure compliance with ozone and fine particulate matter (PM) National Ambient Air Quality Standards (NAAQS). The new Transport Rule limits interstate trading of emission allowances, while the remanded CAIR had allowed unrestricted trading between states. The new Transport Rule also differs from the CAIR proposal in that it precludes previously banked allowances from being used to demonstrate compliance with its new caps.

[19] U.S. Energy Information Administration. Annual Energy Outlook 2011. Electricity Supply, Deposition, Prices, and Emissions.
[20] Database of State Incentives for Renewables & Efficiency. Summary map of RPS policies. www.dsireusa.org. Accessed May 2011.

The previous CAIR proposal, which EPA issued on March 10, 2005, would have permanently capped power sector emissions of SO_2 and NO_x in the eastern United States. The purpose of CAIR was to reduce the interstate transport of pollutants that contribute to non-attainment of fine PM and ozone NAAQS. At the time it was proposed, the health and environmental benefits of this rule were valued at 25 times the estimated cost of compliance.[21]

In July 2008, the US Court of Appeals ruled that CAIR's tradable emission allowance scheme was "fatally flawed" and violated the Clean Air Act (CAA) because it could not ensure that trading would not contribute to another state's non-attainment of the NAAQS. In other words, the Court found that CAIR's trading provisions did not guarantee the ambient air quality improvements needed to achieve the NAAQS in downwind areas. While the court remanded CAIR, it ruled that CAIR would remain in effect until the EPA developed a lawful alternative.[22]

As proposed on August 2, 2010, the Transport Rule would regulate NO_x and SO_2 emissions from electric generating units in the East under a regional cap-and-trade program with limited interstate trading.[23] New NO_x and SO_2 caps would first become binding in 2012 (called "Phase I" in the Transport Rule), and power plants in a limited subset of states would become subject to more stringent "Phase II" caps on SO_2 emissions beginning in 2014.

The compliance options expected to be deployed under the Transport Rule's SO_2 caps include low-sulfur coal, wet and dry scrubbers–known as flue gas desulfurization (FGD) systems–and dry sorbent injection (DSI) with sodium-based sorbents, such as sodium bicarbonate or Trona. Expected options for compliance with the Transport Rule's NO_x caps include low NO_x burners, selective catalytic reduction (SCR), and selective non-catalytic reduction (SNCR). The Transport Rule is intended to address interstate contributions to violations of three specific NAAQS: the 1997 ozone NAAQS and the 1997 and 2006 NAAQS for $PM_{2.5}$. EPA may soon issue updated and more stringent NAAQS for both of these criteria pollutants, and subsequently may issue additional Transport Rules for the control of interstate NO_x and SO_2 emissions after 2014. These successors to the Transport Rule could be implemented within a range of deadlines around 2016-2018, depending on how quickly EPA makes key determinations and how the agency interprets certain timing provisions of the CAA.

> EPA has already proposed multiple regulations for the power sector and has been directed by the courts to conduct these rulemakings in response to litigation over earlier rules.

UTILITY AIR TOXICS RULE

The 1990 Clean Air Act Amendments include a section (Section 112) on hazardous air pollutants that require EPA to regulate the sources of 90 percent of such emissions by 2000.[24] Because electric generating units were also to be regulated under other sections of the Act in ways that would provide some co-benefits in hazardous air pollutant reductions, Congress required a study and finding to determine if air toxics from electric generating units remained a significant source of concern. In December of 2000, EPA determined that it was "appropriate and necessary" to regulate coal and oil-fired power plants under Section 112.[25]

In 2005, however, EPA reversed course and found that it was neither appropriate nor necessary to regulate power plants under Section 112. At that point EPA removed electric generating units from the list of sources subject to 112.[26] In a March 15, 2005 rulemaking known as the Clean Air Mercury Rule (CAMR), mercury was delisted as a hazardous air pollutant (HAP) and a cap-and-trade policy was enacted under Section 111 of the Clean Air Act with the aim of reducing mercury emissions from coal-fired power plants by 70 percent (i.e., from a national baseline of 48 tons to 15 tons by 2018).[27] On February 8, 2008, the US Court of Appeals for the DC Circuit found that EPA violated the CAA by delisting electric generating units from the Act's toxics provisions and vacated the CAMR.[28,29]

[21] U.S. EPA. Clean Air Interstate Rule. http://www.epa.gov/cair.

[22] Fozard, Colette. "Interstate Air Pollution Rule Granted Temporary Stay of Execution." Energy Legal Blog. http://www.energylegalblog.com/archives/2009/01/05/1311.

[23] Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone. 75 Fed. Reg. 45,210 (Aug. 2, 2010). (Transport Rule).

[24] Clean Air Act Section 112(n)(1)(A)

[25] 65 FR 79,825

[26] 70 FR 15,994

[27] U.S. EPA. Clean Air Mercury Rule. http://www.epa.gov/camr/basic.html.

[28] State of New Jersey v. EPA, 517 F.3d 574, 583 (D.C. Cir. 2008), cert. denied, 129 S. Ct. 1308, cert. dismissed, 129 S. Ct. 1313 (2009).

[29] Davis, Tracy. "DC Circuit Orders Immediate Tightening of Mercury Control Rules." Energy Legal Blog. http://www.energylegalblog.com/archives/2008/03/25/1354.

Relevant Air Pollution Control Technologies

- Activated Carbon Injection (ACI): ACI is a commercially available technology that, in combination with particulate controls, removes mercury from the exhaust stack of a power plant. ACI is currently employed at many units to comply with state regulations for mercury control.

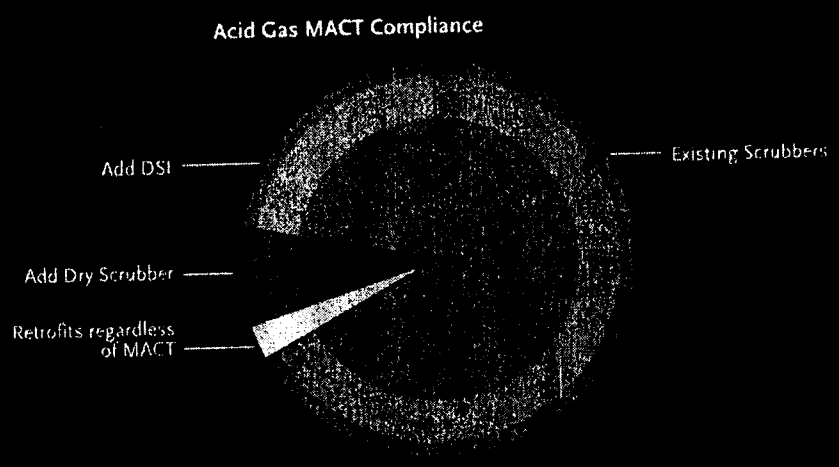
- Dry Sorbent Injection (DSI): DSI is a commercially available technology (similar to ACI for mercury) that, in combination with particulate controls, has been shown to significantly reduce emissions of acid gases, as well as sulfur dioxide (SO_2), without a more expensive scrubber. DSI has significantly lower capital cost than a scrubber, but its operating costs are non-trivial due to the cost of sorbent (e.g., Trona). This feature may make DSI best suited for certain fuels (e.g., coals with lower sulfur and chlorine content) and/or for smaller, less frequently operated units. DSI is currently employed on a number of existing power plants and power companies have announced further installation plans. Although there is not a large body of performance data on acid gas removal with DSI, commercial and demonstration projects have shown that this technology can achieve significant reductions in acid gas emissions, at levels on par with Toxics Rule standards.

- Particulate controls: Particle pollution can be captured by particulate controls installed on the exhaust stack of a power plant. Existing power plants generally have some particulate controls, usually electrostatic precipitators (ESP) or fabric filters/baghouses. Depending on the other controls in use and on the type of fuel burned, compliance with the PM limit in the Toxics Rule may require upgrades or the addition of a polishing or full fabric filter.

- Scrubber or Flue Gas Desulfurization (FGD): FGD is a commercially available technology that removes SO_2 as well as acid gases from power plant exhaust. More than half of existing coal-fired generating units currently have a scrubber installed for SO_2 control. Variations include wet scrubbers and dry scrubbers. Wet scrubbers are the most expensive pollution control technology expected to be used for the new air rules.

- Selective Catalytic Reduction (SCR): SCR is a commercially available technology that removes nitrogen oxides (NO_x) from power plant exhaust. It is currently installed at many facilities, particularly in the eastern states. In combination with a wet scrubber, SCR also removes mercury.

FIGURE 3: PROJECTED CONTROL STRATEGIES FOR ACHIEVING ACID GAS LIMITS



Source: U.S. Environmental Protection Agency IPM Data Files for Utility Air Toxics Rule Base and Policy Cases[10]

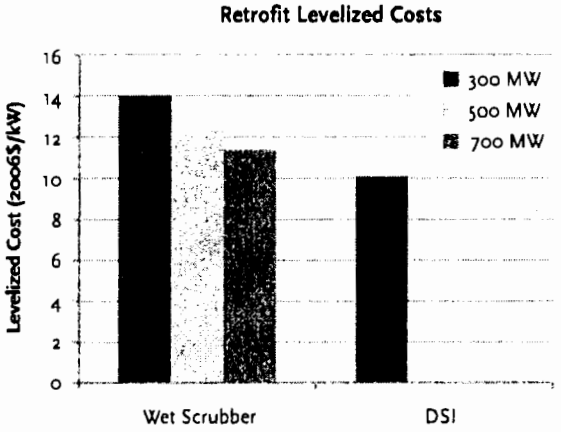
[10] EPA modeling of the Utility MACT rule using IPM runs "ToxR Base Case" and "ToxR Policy Case". Found at http://www.epa.gov/airmarkt/progsregs/epa-ipm/toxics.html. Accessed March 23, 2011.

On March 16, 2011, EPA proposed emission standards for electric generating units under Section 112, consistent with the court ruling. The court ordered a final rule to be issued by November 16, 2011.

The proposed Utility Air Toxics Rule sets emission limitations for three pollutants: mercury, particulate matter, and hydrogen chloride (HCl) based on the average emission rates actually achieved by the top 12% of performers. The standards were designed to assure the achievement of required reductions in the larger category of air toxics. For dioxin/furan, EPA proposed work practice standards based on good combustion practices.

To comply with the Utility Air Toxics Rule, it may be necessary to upgrade or retrofit particulate controls and add activated carbon injection to reduce metallic toxics at many units. In addition, to meet the acid gas HCl limit at uncontrolled plants, it may be necessary to choose between a wet scrubber, dry scrubber, and dry sorbent injection.[31] Specifically, in order to meet the requirements of the Utility Air Toxics Rule, EPA's modeling projects 56 GW of DSI installed in addition to the 9 GW in the base case (for a total of 65 GW) and that 22 GW of Dry FGD will be installed in addition to the 4 GW projected to retrofit in the base case (for a total of nearly 27 GW of dry scrubber installs). EPA projects the Utility Air Toxics Rule will not require installation of any additional Wet FGD beyond 6 GW projected to retrofit in the base case to meet the Transport Rule.[32] If existing pollution controls are included in the count, EPA projects a total of 175 GW of wet scrubbers, 53 GW of dry scrubbers, and 65 GW of DSI will be in place when compliance with the Air Toxics Rule is achieved.[33]

FIGURE 4: COMPARISON OF ANNUAL COSTS OF A WET SCRUBBER VS. DRY SORBENT INJECTION



Source: Technology cost assumptions used in BPC modeling of EPA regulation scenarios, with levelized capital, fixed and operating costs of flue gas desulfurization (wet scrubber), compared with representative cost of dry sorbent injection. Site-specific costs are dependent on various factors including location, fuel-type, and complement of controls. DSI costs are shown for units less than or equal to 300 MW, based on BPC conservative modeling assumption to only offer DSI for such smaller units burning low sulfur coal.

In terms of capital costs, the most expensive control technology for compliance with the Utility Air Toxics Rule is a wet scrubber, as seen in Figure 5 (page 18). Capital costs for an alternative, dry sorbent injection, are significantly lower. On a levelized cost basis, however, the difference is far less significant. Figure 4 shows that the on-going costs for dry sorbent injection, including costs to ship and store large amounts of chemical sorbent, approach the annualized cost of a wet scrubber.

EPA estimates the average annualized cost of compliance with the Utility Air Toxics Rule at $10.9 billion. Estimated net benefits for this rule—taking into account health and other benefits, as well as compliance costs—are estimated to range from $48 billion to $129 billion per year (in 2007 dollars), according to EPA.[34]

COAL COMBUSTION WASTES (ASH) DISPOSAL REGULATIONS

On June 21, 2010, EPA published a proposed rule to take comment on whether or not coal combustion wastes should be treated as hazardous waste.[35] One option would regulate ash as a special waste under subtitle C of the Resource Conservation and Recovery Act (RCRA), which sets guidelines for the management of solid waste. (Currently, coal combustion waste is not covered by subtitle C.) Within the hazardous waste regulations, the coal ash would be classified as a "special waste" to

[31] Some companies suggest that DSI is not a proven option for HCl MACT compliance because there is still limited public data on HCl removal from full-scale DSI applications. On the other hand, a recent study by a national engineering firm endorsed DSI for HCl removal. See Lipinski, G., J. Leonard, C. Richardson. Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants. URS Corporation. April 2011.

[32] U.S. EPA Base Case pollution control installations include those retrofits projected to occur in the period 2010 through 2013 to comply with the 2012 and 2014 SO_2 and NO_x caps in the Transport Rule.

[33] Data on the number of retrofits and existing controls was calculated from EPA data files from EPA IPM runs to support the Utility Air Toxics Rule. Files: ToxR Base Case and ToxR Policy Case. Found at http://www.epa.gov/airmarkets/progsregs/epa-ipm/toxics.html. Accessed April 1, 2011.

[34] U.S. Environmental Protection Agency. Fact Sheet: Proposed Mercury and Air Toxics Standards. http://www.epa.gov/airquality/powerplanttoxics/pdfs/proposalfactsheet.pdf.

[35] Unofficial proposals were issued May 4, 2010. For additional information and the proposed rule see: http://www.epa.gov/osw/nonhaz/industrial/special/fossil/ccr-rule/index.htm

TABLE 1. KEY DIFFERENCES BETWEEN SUBTITLE C AND SUBTITLE D OPTIONS

	SUBTITLE C	SUBTITLE D
Effective Date	Timing will vary from state to state, as each state must adopt the rule individually-can take 1 - 2 years or more	Six months after final rule is promulgated for most provision: certain provisions have a longer effective date
Enforcement	State and Federal enforcement	Enforcement through citizen suits; States can act as citizens.
Corrective Action	Monitored by authorized States and EPA	Self-implementing
Financial Assurance	Yes	Considering subsequent rule using CERCLA 108 (b) Authority
Permit Issuance	Federal requirement for permit issuance by States	No
Requirements for Storage, Including Containers, Tanks, and Containment Buildings	Yes	No
Surface Impoundments Built Before Rule is Finalized	Remove solids and meet land disposal restrictions; retrofit with a liner within five years of effective date. Would effectively phase out use of existing surface impoundments	Must remove solids and retrofit with a composite liner or cease receiving ash within 5 years of effective date and close the unit
Surface Impoundments Built After Rule is Finalized	Must meet Land Disposal Restrictions and liner requirements. Would effectively phase out use of new surface impoundments.	Must install composite liners. No Land Disposal Restrictions
Landfills Built Before Rule is Finalized	No liner requirements, but require groundwater monitoring	No liner requirements, but require groundwater monitoring
Landfills Built After Rule is Finalized	Liner requirements and groundwater monitoring	Liner requirements and groundwater monitoring
Requirements for Closure and Post-Closure Care	Yes; monitored by States and EPA	Yes; self-implementing

Source: U.S. Environmental Protection Agency

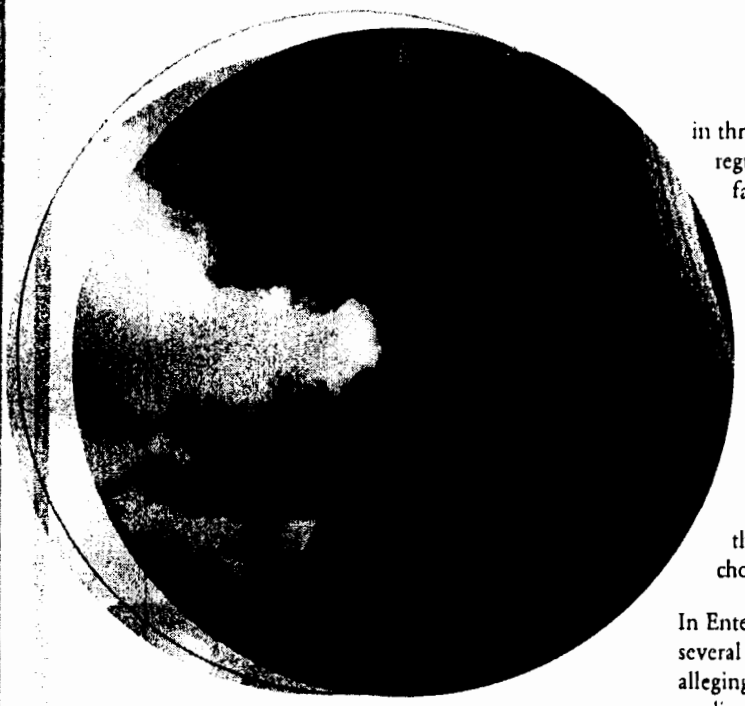
avoid the stigma associated with a hazardous designation and to allow continued beneficial uses of coal ash.[36] This option would regulate ash disposed in landfills and surface impoundments from all electric utilities and independent power producers. Coal ash would be regulated from the point where it is generated to final disposal. This means generators and transporters, as well as facilities that manage, treat, or store coal combustion waste would be subject to regulation.

A second option would instead regulate coal ash under subtitle D of RCRA. Under this proposal, EPA would establish performance standards for landfills and surface impoundments where coal combustion waste is disposed, but it would not regulate its generation, transport, or pre-disposal treatment. Under subtitle D, EPA does not have authority to enforce its requirements.

In practice, regulation under either subtitle C or subtitle D will require many of the same control technologies (see Table 1) including modifications to remove solids, line surface impoundments, and improve wastewater treatment. The main difference is whether or not the requirements are state vs. federally enforceable. While subtitle C would establish federally enforceable "special waste" provisions, the subtitle D option would establish self-implementing requirements for "non-hazardous waste" that are not federally enforceable. In the latter case, enforcement actions could only be triggered by citizen suits (including suits brought by states).

The proposed rule estimates a range of regulatory costs: $3–$20 billion over the life of the program or average annualized costs ranging from $236 million to $1.5 billion. There is some concern that designating coal

[36] Presently, coal combustion waste is used for a number of beneficial uses. Coal ash has a number of agricultural and highway applications and gypsum products are frequently used in wallboard production.



combustion waste as "special waste" may further increase costs if it has the effect of constraining beneficial uses of coal ash, such as in wallboard and concrete. Materials that cannot be put to use will require disposal and, instead of representing a source of revenue, will contribute to additional costs. When factoring in the environmental benefits of the regulation, EPA estimates the average annualized net benefits of its rule will range from approximately $193 million to $18 billion.

CLEAN WATER ACT SECTION 316(B) COOLING WATER INTAKE STRUCTURES

Section 316(b)of the Clean Water Act (CWA) requires EPA to develop regulations on cooling water intake structures at electric generating units (EGU) and other industrial facilities that use large amounts of cooling water for purposes of reducing the mortality of aquatic species due to impingement and entrainment.[37,38] Specifically, the Act requires EPA to demand that cooling intake structures use the "best technology available for minimizing adverse environmental impact."[39] EPA originally promulgated these regulations in three phases: Phase I (covered in a 2001 rulemaking) regulates new facilities (both EGUs and industrial facilities); Phase II (issued in 2004) regulates existing EGUs that use large amounts of cooling water; Phase III (issued in 2006) establishes requirements for other facilities that use cooling water intake structures.[40]

The Phase I regulations require the use of closed-cycle cooling systems on new facilities. The Phase II regulations on existing facilities did not, however, establish a similar requirement. Instead, EPA set performance standards based on mortality rates. These standards could be met through a variety of technologies and would be chosen by cost-benefit analysis.[41]

In Entergy Corp. v. EPA, environmental groups and several states filed suit against the Phase II regulation alleging that the decision to not require closed-cycle cooling violated the Clean Water Act. In 2007, the Second Circuit Court ruled that the use of cost-benefit analysis to determine best technology available (BTA) is inadmissible under Section 316(b) and remanded several provisions of the rule. EPA subsequently suspended the Phase II regulations.[42]

After appeals by EPA and industry, the case went to the Supreme Court, which in April 2009 reversed and remanded the Second Circuit's decision, allowing the BTA to be determined by cost-benefit analysis.[43] The Supreme Court ruling did not hold that 316(b) *requires* cost-benefit analysis, only that it could be used.

At present, EPA's earlier regulations remain suspended, which means that compliance determinations are being decided on a case-by-case basis by the permitting authority, usually the state. EPA's new proposed rulemaking on March 28, 2011 will address these and other issues from court rulings on the earlier Phase I, II, and III rulemakings. Under the Clean Water Act's Section 316(b), EPA has considerable discretion with respect to the application of cooling water constraints that minimize entrainment and impingement, and the Agency's recent proposal draws on this flexibility.

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[37] 33 U.S.C. § 1326(b).

[38] Impingement is when fish are pinned against water intake screens or other parts at the facility. Entrainment is when aquatic organisms are drawn into cooling water systems.

[39] For more information see U.S. EPA. Water: Cooling Water Intakes (316b). Basic Information. http://www.epa.gov/waterscience/316b/basic.htm. Phase II addresses large existing power plants that are designed to withdraw 50 million gallons per day or more and that use at least 25 percent of their withdrawn water for cooling purposes only.

[40] Affected facilities have a design intake flow threshold of greater than 2 million gallons per day and withdraw at least 25 percent of water for cooling purposes. See http://www.epa.gov/waterscience/316b/phase3/ph3-final-fs.html.

[41] *Entergy Corp. v. Riverkeeper, Inc.* 556 U.S. (2009)

[42] 72 FR 37107

[43] Ibid.

Under the Clean Water Act's Section 316(b), EPA has considerable discretion with respect to the application of cooling water constraints that minimize entrainment and impingement.

Facilities with design intake above 2 million gallons per day, that withdraw at least 25 percent of their water from an adjacent water body for cooling, must submit information and limit the number of fish killed by being pinned against intake screens or equipment (impingement) and sucked into the water intake system (entrainment). Many existing facilities may have to install screens, make modifications to existing technology or take measures to reduce intake velocity. The EPA proposal includes additional requirements for facilities that use very large quantities of water (i.e., actual water intake above 125 million gallons per day). Facilities that exceed this threshold must submit additional information regarding entrainment, including a study that compares the costs and benefits of installing a cooling tower versus alternative technology. Lastly, the proposed water rule requires the use of cooling towers, or their equivalent, for any new unit capacity additions built at an existing facility (the requirement does not apply to capacity replacements).

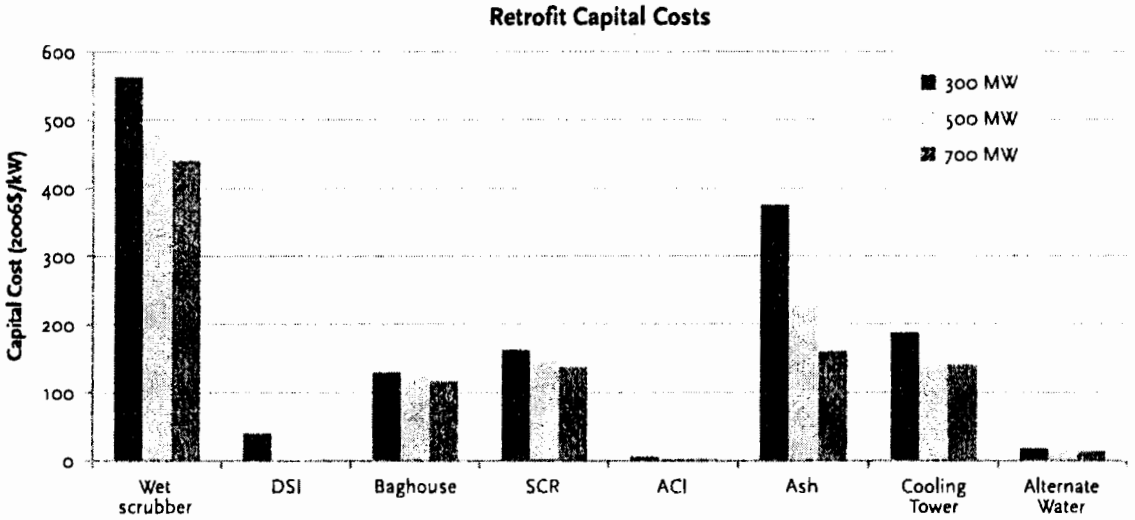
RELEVANT POLLUTION CONTROL TECHNOLOGIES

Although many existing plants will comply with some or all of the various EPA regulations based on their current configuration and already installed controls, some will require new pollution controls. Table 2 identifies some of the control technologies expected to be used for compliance with upcoming EPA regulations.[44] Figure 5 compares the relative capital cost to install such technologies on existing electric generating units.

EPA REGULATIONS AND RELIABILITY CONCERNS

The timeline for forthcoming EPA regulations has prompted concern that grid reliability issues could arise in some parts of the country as utilities comply with pollution regulations. These concerns center on the combined effects of new EPA rules on plant retrofits and retirements and on the condensed compliance timeline for the Utility Air Toxics Rule, in particular. Figure 6 lays out a likely timeline for compliance with these regulations. The figure shows that 2014 and 2015 are likely to be the most constrained years as power plant owners prepare to comply with the Air Toxics Rule.

FIGURE 5. ESTIMATED RETROFIT CAPITAL COSTS OF RELEVANT TECHNOLOGIES



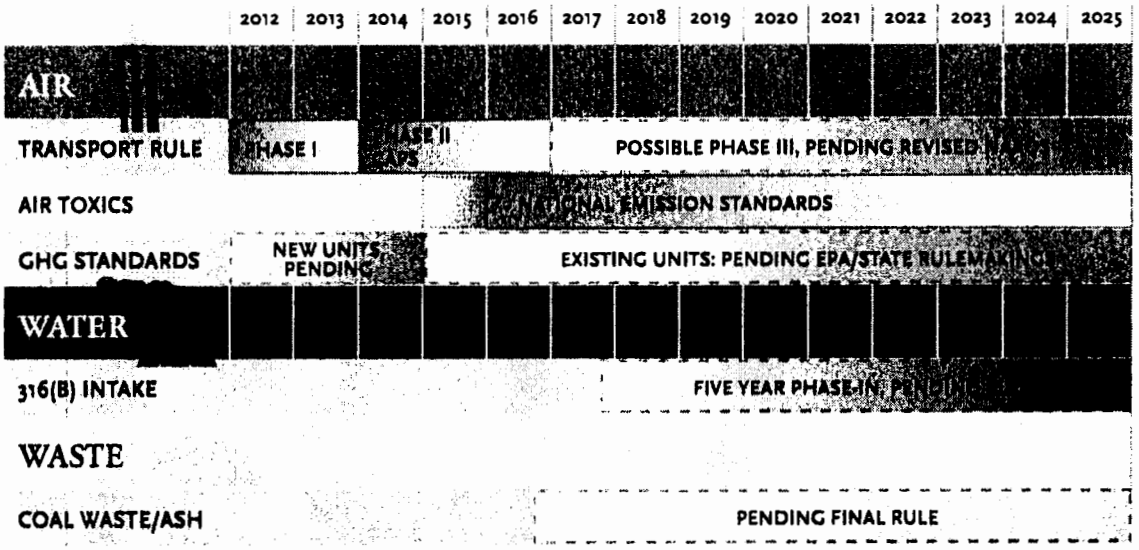
Note: The capital cost of a dry scrubber is estimated to be 10-20% lower than that of a wet scrubber.
DSI costs are shown for units less than or equal to 300 MW, based on BPC conservative modeling assumption to only offer DSI for such smaller units burning low sulfur coal.
Source: Technology capital cost assumptions used in BPC modeling of EPA Regulation scenarios.

[44] For additional information about control technologies see Lipinski, G., J. Leonard, C. Richardson. Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants. URS Corporation. April 2011.
Staudt, James E. and M.J. Bradley & Associates. Control Technologies to Reduce Conventional and Hazardous Air Pollutants from Coal-Fired Power Plants. March 31, 2011.
Fessenden, Jamie. NESCAUM (Boston, MA). Multi-pollutant Emission Reduction Technology for Small Utility Boilers. Presentation to Lake Michigan Air Directors Consortium, Innovative Industrial Source Control and Measurement Technologies Workshop. March 24, 2010.

TABLE 2. EPA REGULATION AND EXPECTED CONTROL TECHNOLOGIES

Pollutant/Issue	Control Technologies/Measures
Acid Gases:[45] Air Toxics HCl & HF, plus Sulfur Dioxide (SO_2)	**Wet scrubber** ***or* Dry scrubber + Particulate Controls** ***or* Dry Sorbent Injection (DSI) + Particulate Controls**
Metallic Toxics/Particulate Matter	Baghouse/Fabric Filter *or* Electrostatic Precipitator (ESP)
Mercury	**Activated Carbon Injection (ACI) + Particulate Controls** ***or* Wet scrubber + Selective Catalytic Reduction (SCR)**
NO_x	Selective Catalytic Reduction (SCR) *or* Selective Non-Catalytic Reduction (SNCR), low-NO_x burners, etc
Coal Ash	**Dry ash handling + ash pond liners, etc**
Cooling Water Intake	Screens, barrier nets, low velocity caps, etc *or* Cooling Tower
GHG Performance Standards	**Efficiency upgrades or, potentially, biomass co-firing**

FIGURE 6. TIMELINE OF EPA REGULATIONS IMPACTING THE POWER SECTOR



[45] The acid gases hydrogen chloride (HCl) and hydrogen fluoride (HF) are regulated under Section 112 of the Clean Air Act. By contrast, SO_2 is regulated as a conventional "criteria" pollutant under the NAAQS provisions of the Act.

SECTION III

A. CURRENT TRENDS IN THE POWER SECTOR

As has already been noted, a number of market factors are likely to lead to the retirement of a significant number of coal-fired power plants, even absent EPA regulation. These include:

- Aging coal-fired power plants. About 33 percent of the existing coal-fired fleet is over 40 years old, and most of this aging capacity lacks environmental controls. These units tend to be small and relatively inefficient, and therefore do not operate near full capacity. These units are likely to become increasingly uneconomic.

- Low gas price projections. Recent advances in drilling technology for natural gas have lead to a dramatic reassessment of the magnitude of potentially available U.S. natural gas resources, and an associated decline in projected prices. Although coal-fired power plants have historically enjoyed a cost advantage over natural gas-fired plants, this cost advantage is diminishing, and older, inefficient plants are likely to become increasingly uneconomic as a result of gas prices alone.

- Ongoing uncertainty about the future regulation of carbon dioxide (CO_2) makes it even less likely that companies will invest in aging plants.

Consideration of these factors alone has led some analysts to project significant coal plant retirements over the next decade, even absent EPA regulation. For example, EEI's January 2011 analysis projected 22 GW of coal retirements in the reference case (i.e., with no new regulation) by 2015. In its October study, NERC reported that 13 GW of upcoming retirements were already announced or committed, prior to EPA's proposals for Utility Air Toxics and cooling water rules.[46]

This section summarizes the projected impacts of forthcoming EPA regulations on retirements in the power sector. In particular, it reviews findings from several existing studies along with some key underlying assumptions, with a focus on results pertaining to plant retirements and implications for resource adequacy.

BPC review of existing studies and our own modeling suggests that the actual number of retirements due to EPA regulations will be at the lower end of the range of published projections.[47] This is primarily because most analyses assume that the EPA regulations (particularly 316(b) and Utility Air Toxics) will require much more costly controls than EPA's recent proposals indicate. Analyses of resource adequacy also tend to use these retirement projections in combination with capacity projections that do not reflect how market drivers will influence the construction of additional capacity (or demand side management). As a result, these studies are likely to overstate risks to resource adequacy.

B. STUDIES ON THE IMPACT OF EPA REGULATIONS

A number of studies, compared in Table 3, have evaluated the potential retirements that are likely to result from market conditions and forthcoming EPA regulations. These studies vary in terms of the regulations they cover; the assumptions they make about the stringency, timing, and cost of regulations; and the general methodology and other market assumptions they apply. It is important to consider the implications of each of these factors.

Because some studies do not include an estimate of "business-as-usual" (BAU) retirements in the absence of EPA regulations, and because the studies make different assumptions about electricity demand, fuel prices, and other variables that impact the number of retirements in the baseline case, it is not possible in many cases to determine the incremental number of retirements being projected as a result of EPA regulations. Therefore, BAU retirements are included in the total coal retirements reported in the table below.

REGULATIONS COVERED

Studies have also differed with respect to the scope of environmental regulations examined. A number of studies look only at the potential impact of upcoming air emissions rules (e.g., the Transport Rule and Utility Air Toxics Rule), while others also evaluate the impact of regulatory scenarios for cooling water, coal ash, tighter NO_x requirements to incorporate NAAQS revisions, and/or future greenhouse gas constraints. EPA's modeling for the Utility Air Toxics Rule, the CRA and PIRA studies, and some of the EIA AEO2011 EPA regulation sensitivity runs, are all limited to the Transport Rule and Utility Air Toxics Rule. The Credit Suisse analysis and an EIA AEO2011 run include tighter NO_x requirements beyond the Transport Rule, while the Brattle Group also looks at a scenario that includes the water rules. The modeling from BPC and EEI referenced in Table 3 includes EPA rules on air (Transport Rule, Utility Air Toxics Rule, and future NO_x), water, and ash. The ICF analysis quoted in the table includes air, water, and ash, plus a CO_2 price.

Based on a review of studies and internal BPC analysis, as well as recent EPA proposals, we conclude that the most important *regulatory* driver of projected coal plant retirements, and hence of possible reliability concerns, is the Utility Air Toxics Rule. But other non-regulatory factors, including low natural gas prices, may be as important. The uncertainty regarding future carbon constraints, even without an immediate regulatory driver, is also significant as it may lead some plant operators to forego life-extending pollution control investments on inefficient coal plants. Cooling water and ash regulations will increase costs for some facilities, but are not expected

[46] North American Reliability Corporation. 2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations. October 2010. Page 8.

[47] See Appendix B for additional information about BPC modeling using ICF's Integrated Planning Model.

TABLE 3. COMPARISON OF COAL RETIREMENTS FROM SELECTED STUDIES AND SCENARIOS

Study	Regulations Included	Projected Retirements	Details
EIA AEO2011 April 2011	TR, Mercury TR, Air Toxics, NO_x	**14-18 GW total** **19-45 GW total**	The high ends represent retrofit cost recovery in 5 yrs vs 20. "TR, Air Toxics, NO_x" assumes wet FGD & SCR on each unit. Nat gas price below AEO2011 (~$4/mmBtu) brings second case retirements up to 40-73 GW.
EPA March 2011	TR, Toxics	**23 GW total** (including 10 GW incremental)	Modeling for Utility Air Toxics Rule (Toxics) proposal; Transport Rule (TR) included in the baseline and not in the incremental retirements.
BPC March 2011	TR, Toxics, Coal Ash, 316(b), NO_x	**29-35 GW total** (15-18 GW incremental)	Assumes ACI, Fabric Filter and either wet FGD or DSI for Utility Air Toxics Rule. DSI only for units <300 MW with low sulfur coal. Cooling towers if >500 MGD design intake. Stricter NO_x by 2018. Low end of the range results from higher AEO2010 natural gas price.
EEI January 2011	TR, Toxics, Coal Ash, 316(b), NO_x	**46-56 GW total** (24-34 GW incremental)	Low end estimates reflect availability of lower cost compliance strategies for some units. EEI scenarios that include CO_2 price are excluded.
CRA December 2010	TR, Toxics	**39 GW total** (includes 6 GW planned retirements)	Assumes ACI, fabric filter, and FGD for Utility Air Toxics Rule. Assumes AEO2010 natural gas price.
Brattle Group December 2010	TR, Toxics TR, Toxics, 316(b), NO_x	**40-55 GW total** (34-49 GW 2020 incremental) **50-66 GW total** (44-60 GW 2020 incremental)	Doesn't identify specific assumptions for each rule, but assumes SCR and scrubber on every coal unit by 2015. Cooling towers on all coal units by 2015 for 316(b).
ICF December 2010	TR, Toxics, Coal Ash, 316(b), NO_x, +CO_2 price	**70 GW total** by 2018 (including 10 GW of announced retirements)	For Utility Air Toxics Rule, scrubber, ACI, and baghouse assumed for all units. For 316(b), cooling towers on units drawing from coastal and estuarine water bodies. Retirement estimates also reflect cap-and-trade program for CO_2 emissions that begins in 2018.
NERC October 2010	TR, Toxics, 316(b), Coal Ash	**10-35 GW** by 2018 (excludes 13 GW committed/ announced retirements, which may include non-coal units)	Range reflects 'Moderate' and 'Strict' scenarios. Both assume cooling tower required for 316(b) the primary driver of retirements. For Utility Air Toxics Rule, both assume FGD (with SCR, or ACI + baghouse).
Credit Suisse September 2010	TR, Toxics, NO_x	**60 GW total**	Assumes retirement of all small plants without SCR or FGD, and half of small plants with SCR but no FGD.
PIRA April 2010	TR, Toxics	**30-40 GW total**	This analysis was quoted in a study by MJ Bradley/ Analysis Group.

Note: Coal retirement estimates are reported for 2015 if available. Total coal plant retirements, including those already announced and projected in the reference case, even absent EPA regulations, are reported, where available. Where available, incremental retirements resulting from the EPA rules are reported in parentheses.

Sources:

- U.S. Energy Information Administartion. Annual Energy Outlook 2011 With Projections to 2035. DOE/EIA-0383(2011). April 2011. Page 4. http://www.eia.gov/forecasts/aeo/pdf/0383(2011).pdf
- U.S. Environmental Protection Agency. Regulatory Impact Analysis for the Utility MACT Proposed Rule. March 2011. http://www.epa.gov/ttn/atw/utility/utilitypg.html
- Edison Electric Institute, with analysis performed by ICF International. Potential Impacts of Environmental Regulation on the U.S. Generation Fleet. January 2011.
- Charles River Associates. A Reliability Assessment of EPA's Proposed Transport Rule and Forthcoming Utility MACT. December 2010.
- Brattle Group. Potential Coal Plant Retirements Under Emerging Environmental Regulations. December 2010.
- ICF International. ICF 2010 Quarter 4 Integrated Energy Outlook: Summary of Analysis Results. December 2010.
- North American Reliability Corporation. 2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations. October 2010. (page 63 coal retirements plus page 8 committed/announced.)
- Credit Suisse. Growth from Subtraction: Impact of EPA Rules on Power Markets. September 2010.
- PIRA. EPA's Upcoming MACT: Strict Non-HG Can Have Far-Reaching Market Impacts. April 2010.

to have a strong influence on reliability because of long compliance periods and low numbers of retirements, beyond those units expected to retire due to other factors. For example, in their most stringent scenario, the NERC study estimates that only 388 additional MW retire as a result of the ash rule alone; EEI's most stringent scenario for ash retires an incremental 6 GW by 2020.[48] The impact of future NO_x rules, which are yet to be proposed, will depend on how those rules are designed.

STRENGTH AND TIMING OF REGULATIONS

Generally, the available studies assume that EPA will promulgate regulations at the stringent end of the spectrum of what is possible. This assumption proved least accurate in the case of the 316(b) cooling water proposed requirements, which were signed March 28, 2011, after the referenced studies were undertaken.

Those studies generally assumed that EPA's rule would require all units to install cooling towers and move to closed cycle cooling systems. This assumption–which was not borne out in EPA's actual proposal–adds as much as 40 GW of plant retirements to the projected outcome in some analyses.

According to EPA, an estimated 70 percent of existing facilities are not expected to require a cooling tower under the new rule because their actual intake flow is below the threshold of 125 million gallons per day (MGD) and EPA expects lower cost screens and intake velocity measures to allow compliance with impingement mortality limits.[49,50] Even for facilities with actual intake above 125 MGD, EPA's proposed rule would require a cooling tower only if the state permitting authority made a site-specific determination that alternatives would not be adequate and also demonstrated that the benefits of a cooling tower outweigh the costs. Given typical valuations of fish death and ecosystem damage, it may prove difficult for states to demonstrate that benefits outweigh the cost of a new cooling tower, particularly if such a requirement would lead a plant to retire.

Furthermore, the proposed rule requires states to consider the remaining useful life of the affected facility and any electric reliability impacts. Considering that the units most vulnerable to retirement are generally well past 40 years old, it seems even less likely that a case-by-case determination would require a cooling tower installation (with a deadline of 2022 for fossil units) on plants that would be, by then, another decade older than they are today. Thus, many of the remaining 30 percent of units which are subject to a cooling tower study may comply with less expensive alternatives and the 316(b) rule may not lead to significant retirements.

The EEI study includes a sensitivity run "Alternative Water Case," which requires cooling towers on a subset of existing units with design intake flow above 125 MGD that draw water from oceans, estuaries, and tidal rivers. Even this case, however, is likely more stringent than the EPA water rule. First, the EPA threshold is based on actual intake flow. By contrast, the EEI study used design intake flow–which is often considerably higher–as the threshold to determine which units might be affected. Second, even for facilities with actual intake flows above the EPA threshold, the state case-by-case determination is likely to avoid a cooling tower requirement for at least some, if not most, facilities.

The referenced analyses also vary in terms of their assumptions about when cooling towers would be required. The NERC study appears to have the most aggressive timing assumptions. It assumes 316(b) will require cooling towers on all nuclear and fossil units by 2018. NERC projected that the 316(b) rule alone would result in about 40 GW of retirements by 2018. The EEI study maintains the assumption that cooling towers are broadly required on existing units, but delays compliance until 2020 for fossil units and 2027 for nuclear units.[51] As actually proposed, the EPA rule requires impingement controls, such as screens to be in place by 2020. If cooling towers are required, compliance is required by 2022 or 2027 for fossil and nuclear plants, respectively.

An additional variable related to regulatory stringency involves the expectation of deeper NO_x reductions beyond the first and second phases of the Transport Rule. Some analyses (including EIA, Brattle Group, Credit Suisse, and most EEI scenarios) assume that all units will be required to install selective catalytic reduction (SCR), the most costly control technology for NO_x. However, many units are expected to meet their compliance obligations–under the Transport Rule for units in the East and under Best Available Retrofit Technologies (BART) requirements in the West – using lower cost technologies, such as selective non-catalytic reduction (SNCR) or low

[48] EEI. Potential Impacts of Environmental Regulation on the U.S. Generation Fleet. January 2011. Page 13.

[49] Federal Register Notice pre-publication. U.S. EPA Proposed Rule for Cooling Water Intake Structures, Section 316(b), Clean Water Act. March 28, 2011. Page 86.

[50] However, industry sources have expressed concern that site-specific factors or permitting decisions may lead to cooling towers to reduce impingement and entrainment mortality at facilities below the threshold.

[51] EEI specifies water policy assumptions of cooling towers required by 2022 for fossil and 2027 for nuclear. However, the IPM version supporting their analysis does not include a model year for 2022 and EEI chose to map the 2022 compliance date to the years 2020. EEI. Potential Impacts of Environmental Regulation on the U.S. Generation Fleet. January 2011. Page 12.

NO_x burners. Beyond the current Transport Rule, future NAAQS revisions are expected to tighten NO_x control requirements, but there is little indication that SCR would be required on all units nationwide.

TECHNOLOGY AND COST ASSUMPTIONS

Existing studies make different assumptions about the capital and operating costs of pollution control technologies and about the costs of providing replacement capacity. Moreover, these assumptions are not always clearly and explicitly identified even though they play an important role in determining the number of retirements projected. All else equal, studies that assume higher control costs predict higher levels of retirements.

A major discrepancy between various analyses is the assumed cost of compliance with Utility Air Toxics Rule limits for acid gases. This has a notable effect on their findings with respect to number of retirements, retrofits, and price impacts. With the exception of EPA, BPC, and two sensitivity runs in the EEI analysis, all other studies assume that compliance with acid gas limitations in the Utility Air Toxics Rule will require a scrubber–the most expensive control technology related to the suite of upcoming EPA regulations–by 2015. By contrast, EPA's analysis in support of its Utility Air Toxics Rule includes DSI, in combination with particulate controls, as a compliance option to achieve acid gas limits. EPA's assumed costs for DSI are based on a detailed engineering cost analysis.[52]

BPC analysis also assumes that DSI, in combination with a fabric filter, is an option to comply with the acid gas Utility Air Toxics Rule standard, but BPC makes a conservative assumption to limit DSI to smaller units less than 300 MW that burn low sulfur coal. The NERC analysis as well as the main policy scenarios in EEI's January 2011 analysis do not allow compliance with DSI and instead require a scrubber on every unit for compliance with the Utility Air Toxics Rule. EEI does include a sensitivity run "Alternative Air Case" that allows dry sorbent injection to comply with the acid gas limit for smaller units less than 200 MW. According to the EEI analysis, the availability of DSI as a compliance option reduces expected cumulative coal retirements in 2015 by 10 GW.

FUEL PRICE ASSUMPTIONS

Fuel price assumptions for coal and natural gas will also impact the economics of individual plants. Because natural gas-fired capacity competes with coal-fired capacity, lower natural gas prices lead to the displacement of coal-fired generation in the reference case, and result in older, less-efficient coal plants becoming uneconomic.

MARKET RESPONSE

Studies vary in how they simulate the electricity market. Some studies (e.g., NERC, Brattle) do a static analysis of facilities that are at risk of retirement, comparing projected operating costs under the regulation (using generic cost factors and fuel price projections) with expected revenue based on forward electricity price projections. However, these studies do not account for the impact of the regulations themselves on electricity or fuel prices. For example, electricity prices are expected to rise as a result of the regulations, such that expected revenues will likely be higher than projected. This feedback effect would likely reduce the number of expected retirements. Other studies (EEI, EPA, and BPC) utilize dynamic power sector models that attempt to capture the effect of changing electricity and fuel prices on the cost of generation.

COMBINED SCENARIOS

With the exception of the BPC analysis, EEI's sensitivity scenarios–the "Alternate Air Case" and the "Alternative Water Case"–come closer to modeling the actual requirements and technology options for recently proposed EPA regulations than do the other referenced studies. However, EEI's analysis does not include a scenario that approximates the actual proposals for both the Utility Air Toxics Rule and the cooling water proposals together. Instead, the "Alternative Air Case" includes more stringent water requirements and the "Alternative Water Case" does not allow for lower cost air controls consistent with EPA's new regulations as recently proposed. *Thus, most of the referenced studies probably overstate the cost and number of retirements likely to be associated with forthcoming EPA regulations.*

BPC analysis using ICF's Integrated Planning Model used many assumptions similar to the EEI study (see Appendix B). The BPC analysis includes a scenario that allows for some of the lower cost Utility Air Toxics Rule controls (i.e., dry sorbent injection instead of a scrubber for units less than 300 MW) and less stringent water requirements (i.e., cooling towers on facilities which draw more than 500 MGD and operate above 35% capacity factor). These BPC assumptions, result in 20-25 GW of DSI installations instead of scrubbers as well as cooling tower installations on 93 facilities (no

[52] Sargent & Lundy. IPM Model – Revisions to Cost and Performance for APC Technologies: Dry Sorbent Injection Cost Development Methodology. August 2010. Found at http://www.epa.gov/airmarkets/progsregs/epa-ipm/docs/append5_4.pdf.

incremental retirements are projected from the water rule).[53] BPC assumptions result in a projected 15-18 GW of incremental coal plant retirements by 2015 from the suite of EPA regulations, with no additional incremental retirements through 2030. When factoring in BAU retirements in the reference case (14 GW of coal and 23 GW of oil/gas BAU retirements), the BPC analysis results in 57-58 GW of overall retirements by 2030.

C. IMPACTS OF RETIREMENTS ON RESOURCE ADEQUACY

Plant retirements alone are not the only factor to consider in evaluating the system reliability impacts of environmental regulation. Another relevant issue is resource adequacy, or the extent to which expected available generation resources will be capable of meeting forecasted demand. Planning authorities evaluate resource adequacy periodically, generally by assessing reserve margin levels and loss of load expectation (LOLE) for the relevant location.[54] Resource adequacy is a useful metric for planning purposes, though it provides limited insight into operational reliability (operational reliability is the ability to serve all customers at all locations at all times of day). Operational reliability depends not only on capacity availability, but on conditions in local transmission and distribution systems.

Where existing capacity surpluses are not sufficient to maintain reserve margin requirements in the presence of retirements, new capacity will have to be added to maintain resource adequacy. This new capacity could be in the form of new generation or demand side resources. In competitive markets, higher spot market prices and forward capacity markets will provide an incentive to construct new capacity. In regulated markets, the requirement to submit integrated resource plans for approval serves as a vehicle for identifying new capacity needs and planning accordingly.

Existing analyses vary in the way that they assess the issue of new capacity and apply the methodology and analytical tools at hand. For example, some electricity sector models inherently assume that all of the necessary capacity resources will be constructed in order to meet reserve margin requirements.[55] While such modeling cannot be used to directly draw conclusions about resource adequacy or reliability, the amount of new capacity projected to be built in response to retirements and other market changes can be instructive. This type of modeling can shed light on how much capacity will be needed, and in what timeframe, to maintain resource adequacy. For example, the January 2011 EEI analysis projects that 7 to 18 GW of incremental new capacity will be required nationally by 2015 due to the suite of EPA regulations–this is in addition to 66 GW of new capacity in the base case.[56] These capacity projections fall well within the realm of what the industry has constructed in recent periods. A CRA study found that over the period 1999–2004, the industry constructed 177 GW of natural gas-fired capacity alone.

A handful of the studies discussed in the table above attempt to make the link between projected retirements and implications for resource adequacy. By comparing projected retirements in specific regions against projected reserve margins, these studies attempt to highlight areas where there could be capacity shortfalls if adequate planning and new capacity construction does not occur.

- With respect to the Utility Air Toxics Rule, EPA concludes that projected coal plant retirements "are not expected to raise broad reliability concerns" and points to the existence of sufficient excess capacity to take up the slack for projected retirements, which the Agency estimates will total less than 10 GW. EPA calculates that the Utility Air Toxics Rule will reduce the national weighted average reserve margin by just a few percent below the 25 percent reserve margin level projected in the baseline scenario. This compares to a NERC recommended reserve margin of 15 percent. According to EPA modeling, resource adequacy is maintained in each region where coal retirements occur primarily by using excess reserve capacity and by "reversing base case retirements of non-coal capacity, building new capacity, or importing excess reserve capacity from other regions."[57] For the water

[53] For comparison, EPA modeling for the proposed water rule includes scenarios of cooling tower installations ranging from 46 facilities – affecting only baseload and load-following facilities – to 76 facilities, including the largest fossil plants that draw from tidal waters.

[54] The reserve margin is calculated as the difference between available generation capacity and expected peak demand, divided by peak demand. Sometimes calculated reserve margins are compared against region-specific North American Electric Reliability Corporation (NERC) Reference Reserve Margin levels or, if a regional reference level is not provided, against reserve margins assigned by NERC based on capacity mix. LOLE measures the number of days per year that available resources will be insufficient to serve peak daily demand; this is typically assessed through probabilistic modeling. NERC recommends an LOLE of 0.1, which implies that the system may fail to serve peak load no more than 1 day in 10 years.

[55] EPA, EEI, and BPC all use ICF's Integrated Planning Model to make these assessments. The ICF planning model assumes that all necessary capacity resources will be constructed as needed to meet reserve margins.

[56] These numbers are incremental to the capacity additions that are projected under the reference case by 2015. The projections cited here do not include EEI scenarios that included a price on CO_2 emissions.

[57] U.S. EPA. Regulatory Impact Analysis for the Utility Air Toxics Rule proposed rule. March 29, 2001. Found at: http://www.epa.gov/ttn/atw/utility/utilitypg.html. Page 234-236.

[57] U.S. EPA. Utility Air Toxics Rule Information Collection Request. Regulatory Impact Analysis for the Utility MACT proposed rule. Found at: http://www.epa.gov/ttn/atw/utility/utilitypg.html. March 29, 2011. Page 234-236.

rule, EPA made an overall determination that none of the technology options would cause unacceptable reliability concerns at the national level. But to avoid concern at individual sites, the rule will require permitting authorities to consider reliability impacts in their case by case determinations.[58]

- A December 2010 analysis by The Brattle Group, which assumes that scrubbers, SCR, and cooling towers are required on all plants by 2015, finds that reserve margins would fall below NERC reference levels in 2018 in the Reliability First Corporation (RFC) region (which includes parts of the Mid-Atlantic and the eastern Midwest) and in the Electric Reliability Council of Texas (ERCOT) region if new resources are not added.[59]

- CRA evaluated expected 2015 capacity at the level of regional transmission organizations (RTOs), NERC regions, and NERC sub-regions in comparison with reserve margin requirements for that year. At the RTO level, the study found that all regions with projected retirements were expected to meet and exceed reserve margin requirements in that year. At the NERC region level, the CRA study found modest reserve margin shortfalls in the Midwest Reliability Organization (MRO) region, and de-minimis shortfalls in the RFC and Southeast Reliability Corporation (SERC) regions. Looking at the NERC sub-region level, CRA found that the greatest potential resource adequacy impact was likely to occur in the Virginia-Carolinas (VACAR) subregion of SERC. However, nearly half of the projected capacity needed for this region is already in planning stages, but was excluded from the analysis. The CRA study concluded that a combination of coal-to-gas conversions, new gas-fired generation, load management, and existing market and regulatory safeguards would be sufficient to maintain reliability.

- The NERC study estimated that 10 to 35 GW of coal-fired capacity could be at risk of retirement by 2018, when factoring in the Transport Rule, Utility Air Toxics Rule, Coal ash, and 316(b) rules. It is important to note that NERC's aggressive assumption for 316(b) is the biggest driver of retirements, even in NERC's 'moderate' case.[60] Comparing projected retirements under its moderate case against NERC region-level estimates of capacity resources, the NERC study identified SERC as the region most at risk of capacity shortfalls. The study also identified potential capacity shortages in Arizona and New Mexico, and in the southern Nevada sub-region of the Western Electric Coordination Council (WECC). When more conservative (lower) estimates of available capacity resources are used, NERC projects potential shortages in those regions, as well as in the MRO region, New England, Texas, and the Rocky Mountain Power Area.[61] According to NERC, building new capacity, or advancing in-service dates of planned capacity additions, could help to alleviate projected losses.[62] In addition, NERC's updated 2010 demand forecasts and planned new capacity additions were not incorporated into their special assessment of EPA regulations and would have trended toward greater capacity reserves.

- The MJ Bradley and Analysis Group report notes that "the electric sector is expected to have over 100 GW of surplus generating capacity in 2013, about three times the 30 to 40 GW of total retirements projected by PIRA Energy Group" (in its analysis of the impact of the CATR and the Utility Air Toxics Rule).[63] This is largely due to much slower than expected demand growth resulting from the recession. The report further notes that the RFC and SERC regions, where expected retirements are greatest, are projected to have reserve margins of 24.3 percent and 26.3 percent respectively. Again, these figures are well above the 15 percent Reference Margin Level that NERC assigns to most regions.

While most studies have taken a national approach to the reliability assessment, it is clear that some regions will be more vulnerable during this transition period. More study is warranted to assess localized reliability impacts in the most vulnerable regions.

D. THE STAGING OF RETROFITS

Although reliability concerns have mostly focused on plant retirements, there are also concerns about the ability of affected sources to install control technologies in time to meet compliance deadlines–particularly for the Utility Air Toxics Rule –and about the implications

[58] Federal Register Notice pre-publication. U.S. EPA Proposed Rule for Cooling Water Intake Structures, Section 316(b), Clean Water Act. March 28, 2011. Page 55.

[59] For a map of NERC regions, see http://www.eia.doe.gov/cneaf/electricity/chg_str_fuel/html/fig02.html.

[60] In both the moderate and strict cases, NERC assumes cooling towers on all facilities, 25 percent higher costs are assumed for the strict scenario.

[61] NERC compares potential retirements in individual regions against Summer Peak Deliverable capacity Resources and Summer Peak Adjusted Potential Capacity Resources. The former is the more conservative estimate.

[62] NERC. 2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations. October 2010. Page V.

[63] M.J. Bradley & Associates LLC and Analysis Group. Ensuring a Clean, Modern Electric Generating Fleet While Maintaining Electric System Reliability. August 2010. Referencing NERC. 2009 Long-Term Reliability Assessment: 2009-2018. October 2009. And PIRA Energy Group ("PIRA"). EPA's upcoming MACT: Strict Non-Hg Can Have Far Reaching Market Impacts. April 8, 2010.

for consumer costs. Some fear that the need to install large numbers of controls on a system-wide basis in a relatively short timeframe could lead to constraints in financing or materials, which in turn could drive up the cost of compliance.

In its Regulatory Impact Analysis for the proposed Utility Air Toxics Rule, EPA predicts the rule will lead to the installation of scrubbers on an additional 24 GW of capacity; the application of DSI to an additional 56 GW of capacity; the application of ACI to an additional 93 GW of capacity; and the use of SCR on an additional 3 GW of capacity.[64] In addition, EPA predicts that additional fabric filter retrofits will be installed on 49 GW of capacity to comply with the Utility Air Toxics Rule –this is on top of fabric filter installations to meet other Clean Air Act requirements, for a total of 165 GW of capacity with new fabric filters by 2015.[65] Because EPA's assessments project fewer retirements than other studies, they generally project the highest number of control installations. However, installations required before the 2012 and 2014 Transport Rule caps take place are not included in the cited EPA Utility Air Toxics Rule retrofit estimates. In addition, because EPA has more bullish assumptions about DSI, they project fewer scrubbers and more DSI than either the BPC or EEI analyses assume. BPC projects up to 51 GW of scrubbers may be constructed in 2013, 2014, and 2015, in addition to 24 GW of DSI.

Once permitted, most pollution control projects can be implemented in less than two years from design to start-up without the need for outage or with the final step occurring during a regularly scheduled maintenance period, so as to avoid additional outage time. According to a recent report, installing scrubber systems can require from two to three years for a dry system and 24 to 44 months for a wet system from the design through construction stage.[66, 67] The high end of the range is typically associated with more challenging installations due to site-specific limitations. Plants generally continue to operate throughout most of this time, but the final step of "tying in" or connecting the scrubber system typically requires that the plant be shut down for four to eight weeks. Often this step can be completed during a regularly scheduled maintenance outage.

Rate recovery determinations and permitting processes can add to these timeframes. A number of states have avoided a time crunch by passing legislation and/or by entering into agreements with power companies that provide for early planning, timely rate recovery decisions, and a schedule for control installations and retirements. In areas that have not taken such anticipatory steps, however, waiting until after the final Utility Air Toxics Rule is signed in November 2011 to begin a lengthy approval process may be problematic, particularly if site-specific challenges have the effect of complicating scrubber installations and extending the time required to complete needed pollution control retrofits. This highlights the need for plants to immediately begin planning and designing for pollution controls.

None of the economic analyses undertaken to date have directly addressed the issue of staging retrofits. Nevertheless, insufficient planning and coordination between generating companies and state, regional, and federal institutions could result in higher than necessary costs for consumers. For example, if a large number of companies delay retrofits until close to the deadline in order to defer capital costs as long as possible or waiting for state approvals, numerous retrofits may be scheduled in close proximity, leaving the grid potentially vulnerable to supply disruptions if multiple plants go off line at the same time. This could result in higher electricity prices as more costly generation resources are dispatched to supply electricity. Section IV of this report discusses some possible strategies that could be used to manage the timing and coordination of pollution control retrofits.

[64] U.S. Environmental Protection Agency. Regulatory Impact Analysis for the Utility Air Toxics proposed rule. March 29, 2011. Found at: http://www.epa.gov/ttn/atw/utility/utilitypg.html. Page 8-13.

[65] Ibid.

[66] See Lipinski, G., J. Leonard, C. Richardson. Assessment of Technology Options Available to Achieve Reductions of Hazardous Air Pollutants. URS Corporation. April 2011. Particulate upgrades can be completed in 12-24 months with an outage of less than 2 weeks, or up to 4 weeks if a new fan is required for a Fabric Filter upgrade (page A-3). ACI requires up to eighteen months, but no outage time (page A-9). DSI requires nine to twelve months from design to start-up, but no additional outage (page A-11).

[67] Because the formula for the Air Toxics regulation was mandated in the 1990 Clean Air Act, many companies have already begun the planning, design and, in some cases permitting and construction for pollution control equipment, in advance of the final rulemaking. Companies will have 45 months, with the opportunity to ask for a one year extension that allows 57 months, from the March 2011 Utility Air Toxics Rule proposal until the compliance deadline. Some companies say it takes an average of 54 months to install a scrubber and 4-5 years to install a baghouse, including planning, design, permitting/regulatory approval, constructing, and start-up of the control device.

SECTION IV

Federal, regional, and state institutions will play a key role in ensuring reliability as the electricity sector transitions to a new regulatory regime. These organizations have a variety of authorities and tools at their disposal to ease the transition and to help avoid significant impacts on reliability. This section describes the roles of various authorities in addressing reliability issues associated with new environmental requirements.

A. FEDERAL AGENCIES

ENVIRONMENTAL PROTECTION AGENCY

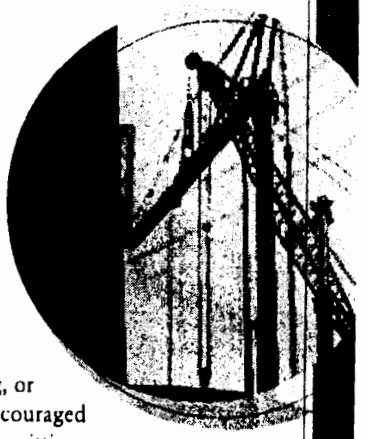
EPA provides analytical and technical support to regulated entities, state authorities, and other federal agencies in planning for and implementing new environmental regulations. In addition, Congress usually grants the Agency specific authorities and discretion in the implementing legislation for each major rulemaking, which are described below.

EPA Discretion on the Utility Air Toxics Rule

Although the Utility Air Toxics Rule is largely prescriptive, EPA does have some discretion to provide flexibility on certain provisions. The following provisions were included in the March 15, 2011 proposed Utility Air Toxics Rule and should be included in the final rule:

- Emissions averaging among units at a facility within the same sub-category.
- Provisions for units that infrequently burn oil, based on the proposed limited-use subcategory for infrequently operated oil-fired units, as well as the exemption for units that burn oil less than 10 percent of the time under the definition of fossil fuel-fired unit.[68]
- Work practice standards for dioxins/furan. EPA chose not to specify emissions limits for these pollutants, but simply required units to employ good combustion practices.
- Alternative performance standards that reduce monitoring requirements for some types of technologies.
- The use of surrogates for certain hazardous air pollutants.
- A 30 day averaging period in demonstrating compliance with the standards for coal-fired power plants.

For the proposed Utility Air Toxics Rule, EPA's discretion on the timing of implementation is limited by the explicit text in Section 112 of the Clean Air Act, which requires that sources come into compliance within three years of the promulgation of the rule.[69] This results in an expected deadline of January 2015. However, Section 112 also allows the permitting authority to extend this compliance deadline by one year, if companies demonstrate that, despite good faith efforts, more time is needed to install pollution controls.[70,71] In its March 15, 2011 proposal, EPA indicated a willingness to apply this extension in order to stagger installations for reliability or constructability purposes or for other site-specific construction issues, permitting, or local manpower or resource challenges.[72] EPA encouraged companies to begin early discussions with the permitting authority to facilitate extensions, where warranted. EPA should encourage permitting authorities to make timely decisions and grant extensions in advance, with appropriate conditions, where warranted.



EPA also requested comment on whether such an extension could be granted to complete on-site replacement capacity, rather than install controls, at an affected facility. BPC agrees that this would be an appropriate and beneficial interpretation of the Clean Air Act waiver authority. The states or EPA, as applicable, could and should use this waiver authority to allow an extra year for those electric generating units unable to complete control installation or build on-site replacement capacity in time, particularly where reliability is a concern.

As a backstop, EPA has the ability to exercise enforcement discretion and negotiate consent decrees with regulated entities in order to allow for their continued operation. Any such consent decrees, however, should eliminate economic advantages a plant might otherwise obtain as a result of operating out of compliance. Consent decrees are negotiated once a company is deemed in violation, and stakeholders may not view this legal mechanism as an acceptable option that could be built into company planning. However, consent decrees do offer an additional means of backstop reliability protection.

Presidential Authority to Delay Utility Air Toxics Rule

As a backup to the other tools and flexibilities available to smooth the phase-in of new regulations, the President also has the ability to delay Utility Air Toxics Rule requirements for some facilities, if warranted. Although this authority has never been invoked, the President is explicitly permitted under Section 112 of the Clean Air Act to grant an additional exemption from compliance (beyond the one year extension from states) for up to two

[68] The Utility Air Toxics Rule proposes a definition of "fossil-fuel fired" for purposes of determining if an electric generating unit is subject to the rule. According to this proposal, the unit must have fired coal or oil for more than 10 percent of the annual average heat input during the last 3 calendar years or for more than 15 percent during any one of those calendar years to be subject to the Utility Air Toxics Rule.

[69] 42 U.S.C. § 7412(i)(3)(A).

[70] In most cases, the permitting authority has been devolved to states that administer their own operating permit programs under Title V of the CAA. In a few instances, such as tribal lands, EPA retains this permitting authority.

[71] 42 U.S.C. § 7412(i)(3)(B).

[72] U.S. Environmental Protection Agency. Proposed Utility Air Toxics Rule. Signed March 16, 2011. Page 443. www.epa.gov/ttn/atw/utility/pro/proposal.pdf.

In addition, EPA has proposed and should finalize compliance deadlines that provide sufficient time for planning, coordination, and installations.

years if the "technology to implement such a standard is not available" and if the exemption is found to be in the "national security interests of the United States."[73] This exemption may be renewed an unlimited number of times provided the requisite findings are made.

Presumably, the President could interpret the term "available" to encompass both technological and economic feasibility, consistent with the interpretation of that term in the context of "best available control technology" for Prevention of Significant Deterioration permitting. In addition, a threat to electric reliability could presumably serve as grounds for determining that it is in the "national security interests" of the United States to extend the Section 112 compliance deadline.

EPA Discretion on Cooling Water Rule

The Clean Water Act provides EPA with extensive discretion on the compliance timing and stringency of regulations for power plant cooling water intake. In its proposal, EPA relied on this flexibility and on cost/benefit considerations with respect to entrainment provisions to allow alternative technologies where appropriate, to accommodate site-specific constraints, and to allow sufficient time for retrofits.

EPA's March 2011 proposal requires the largest water users to conduct a study to determine whether cooling towers or alternative technologies are needed to limit damage from aquatic life being sucked into cooling water intake systems (entrainment). Study results would be considered along with other factors–such as the useful life of the facility, reliability concerns, and the benefits versus costs of installing a cooling tower–to make a site-specific determination of the "best technology available" for a particular facility. In addition, EPA's proposed cooling water rule requires facilities to meet impingement mortality limits or reduce intake velocity. In its final rulemaking, EPA should exercise its authority to allow the consideration of site-specific factors and cost-benefit analysis with respect to impingement requirements.

In addition, EPA has proposed and should finalize compliance deadlines that provide sufficient time for planning, coordination, and installations. For example, under the proposed rule, plant owners are allowed eight years to install technologies such as screens, low velocity caps, and barrier nets. The installation of cooling towers is allowed to take five to ten years in the case of existing fossil plants, or ten to fifteen years in the case of existing nuclear plants.

EPA Discretion on Coal Ash Rule

EPA also has significant flexibility to establish compliance deadlines for its proposed RCRA regulations governing the disposal of coal combustion waste, including coal ash. In its proposal, EPA took comment on whether or not coal ash should be treated as hazardous waste.[74] One option would regulate coal ash as a "special waste" under the hazardous waste Subtitle C of RCRA, whereas an alternative option would regulate the ash as non-hazardous waste under Subtitle D. The primary difference between the alternatives is that EPA retains enforcement authority under Subtitle C, whereas Subtitle D requirements would be self-implementing with no federal enforcement authority. Aside from enforcement, the actual requirements are quite similar for the two proposed options. For example, both alternatives would eventually require that surface impoundments for coal combustion waste have leachate collection and removal systems; alternatively, the impoundments would have to be closed. EPA's proposed Subtitle D regulation would require these controls to be installed by April 2017, whereas the proposed Subtitle C regulation would allow states until 2018 to implement retrofit requirements.[75,76]

However, neither RCRA subtitle requires EPA to mandate compliance by any particular deadline. Subtitle D does not require that waste storage standards be implemented in any particular timeframe. And even if EPA adopts substantially more stringent requirements under Subtitle C, Section 3004(x) of RCRA also allows EPA to modify Subtitle C requirements for coal ash sites where justified by "practical difficulties." EPA may also allow site-specific variances from Subtitle C regulations for sites with distinctive geological, climatic or chemical

[73] 42 U.S.C. § 7412(i)(4).

[74] See Hazardous and Solid Waste Management System, 75 Fed. Reg. 35,128 (June 21, 2010).

[75] This date is based on the following assumptions: 1) EPA promulgates the final CCW rule in September 2011; 2) RCRA regulations, including the coal combustion waste rule, generally take effect six months after promulgation–in this case, March 2012; 3) EPA's proposed Subtitle D regulations require retrofit within five years of the effective date of the regulation. Thus, retrofit would be required before April 2017.

[76] Under RCRA, Subtitle C regulations are subject to the same effective date provisions as Subtitle D regulations. However, most states administer RCRA requirements in lieu of EPA pursuant to a delegation of authority from the agency. In these states, certain core RCRA requirements included in new EPA regulations do not take effect until the state itself adopts a regulation reflecting the new EPA requirements–a process that RCRA usually requires to take place within one year of a new EPA regulation. Thus, the retrofit requirements under the proposed Subpart C regulations would not take effect in most states until one year later than the compliance deadline in the Subpart C regulations (April 2018).

characteristics.[77] This authority could be exercised to craft appropriate tailored deadlines for sites that are unusually difficult to retrofit, or to provide an across-the-board deferral in RCRA compliance deadlines (as EPA already proposed to do in its Subpart C regulation by changing the RCRA compliance deadline to five years from four years pursuant to its Section 3004(x) authority).

In its June 21, 2010 proposed rulemaking, EPA highlighted the environmental benefits, and lack of damages, from the beneficial reuse of coal combustion wastes in encapsulated uses such as wallboard, concrete, and bricks.[78] EPA should continue its efforts to support such beneficial reuses and finalize the Bevill exemption for encapsulated beneficial reuse of coal combustion waste.

DEPARTMENT OF ENERGY AND FEDERAL ENERGY REGULATORY COMMISSION

The Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC) have specific authorities under the Federal Power Act to ensure the stability or reliability of the transmission grid. DOE and FERC authorities can be applied to avoid potential reliability issues or emergencies in the near term and, perhaps more effectively, to support long-term planning.

Addressing Near-Term Reliability Issues

While an emergency reliability issue is unlikely and should be preventable with proper planning and oversight, DOE and FERC have authority to address such situations if they arise. Under Section 202 of the Federal Power Act, the DOE can issue emergency orders to temporarily require a unit to generate and deliver electricity. In the past, this authority has been used to address a few, short-term reliability concerns.

FERC's relevant authority stems from its mission to ensure just and reasonable rates. FERC has authority to review the rates, terms, and conditions of "reliability-must-run" (RMR) contracts between a regional transmission organization or independent system operator (RTO/ISO) and a unit intended for retirement. These types of contracts are used in RTO/ISO markets when an RTO/ISO determines that a unit proposed for retirement is necessary to ensure system reliability. In such cases, the RTO/ISO can propose or enter into a RMR agreement to compensate the generator for continued operation based on cost-of-service rates or other rate agreements.[79] Through a number of recent rate reviews, FERC has indicated that RMR contracts should be considered a solution of last resort to maintain reliability.[80]

Both DOE's emergency orders and FERC-approved RMR contracts allow generators needed for reliability to be compensated for above-market costs of continued operation. If keeping such units online requires significant capital investments in pollution controls, the associated cost-of-service may be quite high. This would be the case, for example, if a unit were kept online at cost-of-service rates, retrofitted with pollution controls, and then retired well before the capital investment could be repaid. The generator might seek to amortize the relatively high costs of the retrofit investments over a short period (e.g., the term of the RMR contract or the DOE order) at the expense of ratepayers.

Alternatively, an RMR unit might operate for a period without pollution controls. This could be a lower cost solution, although the rate tariff could still provide for above-market payments. However, operation without compliant controls would violate emissions limits, as FERC's RMR authority does not supersede Clean Air Act requirements. As discussed below, such a situation would require coordination with EPA and enforcement discretion, such as the negotiation of a consent decree to continue operating for a period without controls.

FERC reviews RTO tariff provisions relating to RMR contracts under its general rate review authority (Sections 205 and 206 of the Federal Power Act), which requires that the rates, terms and conditions for provision of jurisdictional transmission service and wholesale sales must be just and reasonable and not unduly discriminatory or preferential. In some instances where FERC has found that an RTO/ISO violated its tariff provisions, FERC has intervened in RMR determinations (an example involving ISO New England and Dominion power company is discussed in the text box).

Long Term Planning

DOE and FERC both have broad authorities to gather information and require public utilities to file reports. In addition, DOE has specific authority under Section 202 to require utilities to report on anticipated shortages of electricity or capacity, as well as on their plans to manage

[77] 42 U.S.C. § 6924(x).

[78] FR Vol 75, No 118 June 21, 2010. Coal combustion waste proposed rulemaking.

[79] In several organized markets, including Midwest ISO and California ISO, contractual or tariff requirements obligate the generator to negotiate RMR contracts to remain in operation if the RTO/ISO concludes that continued operation of the unit is necessary for reliability. In other markets, including PJM and ISO New England, the generator's decision to accept an RMR contract is voluntary.

[80] Devon Power, LLC, 103 FERC ¶ 61,082 (2003).

shortages. In addition, FERC has broad authority to conduct investigations, including subpoenaing witnesses and requiring companies to produce relevant materials.

Expanded Role for FERC

In the future, FERC could play an expanded role in monitoring RTO forward capacity markets. State PUCs have little authority to manage resource planning and generation adequacy in restructured states, where regulated utilities do not own generation resources but rather purchase electricity from wholesale markets under relatively short-term contracts. In lieu of resource planning, several RTOs have established forward capacity markets to attract new generation capacity and provide a price signal for economic retrofits of existing capacity. However, there is some concern that these markets may not provide sufficient price signals to ensure an adequate response to significant retirements of coal-fired capacity.

Thus, FERC could undertake an effort to consider: (1) whether some or all of the RTOs face resource adequacy

FERC Oversight of RMR Contracts: ISO-NE and Salem Harbor

Using its authority under the Federal Power Act, FERC recently intervened in an ISO-New England proceeding related to a reliability-must-run type contract for Dominion's Salem Harbor 3 and 4 coal-fired generating units. In December 2010, FERC's review of ISO-NE's fourth Forward Capacity Auction determined that ISO-NE had violated its tariff provisions in failing to identify alternatives to the reliability need for Salem Harbor.[81]

Available surplus capacity contributed to several existing power plants and demand resources—a combined 1.2 GWs of capacity—opting out of the fourth ISO-NE forward capacity market auction by submitting de-list bids. However, ISO-NE determined that Dominion's Salem Harbor Units 3 and 4, in addition to Entergy's Vermont Yankee Station, could not withdraw from the market due to reliability concerns that would violate NERC, Northeast Power Coordinating Council (NPCC), and ISO-NE standards.

When ISO-NE rejects a de-list bid, their Forward Capacity Auction rules require them to look for ways to allow the generating unit to withdraw under an established timeline or, if no alternatives are available, provide compensation to retain the resource in a reliability-must-run type agreement. ISO-NE's Tariff requires that this process to identify alternatives must occur in advance of the new capacity qualification period for the subsequent Forward Capacity Auction.

Following ISO-NE's rejection of Salem Harbor's de-list bid, the Conservation Law Foundation (CLF) filed a protest which stated that ISO-NE failed to meet these procedural requirements and that this would result in unjust and unreasonable rates. ISO-NE responded by providing evidence that it repeatedly presented the specific reliability need for the Salem Harbor Units to the NEPOOL Stakeholders, including the Reliability Committee. ISO-NE also stated that because Dominion submitted a static de-list bid rather than a permanent de-list bid, Dominion did not indicate a permanent exit from the market that would trigger the need for a transmission solution. Resources that wish to withdraw from the market for a one-year period can submit either a static or a dynamic de-list bid. A permanent de-list bid withdraws the resource from all future auctions.

In December 2010, FERC concluded that ISO-NE's presentations did not satisfy the Tariff's procedural requirements. FERC ordered ISO-NE to submit a compliance filing within 60 days that either identifies alternatives to resolve the reliability need and the time to implement those solutions, or include an expedited timeline for identifying and implementing alternatives. According to CLF, such alternatives could include "energy efficiency, conservation, electric transmission line upgrades, and renewable energy."[82]

In October 2010, Dominion submitted a permanent de-list bid for Salem Harbor.

[81] ISO New England, Inc., 133 FERC ¶ 61,230

[82] Conservation Law Foundation Press Release. Federal Energy Regulatory Commission Orders ISO-NE to Plan for Close of Salem Harbor Station. December 17, 2010.

concerns driven by EPA regulations; (2) whether capacity markets are a useful tool for assuring resource adequacy in markets facing such problems; and (3) whether Section 206 of the Federal Power Act should require the reform of existing capacity markets, or the establishment of capacity markets in RTOs where they do not now exist. In essence, the FERC review would consider how capacity markets in the organized markets could and should be used to address the issue of plant retirements. FERC could undertake such a review on an RTO-specific basis or on a generic basis covering all RTOs. FERC could act to amend current RTO tariffs to provide for capacity market reforms under Section 206 of the Federal Power Act, and could take such action in RTO-specific orders or in a generic notice and comment rulemaking. Although such actions may require more time than is available for dealing with reliability issues that arise in the 2015 Air Toxics Rule timeframe, they could potentially bolster the system to address future situations.

Supporting Alternative Capacity Resources

FERC is also involved in efforts to encourage the participation of alternative resources in wholesale energy markets administered by RTOs or ISOs. On March 15, 2011, FERC issued a Final Rule that attempts to level the playing field for alternatives to traditional generation by requiring competitive rates for demand response resources.

The term "demand response" generally refers to load management programs in which electricity customers volunteer to reduce their electricity consumption during periods of peak demand in exchange for lower rates. These programs can reduce costs for all consumers because electricity is more expensive during periods of peak demand, when higher cost generators that seldom operate are required to start-up. FERC's rule requires that cost-effective dispatch of demand response resources, as determined by a new "net benefits" test, must be compensated at the locational marginal price (LMP). To comply with the rule, each RTO and ISO must file a net benefits analysis and proposed tariff revisions by July 2011.[83]

The Final Rule also requires that the cost of obtaining demand response resources must be spread among all entities that purchase energy at the times and at the locations where those demand response resources were committed or dispatched.

> Coordination between the relevant federal agencies might allow for the continued operation of coal-fired electric generating units without compliant pollution controls, if deemed necessary for reliability. Such arrangements and accommodations must be reserved for true emergency situations—they should not be relied upon as the primary mechanism for ensuring reliability during the transition.

B. INTERAGENCY COOPERATION

Although neither DOE nor FERC appear to have authority to waive environmental regulations when they issue emergency orders for a unit to continue uneconomic operation for reliability reasons, EPA might exercise enforcement discretion and negotiate consent decrees that establish the terms of such operation in the absence of compliant pollution controls. Coordination of this sort between the relevant federal agencies might allow for the continued operation of coal-fired electric generating units without compliant pollution controls, if deemed necessary for reliability. Of course, such arrangements and accommodations must be reserved for true emergency situations—they should not be relied upon as the primary mechanism for ensuring reliability during the transition to a more stringent set of environmental regulations. Further, these consent decrees should ensure that plants operating out of compliance are not economically advantaged.

C. STATE AUTHORITIES

In the United States, electricity is regulated largely at the state level and there is considerable variation in the authorities exercised and roles played by regulators from state to state. In particular, the role of state authorities is determined by the extent to which the state has retained traditional regulation of electric utilities or has restructured its wholesale generation markets (see Figure 7).[84] In regulated states, where electric utilities remain vertically integrated, state public utility commissions (PUCs) retain oversight of resource additions, retrofits, and retirements. Utilities in regulated states have the obligation to serve load reliably, and many regulated states require that integrated resource planning be conducted periodically

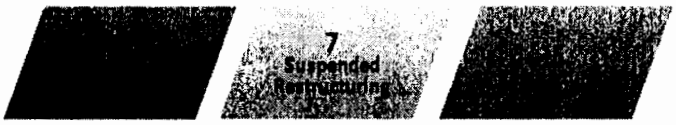
[83] This rule may be subject to additional hearings and judicial review because Commissioner Moeller dissented from the Final Rule and there is likely to be divergent stakeholder views as RTOs and ISOs adjust key analytic features for the net benefits test.

[84] Twenty eight states, including most in the Midwest and South, remain traditionally regulated even though some have undertaken restructuring studies and/or pilot programs. Seven states have suspended efforts at restructuring and are left with either partially restructured markets (e.g., Arizona, California, and Nevada) or traditionally regulated utilities. The remaining fifteen states, largely in the New England and Mid-Atlantic regions, are actively restructuring and sit on a spectrum of partially to fully de-regulated, offering retail choice and competitive rates for some or all customers. For example, Oregon offers retail choice to large commercial and industrial customers only, while areas of Texas are fully competitive with separate companies for generation, transmission and distribution, and retail sales. See http://ftp.eia.doe.gov/cneaf/electricity/page/restructuring/restructure_elect.html.

as a way to provide a built-in process for understanding and addressing future capacity needs. However, utility investments in retrofits and new capacity are subject to prudency reviews and cost recovery is not guaranteed. Uncertainty about cost recovery may cause utilities to be less proactive in making these investments.

In states that have undertaken electricity market restructuring, electric utilities have generally divested themselves of their generation resources, and may remain regulated by the state PUC only with respect to the rates they charge to retail customers. The electric utility serves load by purchasing electricity from independent producers. Because generation assets are not owned by regulated utilities, the state PUCs retain little, if any, direct authority over resource investments or operating decisions. In restructured markets, grid operators–that is, RTOs and ISOs–play an important role in fostering market conditions that encourage new investment in capacity, demand side management (DSM), or transmission when issues of resource adequacy arise.

FIGURE 7: STATUS OF STATE ELECTRICITY REGULATION/RESTRUCTURING



- Most of Midwest + South
- Vermont, Washington

- Regulated: Arkansas, New Mexico, Montana, Virginia
- Partial restructure: Arizona, California, Nevada

- Most of New England and Mid-Atlantic
- Illinois, Michigan, Ohio
- Oregon (non-residential only)
- Fully Competitive: Texas

Source: U.S. Energy Information Administration.

In regulated states, the integrated resource planning (IRP) process informs state utility regulators who approve rate plans. State regulators should consider a forward-looking, multi-pollutant approach for planning and rate recovery decisions and require utilities to submit multi-pollutant compliance plans that include planning for forthcoming air, water, and waste rules. State regulators can encourage utilities to minimize cost by denying automatic cost recovery if, for example, a utility proposes to retrofit an aging plant that faces an uncertain future and is unlikely to remain competitive as future requirements are phased in. State utility commissions could also facilitate a smooth transition by making timely decisions on rate approvals, as well as proposed retirements and new capacity additions, so that utilities can begin construction as soon as possible, where appropriate.

Further, several states have passed laws that require utilities to plan for the installation of air pollution controls to protect public health. For example, North Carolina, Illinois, New Hampshire, Delaware, Maryland, and Massachusetts all adopted state laws prior to EPA's Transport Rule and Utility Air Toxics Rule that require multi-pollutant reductions. As a result, power companies in these states are in a good position for timely compliance with a new round of air quality regulations under the federal Clean Air Act.[85] The text box on page 35 describes Colorado's Clean Air-Clean Jobs Act, which encourages comprehensive, multi-year compliance planning.

State utility regulations also have an important role to play in integrating non-conventional capacity resources, such as demand-side resources, into planning for a reliable bulk electricity system. Incentives and fair rate policies for demand resources, distributed generation, and energy storage create a level playing field and provide meaningful incentives for new resources that could help the electricity system deliver reliable power and minimize consumer costs. Many states have enacted renewable portfolio standards and energy efficiency programs to spur the deployment of these non-conventional capacity resources.

To the extent that new environmental regulations prompt a shift to natural gas generation, either through the utilization of existing capacity or through the construction of new capacity, state PUCs could encourage long-term contracts for natural gas supply and the use of hedging instruments to manage the risk of gas price volatility. A report recently issued by the BPC's *Task Force on Ensuring Stable Natural Gas Markets* addresses this issue as one part of its comprehensive recommendations for bolstering consumer, policy-maker and investor confidence in the stability of future gas markets and for improving the tools available for effective price risk management.[86]

[85] For example, North Carolina's 2002 Clean Smokestacks Act requires coal-fired power plants to reduce NO_x emissions by 77 percent by 2009 and SO_2 emissions by 73 percent by 2013. The Illinois Multi-Pollutant Standard (MPS) and Combined Pollutant Standard (CPS) allow utilities flexibility in complying with state mercury standards in exchange for commitments to also significantly reduce SO_2 and NO_x emissions. New Hampshire's 2002 Clean Power Act requires emission reductions from the state's three largest coal-fired plants: 75 percent in SO_2 by 2006 and 70 percent in NO_x by 2006. Massachusetts regulation requires the six largest facilities to meet output-based emission standards for SO_2, NO_x, and CO_2. Maryland's 2007 Healthy Air Act requires larger reductions in NO_x, SO_2, and mercury in a shorter timeframe than previous federal rules.

[86] Bipartisan Policy Center and American Clean Skies Foundation. Task Force on Ensuring Stable Natural Gas Markets. March 2011.

STATE ENVIRONMENTAL AGENCIES

As the permitting authority under the Clean Air Act, states generally have authority to grant a one-year waiver that extends the Utility Air Toxics Rule compliance deadline for electric generating units that need more time to install pollution controls. With this one-year extension, compliance would not be required until four years after promulgating the final Utility Air Toxics Rule. States, which have typically been lenient in granting this extra year, should draw on this authority as needed to allay reliability concerns. EPA has encouraged the use of this one-year extension in its proposed Utility Air Toxics Rule.

In addition to allowing retrofits to be scheduled past the compliance deadline, states should look for ways to encourage retrofits to be scheduled well before the deadline. This would help avoid a pile-up of control installations in the maintenance season or year prior to the deadline. Specifically, states should aim to reward plants that start pollution retrofit projects as soon as possible and are able to install *and operate* their pollution controls in advance of the compliance deadline. Such early action would not only provide early emission reductions, it would take pressure off the grid during the heaviest period of pollution retrofits, when new infrastructure is also coming online to take up the slack from retired plants. Early decisions made by states to grant extensions should require plants to submit a detailed schedule for installation of pollution controls and specify consequences in the event interim deadlines are not achieved.

D. REGIONAL ORGANIZATIONS

REGIONAL TRANSMISSION ORGANIZATIONS/ INDEPENDENT SYSTEM OPERATORS

In restructured states, regional wholesale markets provide greater transparency about anticipated supply changes (including planned retirements) and create a financial incentive for timely investment in new transmission, generation, and non-conventional capacity. In these states, RTOs and ISOs typically facilitate orderly planning of power plant retirements by requiring advance notice of the intent to retire a unit and by conducting reliability impact studies. More advance notice could be helpful in identifying potential issues and allowing more time for their resolution.

RTOs and ISOs administer day-ahead and real-time electricity markets, manage transmission, and play an important role in assessing resource adequacy and ensuring operational reliability. These organizations emerged in response to FERC orders 888 and 889, which were both issued in 1996 and were intended to remove

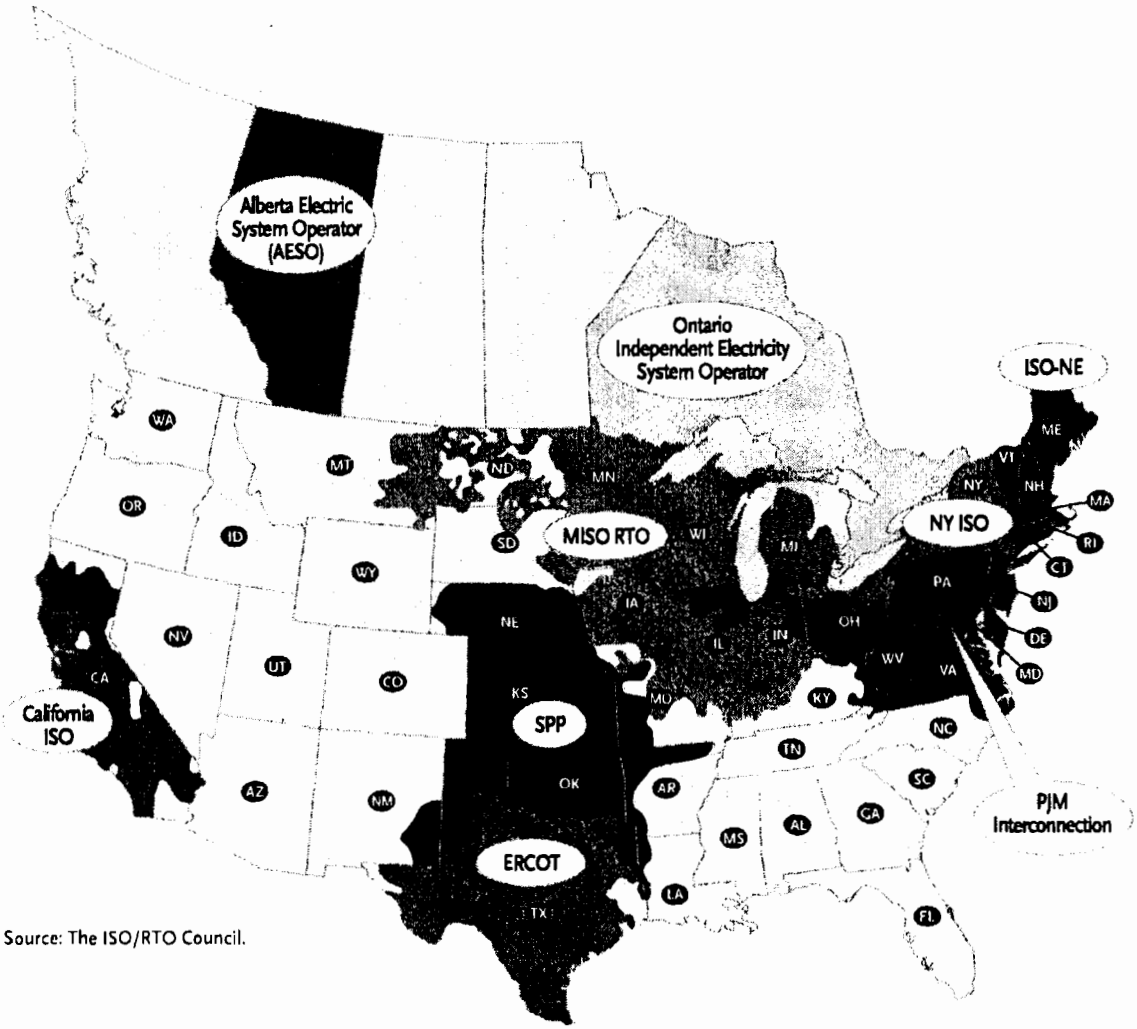
Case Study: Colorado's Clean Air–Clean Jobs Act

Colorado's Clean Air–Clean Jobs Act, signed into law by Governor Bill Ritter on April 19, 2010, is an example of state action to encourage comprehensive, multi-year planning for compliance with environmental regulation. In anticipation of a number of challenges facing the state's coal-fired utilities, the Clean Air–Clean Jobs Act directs the state's regulated utilities to work with state agencies to create proactive and comprehensive emission reduction plans.

A main driver for the legislation was that the Denver metropolitan area was in non-compliance with several air quality requirements and faced the threat of EPA-mandated compliance beginning in 2011. Therefore, the Colorado law requires each regulated utility to develop a multi-year plan to reduce NO_x emissions by more than 70 percent by 2018. The legislation also allows integrated planning for compliance with a full range of known and anticipated environmental regulations, including federal requirements under the Clean Air Act, rather than planning for one standard at a time and risking stranded assets. Each utility's plan is reviewed, by the Colorado Department of Public Health and Environment for its attainment of emissions standards and by the Public Utilities Commission in terms of projected impacts on consumers.

The Act's stated goal is to reduce costs to consumers by removing legislative and regulatory barriers to proactive, comprehensive planning. Utilities are encouraged to employ a range of methods to achieve emission reductions, but are given incentives to consider replacing coal-fired generation with natural gas-fired generation or other low-emission sources. Once its emission reduction plan is approved, the utility is given broad assurances for full recovery of costs to execute the plan. The law also provides flexibility for utilities to enter into long-term natural gas contracts to manage costs for plants that are refueled from coal to gas.

FIGURE 8. MAP OF RTOS/ISOS IN THE U.S.



Source: The ISO/RTO Council.

barriers to competitive wholesale markets by requiring open access to transmission lines. In some regions FERC approved the development of ISOs as a means of facilitating the transition to competitive wholesale markets. In 1999, FERC issued Order No. 2000, which encouraged the development of RTOs, and established criteria for them. While their activities vary somewhat by region, RTOs and ISOs serve similar functions: namely, they develop rules to govern power market and transmission market operations and operate and oversee regional wholesale markets, including coordinating the delivery of generation and transmission services.

As part of their market operations, RTOs and ISOs analyze generation and transmission resource adequacy, undertake transmission planning, review plant notices of intent to retire, and coordinate outage schedules. As noted earlier, when a generator proposes to retire a unit, the RTO/ISO assesses the reliability impact. If the RTO/ISO determines that the unit is necessary to ensure system reliability, the RTO/ISO can enter into a reliability-must-run (RMR) agreement to compensate the generator for continued operation based on cost-of-service rates.[87]

Advance notice of retirement can allow sufficient time for new resources to join the market, reducing the need to rely on RMR contracts as an interim measure to assure grid security, and mitigating the stress of assuring grid reliability in the face of retirements and retrofits. Different RTOs have different requirements with respect to the amount of notice generators must give for a proposed unit retirement. For example, PJM requires 90-day notice; NYISO requires 90 days for smaller plants and 180 days for units that are 80 MW or larger; while

[87] In several organized markets, including Midwest ISO and California ISO, contractual or tariff requirements obligate the generator to negotiate RMR contracts to remain in operation if the RTO/ISO concludes that continued operation of the unit is necessary for reliability. In other markets, including PJM and ISO New England, the generator's decision to accept an RMR contract is voluntary.

[88] PJM. Open Access Transmission Tariff. §§ 113.1-.2. September 17, 2010. Available at http://pjm.com/documents/agreements/~/media/documents/agreements/tariff.ashx.

the Midwest ISO (MISO) requires a longer, 26-week notice.[88,89,90] These advance notification requirements can be revised by RTOs/ISOs or FERC under existing RTO/ISO tariffs through a demonstration that the existing notice period is unjust or unreasonable, or unduly discriminatory or preferential. In other words, RTOs and ISOs can consider extending the notification requirement as a way to improve regional planning and reduce reliance on RMR agreements.

Some RTOs have established forward capacity markets as a mechanism to encourage the capacity investments needed to ensure continued reliability over time. In the mid-Atlantic region and New England, for example, the two ISOs–PJM and ISO New England, respectively–have well-developed forward capacity markets that allow existing and new generation resources, as well as demand-side measures, to compete alongside each other to serve future demand. As unit retirements are scheduled, the price in forward capacity market auctions increases, encouraging the development of new resources. However, the continued use of RMR contracts in both regions has led some to question whether forward capacity markets are sufficiently effective.[91]

E. COORDINATION OF FEDERAL, STATE, AND REGIONAL AUTHORITIES

The overlapping jurisdictions of environmental and electricity regulators have prompted efforts to ensure that there is coordination on reliability issues. This section discusses several examples of recent efforts to initiate or improve this coordination.

For example, DOE's Electricity Advisory Committee has issued recommendations to the Secretary of Energy for addressing power reliability concerns related to pending environmental regulations for electric generating stations.[92] The Committee advised DOE to coordinate with FERC, NERC, EPA, and state regulatory authorities to address these concerns. The Committee also put forward two specific recommendations: first, that DOE, EPA, and FERC engage in a senior-level consultative process to commit to open and active communication on reliability issues, while recognizing the existing authorities of each agency; second, that DOE advance a recommendation to FERC to improve the planning process for replacing retiring units. The latter recommendation suggests that DOE and FERC support power system "planning coordinators" who would undertake proactive planning studies, including scenario analyses, to understand the impact of retirements on the need for new generation capacity, transmission system additions, or demand-side resources. To the extent that planning coordinators can better anticipate likely retirements under different scenarios, RTOs and ISOs will have more time, information, and flexibility to take necessary action to ensure reliability.

Similarly, the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC) adopted a resolution on the role of state regulatory policies in the development of federal environmental regulations at its 2011 Winter Meeting.[93] The resolution enumerated several factors that NARUC believes EPA should consider in developing its regulations and urged state utility regulators to engage with state and federal environmental regulators. Specifically, the resolution outlined ten factors for EPA to consider, including several aimed at improving state-federal coordination and addressing reliability concerns:

- "Engage in timely and meaningful dialog with State energy regulators in pursuit of these objectives;"
- "Recognize the needs of States and regions to deploy a diverse portfolio of cost-effective supply-side and demand-side resources based on the unique circumstances of each State and region;"
- "Encourage the development of innovative, multi-pollutant solutions to emissions challenges as well as collaborative research and development efforts in conjunction with the U.S. Department of Energy;" and
- "Recognize and account for, where possible, State or regional efforts already undertaken to address environmental challenges."

[89] NYISO. Technical Bulletin 185. September 19. 2009. Available at http://www.nyiso.com/public/webdocs/documents/tech_bulletins/tb_185.pdf.

[90] MISO Open Access Transmission Tariff. §§ 38.2.7. January 6, 2009. Available at http://www.midwestmarket.org/publish/Document/1d44c3_11e1d03fcc5_-7cf90a48324a/Modules.pdf?action=download&_property=Attachment.

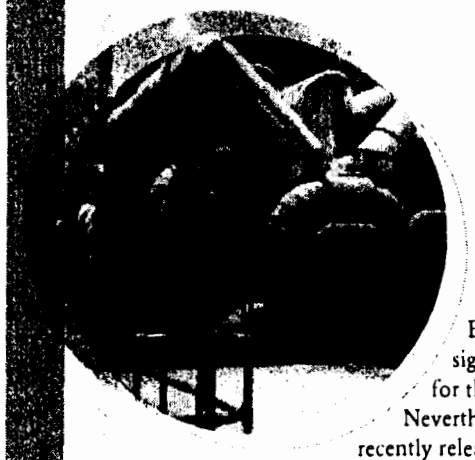
[91] Synapse Energy Economics, Inc. Prepared for Earthjustice. Public Policy Impacts on Transmission Planning. December 2010. In addition, FERC has found that RMR agreements weaken the incentive for new generation development by suppressing spot market prices and allowing inefficient existing units operating under RMRs to receive a higher price than new units. Devon Power LLC, et al. ER03-563-00.

[92] Electricity Advisory Committee Memorandum to Secretary Steven Chu. March 10, 2011. Recommendations to Address Power Reliability Concerns Raised as a Result of Pending Environmental Regulations for Electric Generation Stations. Available at http://www.oe.energy.gov/DocumentsandMedia/EAC_Memorandum_to_Secretary_Chu_and_Assistant_Secretary_Hoffman_3-11-11.pdf

[93] National Association of Regulatory Utility Commissioners. Resolution on the Role of State Regulatory Policies in the Development of Federal Environmental Regulations. February 16, 2011.

SECTION V

It is clear that the U.S. electric power sector is in a period of transition and that EPA regulations will influence the timing and scale of future changes in the nation's electricity supply mix. Coal-plant retirements are already occurring and are likely to continue because of market conditions such as low natural gas prices. EPA regulations, particularly the Utility Air Toxics Rule, will likely advance retirement timelines for these vulnerable plants.



The large numbers of retrofits and retirements expected to result from the EPA regulations raise significant challenges for the power sector. Nevertheless, based on the recently released proposed Utility Air Toxics Rule and 316(b) cooling water rule, it appears that EPA is making an effort to work with industry to ease the transition to a new regulatory regime. As a result, it appears that the scenarios that predicted the largest numbers of retirements will not be realized.

Moreover, even at the higher end of current estimates, the magnitude of new construction and investment would not be unprecedented, even in light of a relatively short timeframe. Between 1999 and 2004, U.S. generating capacity nationwide increased by 177 GW, almost all of which was natural gas capacity. By comparison, projected retirements between now and 2015 range from 10 to 70 GW–a much smaller change. Moreover, not all of the capacity that will be retired will need to be replaced because there is under-utilized existing generation, demand has flattened, and energy efficiency continues to improve. The industry has also demonstrated the ability to orchestrate substantial control technology retrofits. During the peak of the last retrofit construction cycle, scrubbers were installed on nearly 60 GW of coal capacity during the three-year period from 2008 through 2010.[94]

In the areas that may be most vulnerable to reliability problems, BPC believes that power companies, federal and state regulators, and ISO/RTOs have authorities or strategies at their disposal to ensure continued reliability. In light of these findings, we offer the following recommendations to ensure the smoothest possible transition to a cleaner, more efficient electric power system.

A. FLEXIBILITIES IN THE CLEAN AIR ACT AND CLEAN WATER ACT

Where appropriate, EPA should use flexibility inherent in its existing authority to address cost and reliability concerns. EPA's March 15, 2011 proposed Utility Air Toxics Rule includes several provisions that can help minimize costs and the potential for system disruptions. These include work practice standards in lieu of limits for dioxin and furans, emissions averaging among units at a facility in the same sub-category, the use of surrogates for particular hazardous air pollutants, exemptions for units that infrequently burn oil, a 30 day averaging period for demonstrating compliance with emission standards, and alternative standards that could reduce monitoring requirements. In addition, although the Clean Air Act generally allows only three years to comply with the Utility Air Toxics Rule, EPA's proposal emphasizes that states can provide waivers to allow a fourth year for facilities to install controls if plants are unable to do so in three years despite good faith efforts.

Similarly, the proposed cooling water rules provide important flexibility with respect to the timing and choice of compliance technologies. Facilities will have up to eight years to implement lower-cost compliance measures, such as screens or velocity reduction. For the largest water users, EPA's proposed rule will require a case-by-case evaluation–one that considers site-specific constraints, the useful life of the facility, electric reliability impacts, and weighs cost against benefits–to determine which control technologies, if any, will be required. If a cooling tower is required, fossil-fired facilities are provided 5–10 years and nuclear facilities are provided 10–15 years to come into compliance.

Additional options are available that can address unexpected reliability impacts as a last resort. These include authorities to delay compliance deadlines under the Federal Power Act, authorities for the President to delay implementation, and the ability to exercise enforcement discretion through the use of consent decrees to address specific, special circumstances. While it is unlikely that these authorities will be needed, government agencies should make it clear that they will avail themselves of these tools if necessary.

B. PLANNING AND COORDINATION

A number of planning tools and authorities are available and should be used to help smooth the transition to a new suite of environmental regulations in the coming decade. Although attention has focused on reliability concerns related to plant retirements, BPC believes that managing a large number of pollution control retrofits in a relatively short period could also be a challenge. If many plant owners delay retrofits to near the end of the Air Toxics compliance period, scheduling problems could arise that would increase the need for compliance waivers and reliability-must-run agreements, potentially driving up costs. Plant owners should be encouraged–including through concrete incentives, to the extent possible–to start the process of installing controls immediately. State policy makers should look for opportunities to influence the timing of retrofits and to help spread out scheduled installations within the compliance window. In addition,

[94] M.J. Bradley & Associates LLC and Analysis Group. Ensuring a Clean, Modern Electric Generating Fleet While Maintaining Electric System Reliability. August 2010.

Well-crafted legislation could provide greater certainty about environmental outcomes and provide the incentives and the regulatory clarity for utilities to begin retrofits early.

neighboring RTO/ISOs that share transmission corridors and may rely on each other to provide adequate reserve margins should consider coordinating their outage schedules as well.

To play a more proactive role, FERC could consider extending the length of the required notification period for proposed plant retirements to allow more time for reliability assessments.[95] If FERC acted to increase advance notice requirements for unit retirements, the need to rely on RMR contracts as an interim measure to assure grid security would be reduced, and the stress of assuring grid reliability in the face of retirements and retrofits may be mitigated.

Finally, DOE and FERC should look to additional authorities under the Federal Power Act that can be used to support long-term planning for a smoother, more cost-effective transition. For example, DOE and FERC could collaborate to use their information gathering authorities to conduct assessments for decision making and coordinated planning. This type of coordination could help identify regions with potential resource adequacy problems and provide a mechanism for aggregating and disseminating information about the regulatory and market tools that are available for addressing potential problems. A stakeholder process involving federal agencies, RTOs/ISOs, and utilities could be used to develop strategies for addressing challenges posed by retirement and retrofit scheduling and to share best practices.

C. SITING AND PERMITTING FOR NEW INFRASTRUCTURE

The transition to a cleaner, more efficient generation system will require investment in energy efficiency, demand response strategies, and new generation capacity along with associated transmission and pipeline infrastructure. Additional generation capacity will be needed to replace retired coal generation and, potentially to ensure reliability during retrofit outages. Energy efficiency and demand response strategies can help lower overall demand for electricity and better manage demand during peak periods. Some additional transmission infrastructure will be necessary to address shifts in generation capacity and demand, and pipelines may be necessary to transport natural gas to new gas-fired plants.

Previous BPC reports have noted that siting energy facilities in the United States has evolved into a complex, multi-jurisdictional, and often contentious process that is in need of reform.[96] Although a full discussion of potential reforms is beyond the scope of this report, it is worth noting that the upcoming period of transition in the power sector provides an opportunity for policy makers at the state and federal levels to seek improvements in the siting and permitting process.

D. LEGISLATIVE OPPORTUNITIES

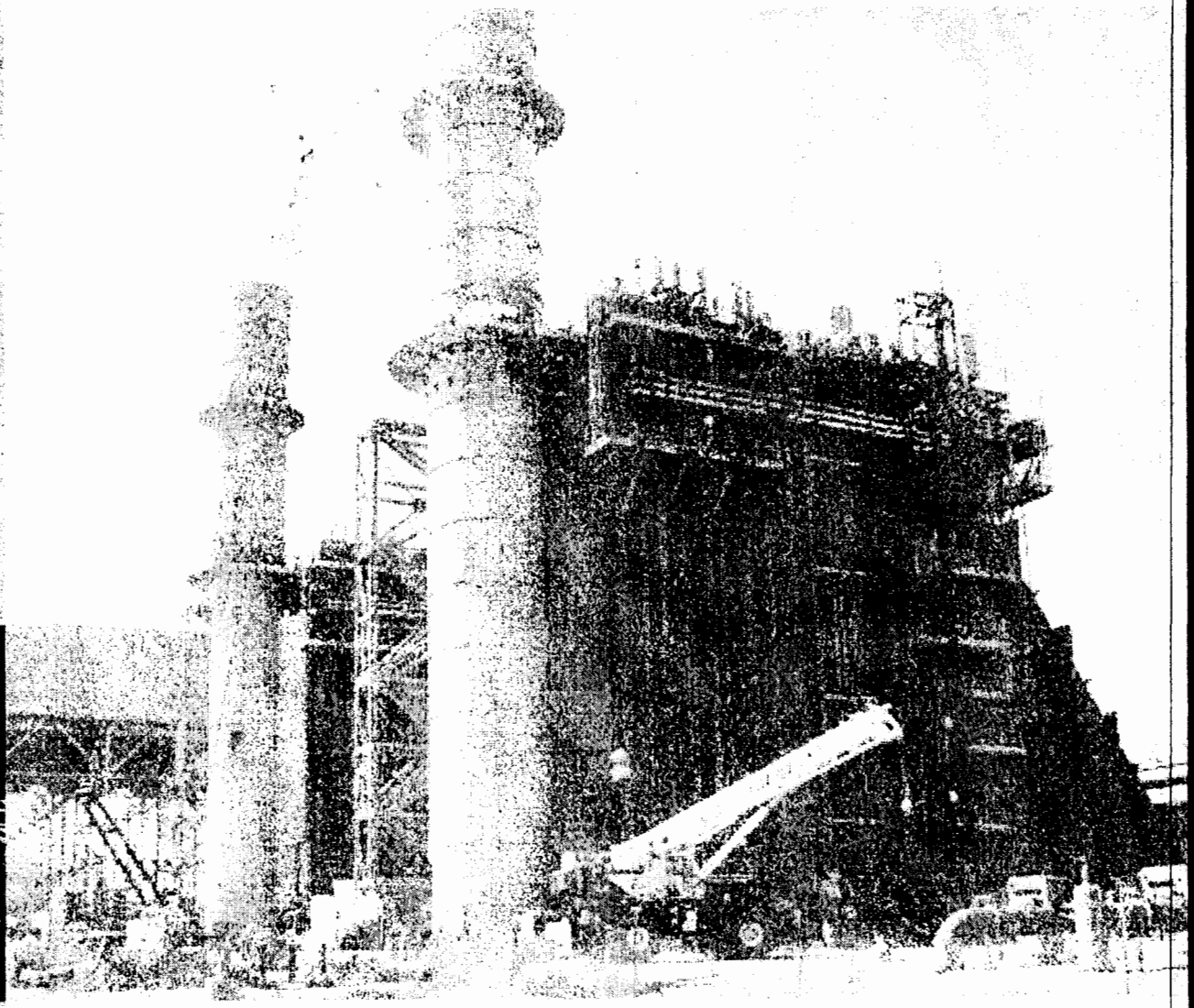
There may be a short window of opportunity for a legislative change that could guarantee the environmental benefits of the Clean Air Act and provide a smoother transition for the power sector. To be successful, multi-pollutant legislation would need to provide certainty and encourage rational and timely investment decisions, so that plant owners begin adding pollution controls immediately at facilities that will remain economically viable; while also planning and coordinating the retirement and replacement of plants that will have to be shut down. For the minority of plants where the outcome is unclear, it will be important to get the information needed to make a determination in time to comply. Further, multi-pollutant legislation should aim to guarantee equivalent or greater environmental benefits than available under current authority.

Well-crafted legislation could also provide greater certainty about environmental outcomes and provide the incentives and the regulatory clarity to get started sooner. Absent new legislation, litigation over the upcoming rulemakings could prolong uncertainty over what will ultimately be required and when. In addition, the current structure provides little incentive to begin retrofits early and to turn on installed controls before the compliance deadline. Legislation could introduce such incentives and provide a backstop requirement that would be applicable if EPA is not able to promulgate regulations in time or if those regulations are tied up in litigation. This was the approach used in the successful, market-based Acid Rain Program, which is widely acknowledged to have achieved significant public health environmental benefits at lower than expected cost.

BPC continues to believe that addressing multiple pollutants in an integrated way can provide certainty, and encourage rational and timely investment decisions in pollution controls and new capacity. Several market-based, multi-pollutant legislative proposals have been developed in recent years. The BPC believes that the public health and economic benefits of these types of coordinated approaches are worth exploring in the coming months.

[95] There are currently differing requirements in PJM, MISO, NYISO.

[96] National Commission on Energy Policy. Clean Energy Technology Pathways: An Assessment of the Critical Barriers to Achieving a Low-Carbon Energy Future. March 2010.



APPENDIX

LIST OF EXPERT SPEAKERS FROM BPC WORKSHOPS ON ENVIRONMENTAL REGULATION AND ELECTRIC SYSTEM RELIABILITY

WORKSHOP I: POWER SECTOR ENVIRONMENTAL REGULATIONS

Jason Grumet, President, Bipartisan Policy Center

Jennifer Macedonia, Senior Advisor, Bipartisan Policy Center

Daniel Greenbaum, President, The Health Effects Institute

Scott Segal, Partner, Bracewell & Guiliani

Dr. Susan Tierney, Principal, The Analysis Group

Commissioner Rick Morgan, DC Public Service Commission

Joseph Goffman, Senior Counsel to Asst. Administrator, Office of Air, US EPA

Dr. James Staudt, Principal, Andover Technology Partners

Dr. Larry Monroe, Senior Research Consultant, Southern Company

David Hawkins, Director of Climate Programs, Natural Resources Defense Council

Dave Foerter, Executive Director, Institute of Clean Air Companies

David Conover, Senior Vice President, Bipartisan Policy Center

Alex Livnat, Ph.D, US EPA Office of Resource Conservation and Recovery

Dr. Julie Hewitt, Branch Chief, US EPA Office of Water

John Novak, Ex. Director, Federal and Industry Activities, Electric Power Research Institute

Lisa Evans, Senior Administrative Counsel, Earthjustice

Joseph Stanko, Jr., Partner, Hunton and Williams

Reed Super, Attorney, Super Law Group, LLC

WORKSHOP II: RELIABILITY IMPACTS OF POWER SECTOR DEVELOPMENTS

David Conover, Senior Vice President, Bipartisan Policy Center

Tom Wilson, Senior Program Manager, Electric Power Research Institute

Howard Gruenspecht, Ph.D., Deputy Administrator, US Energy Information Administration

Joseph Chaisson, Research and Technical Director, Clean Air Task Force

Steve Fine, Vice President, ICF International

Frank Huntowski, Director, The Northbridge Group

John McManus, Vice President of Environmental Services, American Electric Power

John Shelk, President and CEO, Electric Power Supply Association

Chairman Ron Binz, Colorado Public Utilities Commission

John Moura, Technical Analyst, North American Electric Reliability Corporation

Paul Sotkiewicz, Ph.D, Chief Economist, Markets, PJM Interconnection

Ira Shavel, Vice President, Charles River Associates

Bill Tyndall, Senior Vice President, Government and Regulatory Affairs, Duke Energy

Mark Brownstein, Deputy Director, Energy Program, Environmental Defense Fund

Joe McCartin, Deputy Director, Building and Construction Trades Department

Joe Kruger, Policy Director, Bipartisan Policy Center

WORKSHOP III: LOCAL, STATE, AND REGIONAL AND FEDERAL SOLUTIONS

Jason Grumet, President, Bipartisan Policy Center

Chairman Jon Wellinghoff, Federal Energy Regulatory Commission

Vice Chairman James Gardner, Kentucky Public Service Commission

Commissioner Rick Morgan, DC Public Service Commission

Chairman Edward Finley, Jr., North Carolina Utilities Commission

Pamela Faggert, Vice President and Chief Environmental Officer, Dominion

John Hanger, former Secretary, PA Department of Environmental Protection

Sonny Popowsky, Consumer Advocate of Pennsylvania

Paul Miller, Deputy Director, NESCAUM

Sue Tierney, Managing Principal, Analysis Group, Inc

Paul Sotkiewicz, Ph.D, Chief Economist, Markets, PJM Interconnection

John Lawhorn, Sr. Director, Midwest Independent System Operator

Kathleen Barron, Vice President, Exelon Corporation

Garey Rozier, Resource Planning Manager, Southern Company

Chris James, Senior Associate, Regulatory Assistance Project

Linda Stuntz, Founding Partner, Stuntz, Davis, & Staffier, PC

Peter Tsirigotis, Division Director, US Environmental Protection Agency

Doug Smith, Member, Van Ness Feldman

Jeff Holmstead, Head of Environmental Strategies, Bracewell & Guiliani

David Hawkins, Director of Climate Programs, Natural Resources Defense Council

David Conover, Senior Vice President, Bipartisan Policy Center

Maryam Brown, Majority Staff, House Energy and Commerce Committee

Alexandra Teitz, Senior Counsel, House Energy and Commerce Committee

Michael Catanzaro, Deputy Staff Director, Senate Environment & Public Works

Jonathan Black, Professional Staff, Senate Energy and Natural Resources Committee

BPC MODELING USING ICF'S INTEGRATING PLANNING MODEL

IPM is a multi-region model that endogenously determines capacity and transmission expansion plans, unit dispatch and compliance decisions, and power, coal, and allowance price forecasts, all based on power market fundamentals. To utilize the model, it is necessary to make a number of assumptions concerning key market parameters, including electricity demand growth, fuel prices, cost and performance of new generating capacity, and cost and performance of pollution controls and other options for complying with environmental regulations. This appendix discusses the assumptions and regulatory compliance scenarios included in the BPC analysis.

A. ASSUMPTIONS FOR ANALYSIS

BPC based most of the assumptions for this analysis on information from the Energy Information Administration's Annual Energy Outlook (EIA AEO 2010) and the Environmental Protection Agency's IPM Base Case 2009 ARRA (EPA ARRA). In some cases, BPC selected alternative assumptions to reflect recent market conditions. Assumptions for electricity demand growth, cost and performance of new capacity, and costs of regulatory compliance options were held constant across all the scenarios analyzed. Natural gas and coal prices varied by scenario based on the relative fuel demand from scenario to scenario. Table B-1 below summarizes the sources of key assumptions in the analysis. Tables B-2 through B-4 summarize our detailed assumptions for select parameters.

TABLE B-1: SOURCES OF KEY INPUT ASSUMPTIONS

Input Parameter	Source of Assumption	Notes
Electric demand growth	EIA AEO 2010	
Cost and performance of new generation capacity, including new project financing	EIA AEO 2010	New coal capacity without carbon capture technology included a risk premium in financing costs, consistent with the approach used by EIA
Natural gas prices	EIA AEO 2010 (BPC Base Case) Gas price sensitivity at minus $1/MMBtu below the AEO2010-based supply curve	To realize gas price response in scenarios other than the BPC Base Case, ICF derived a measure of supply elasticity from multiple AEO 2010 scenarios and applied it to the BPC Base Case price and gas demand projections to generate a supply curve
Coal prices	ICF coal supply curves calibrated to EIA AEO 2010 prices and quantities	
Cost and performance of air pollution controls	EPA ARRA (SCR, SNCR, ACI), BPC (FGD, fabric filter, DSI)	BPC assumed higher capital costs for fabric filters and wet scrubbers (FGD) than those used in EPA ARRA to reflect costs closer to recent market experience
Cost of compliance options for coal ash and water intake regulations	NERC (cooling towers), EOP Group (ash)[98] BPC (alternative water intake compliance)	

[98] Based on Utility Solid Waste Activities Group. 2010. Cost estimates for the mandatory closure of surface impoundments used for the management of coal combustion byproducts at coal-fired electric utilities. Prepared by The EOP Group, Inc., Washington, DC.

TABLE B-2: BPC ASSUMPTIONS FOR THE COST AND PERFORMANCE OF AIR POLLUTION CONTROLS

	Capacity (MW)	Wet FGD	DSI	SCR	SNCR	Fabric Filter	ACI
Capital Cost (2006$/kW)	300	564	37	168	20	131	Bit - H 3.65 Bit - L 2.72 Lig 25.11 Sub 3.86
	500	487	NA	147	15	123	
	700	442	NA	140	NA	118	
Variable O&M (2006$/MWh)		1.80	Bit 8.46 Sub & Lig 3.83	0.64	0.79	Bit - H 0.10 Bit - L 0.05 Lig 0.11 Sub 0.10	Bit - H 0.41 Bit - L 0.27 Lig 0.50 Sub 0.35
Energy Penalty		2.1%	0.02%	0.5%	0%	0.5%	0%
% Removal		SO_2 - 95%	SO_2 - 70%	NO_x - 85%	NO_x - 30%	PM - 99.95%	Hg - 90%
First Year Allowed		2013	2013	2013	2011	2011	2011
Source		BPC	BPC	EPA	EPA	EPA	EPA

Bit = Bituminous coal; Sub = Subbituminous coal; Lig = Lignite; O&M = Operating and Maintenance Costs.

Note: The 70% SO_2 removal rate for DSI assumes a fabric filter is present. As a conservative modeling assumption to account for site-specific challenges, BPC assumed that DSI was only an option for units ≤ 300MW and that units projected to install DSI are restricted to burning low sulfur coals (2 lb SO_2/MMBtu).

TABLE B-3: BPC ASSUMPTIONS FOR 316(B) WATER RULE COMPLIANCE

Water (2006$/kW)	Capacity (MW)	Cooling Tower	Alternate Compliance
Capital Costs	300	184	18
	500	138	14
	700	138	14

Note: Cooling tower costs derived from North American Electric Reliability Corporation.[99] Alternative compliance costs based on BPC assumption of 10% of cooling tower cost.

TABLE B-4: BPC ASSUMPTIONS FOR COAL COMBUSTION WASTE RULE COMPLIANCE

Ash (Million 2006$)	Fly Ash Conversion	Bottom Ash Conversion	Wet Ash Conversion	Landfill Expansion
Capital Costs	23	20	200	30
Fixed O&M	-	-	4.5	3.0

Note: Ash related costs derived from EOP Group, Inc.[100]

[99] NERC. 2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential US Environmental Regulations. October 2010. Available at http://www.nerc.com/files/EPA_Scenario_Final.pdf

[100] Based on Utility Solid Waste Activities Group. Cost estimates for the mandatory closure of surface impoundments used for the management of coal combustion byproducts at coal-fired electric utilities. Prepared by The EOP Group, Inc., Washington, DC. 2010

B. DESCRIPTION OF SCENARIOS

For this analysis, BPC defined three cases to examine the impacts of EPA's proposed regulations on the U.S. power sector. BPC had ICF analyze these cases using IPM based on the assumptions described above. The three cases included a base case, a regulatory scenario, and a regulatory scenario with lower natural gas prices. The cases are described in more detail below.

BPC BASE CASE

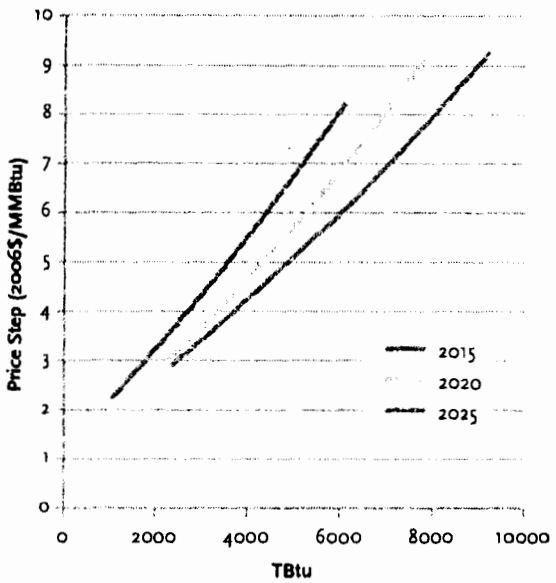
The BPC Base Case represents a business-as-usual (BAU) projection in that it includes only existing federal and state regulations. It assumes regional cap and trade programs for SO_2 and NO_x in the eastern U.S., as promulgated under Phases I and II of the Clean Air Interstate Rule (CAIR).[101] It does not include any federal mercury or carbon dioxide emission reduction requirements. The BPC Base Case includes existing state mercury, SO_2 and NO_x requirements, as well as state renewable portfolio standards. Pollution control and retirement decisions reflected in completed New Source Review consent decrees and public announcements are also included in the BPC Base Case and the other cases.

REGULATORY CASE

The second case includes requirements under EPA's proposed suite of new regulations, including the Utility Air Toxics Rule, transport, and proposed water intake and coal ash rules. BPC assumed the following requirements for each of the proposed rules:

Clean Air Transport Rule (CATR) – The case includes CAIR Phases I and II as a proxy for CATR. However, BPC assumes no banking of SO_2 allowances from the Title IV Acid Rain Program and CAIR into 2012, reflecting the start of the new program under CATR. The Phase II caps under CAIR have been modified for NO_x to reflect tighter standards expected under the new ozone NAAQS. The CAIR Phase II caps were scaled in 2018 to reflect a 0.10 lb/MMBtu standard in place of the CAIR 0.125 lb/MMBtu standard. To reflect Best Available Retrofit Technology (BART) requirements in states not subject to CAIR, units were required to control for NO_x with SCR so long as the cost of control was equivalent to less than $5000 per ton of NO_x avoided.

FIGURE B-1: BPC NATURAL GAS SUPPLY CURVES (FOR GAS SUPPLIED TO POWER SECTOR)



TBtu: Trillion British thermal units

Utility Air Toxics Rule – BPC assumes that all coal-fired electric generating units (EGUs) must be controlled with a suite of controls intended to meet emissions standards to continue operating past the 2015 compliance deadline. If units do not control by 2015, they must retire. As a conservative assumption, control of metals is assumed to require a fabric filter for every unit.[102] The analysis assumes that units greater than 300 MW meet the standard for acid gases (HCl) with a wet scrubber (flue gas desulfurization, FGD) and that units less than 300 MW in size may meet the standard for acid gases with either dry sorbent injection (DSI) combined with the fabric filter and low sulfur coal or, alternatively, with a wet scrubber.[103] Although a dry scrubber, estimated at 10-20% lower cost than a wet scrubber, would be an option in combination with particulate controls to comply with the HCl limit, it is not an assumed option in this

[101] CAIR has since been replaced with the Transport Rule, proposed in July 2010. The latter provides for more stringent caps on SO_2 and NO_x, as well as trading restrictions and limits on the use of "banked" allowances from past years of over-compliance with the SO_2 Acid Rain Trading Program. Other analyses indicate that the incremental changes between CAIR and the Transport Rule are not a significant driver in the context of the suite of EPA regulations. Thus, the policy scenario does not reflect incremental changes from CAIR, other than to restrict the use of allowances banked prior to 2012.

[102] Some studies indicate that upgrades to existing electrostatic precipitators may be sufficient to comply. (Lipinski, 2011).

[103] Studies and EPA analysis of the Air Toxics Rule indicate that lower cost dry scrubber technology combined with particulate controls would be an alternative option for acid gas compliance and that DSI may also be an option for larger units. (Lipinski, 2011)

analysis. To meet mercury standards, units may be controlled with activated carbon injection (ACI) or, for units burning bituminous coals, with a combination of wet scrubber and SCR controls.[104]

WATER INTAKE (316(B)) – BPC assumes water intake structure compliance by 2022 (fossil) and by 2027 (nuclear), both reflected as 2025 in the modeled scenario. Facilities with a weighted average capacity factor of at least 35 percent in 2009 and flow design intake greater than 500 million gallons per day (MGD) are assumed to require cooling towers to operate past the compliance date. Facilities that do not meet those two conditions must install alternative compliance measures, estimated by BPC to cost one-tenth the cost of a cooling tower at the facility.

ASH HANDLING (COAL COMBUSTION WASTE) – BPC assumes that coal-fired facilities must fully convert to dry ash handling in order to continue operating in 2015 and later. The case assumes implementation consistent with EPA's proposal under Subtitle D. Ash is not classified as hazardous and may continue to be used for beneficial purposes. For facilities that already manage some ash using dry handling systems, the retrofit costs shown above were prorated by the share of total ash managed using wet handling systems.[105]

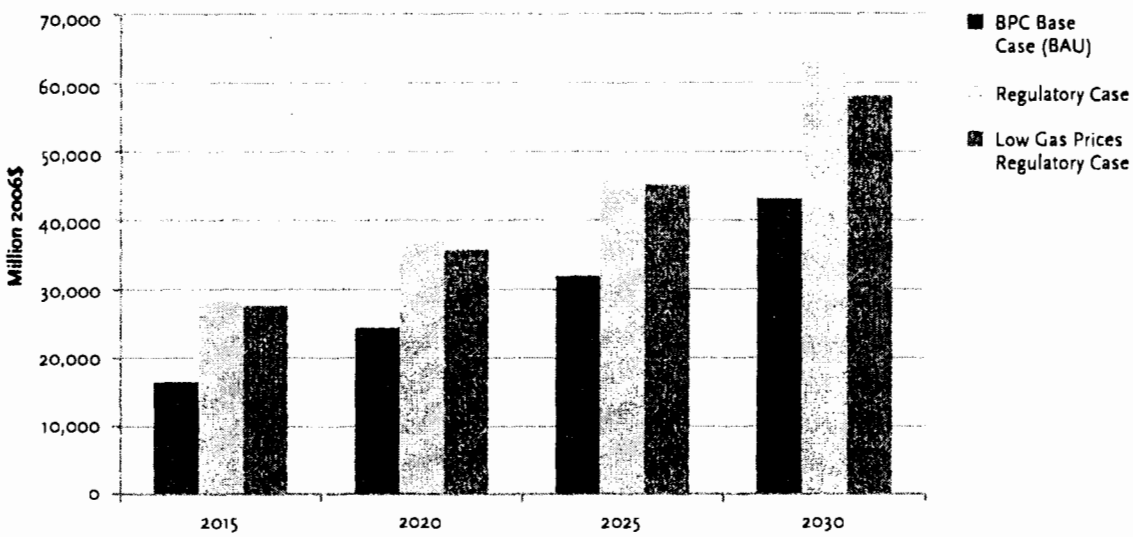
REGULATORY CASE WITH LOW GAS PRICES

Natural gas price levels are critical to determining the projected impacts of EPA's regulations on the power sector. As noted earlier, the BPC Base Case and Regulatory Case relied on natural gas price projections based on EIA's AEO 2010. Since the publication of AEO 2010 in early 2010, expert projections of future natural gas prices have continued to fall as they incorporate growing resource projections for shale gas.[106] To reflect this expectation of lower future natural gas prices, BPC includes a sensitivity case that assumes prices $1/MMBtu lower in each year compared to the projected price in the Regulatory Case.

C. SELECT RESULTS OF BPC ANALYSIS

The following charts present select results for the three BPC cases described in the previous section. Unless specified otherwise, the results are presented for the continental United States as a whole, not including Hawaii and Alaska.

FIGURE B-2: PROJECTED ANNUALIZED CAPITAL EXPENDITURES FOR REGULATORY COMPLIANCE AND NEW GENERATING CAPACITY



[104] For mercury removal, the scenario assumes that a plant burning primarily bituminous coal with installed FGD, baghouse, and selective catalytic reduction (SCR) (for NO_x) controls will meet the Utility Air Toxics Rule 90% mercury removal requirement with no carbon injection. This is a simplified estimate based on an assumption that, for a bituminous coal plant with a baghouse, any additional cost for carbon injection (polishing ACI) would be modest. All other plants are assumed to require activated carbon injection.

[105] Data on wet and dry ash handling are taken from EIA Form 923 reporting.

[106] U.S. EIA Annual Energy Outlook (AEO) 2011 projection averages nearly $1.24/MMBtu lower than the AEO 2010 projection over the period 2011 to 2030.

FIGURE B-3: PROJECTED UNIT RETIREMENTS BY TYPE

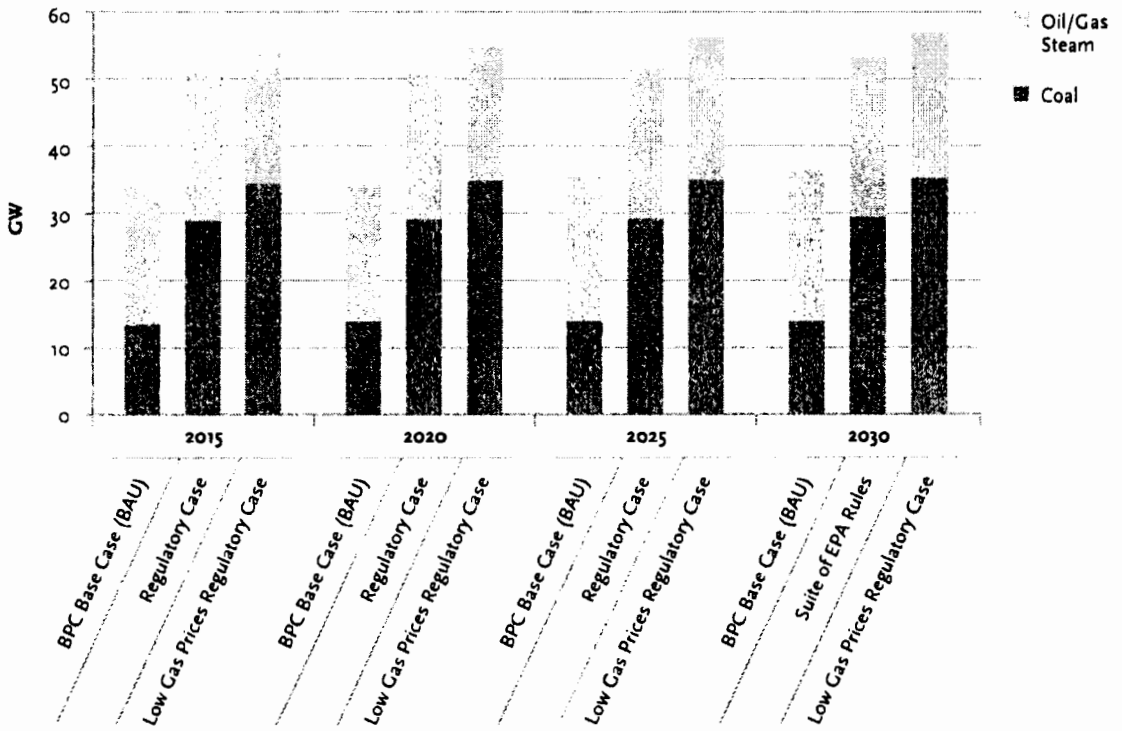


Figure B-2 shows annualized capital expenditures on all new air pollution control equipment, water intake and ash handling compliance retrofits, and new generating capacity. The 2015 value includes compliance investments for the Utility Air Toxics Rule and ash handling requirements. Water intake costs are incurred in 2025. Expenditures on new capacity take place over the entire period to meet demand growth and, in the EPA Regulatory cases, to replace capacity that retires in response to the regulations.

Capital expenditures, which do not include fuel and other costs to generate and distribute electricity, are about $10 billion higher in the Regulatory Cases compared to the BPC Base Case in 2015. The differential increases over time as costs are incurred for water intake compliance and incremental capacity additions. Costs in the Low Gas Price case are slightly lower due to lower compliance investments.

The assumed compliance requirements in the EPA Regulatory Cases drive up retirements of coal-fired capacity relative to the BPC Base Case. The regulations increase coal unit retirements by 15 GW and 21 GW in the Regulatory Case and in the Regulatory Case with Low Gas Prices, respectively, by 2030. Retirements of oil and gas steam capacity change very little from the BPC Base Case.

TABLES B-5 (A) AND (B): PROJECTED COMPLIANCE EXPENDITURES AND UNITS CONTROLLED (ADDITIONAL TO BPC BASE CASE)

TABLE B-5(A): BPC REGULATORY CASE

	2015	2020	2025	2030
Incremental Annualized Capital Expenditures (Million $): Change from BPC Base Case				
FGD	3,170	3,170	3,170	3,165
DSI	282	282	282	282
ACI	165	161	160	160
FF	3,463	3,432	3,432	3,432
SCR	525	691	703	731
Ash	2,897	2,897	2,897	2,897
Cooling Towers	0	0	1,626	1,626
Incremental Number of Units Controlled: Change from BPC Base Case				
FGD	85	85	85	84
DSI	199	199	199	199
ACI	392	385	381	381
FF	541	536	536	536
SCR	34	47	48	48
Ash (Facilities, in whole or in part)[107]	98	98	98	98
Cooling Towers (Facilities)	0	0	93	93

TABLE B-5(B): BPC REGULATORY CASE WITH LOW GAS PRICES

	2015	2020	2025	2030
Incremental Annualized Capital Expenditures (Million $): Change from BPC Base Case				
FGD	3,124	3,124	3,124	3,119
DSI	245	245	245	245
ACI	157	154	153	153
FF	3,331	3,300	3,300	3,300
SCR	411	582	587	650
Ash	2,797	2,797	2,797	2,797
Cooling Towers	0	0	1,610	1,610
Number of Units Controlled: Change from BPC Base Case				
FGD	84	84	84	83
DSI	181	181	181	181
ACI	368	360	356	356
FF	516	511	511	511
SCR	28	41	40	44
Ash (Facilities, in whole or in part)	96	96	96	96
Cooling Towers (Facilities)	0	0	92	92

[107] The BPC analysis assumes costs for compliance with the ash handling requirements for coal-fired facilities that are proportional to the current share of wet ash handling at the facility. For example, a facility that currently relies on wet handling for one-half of its total ash handling needs is assumed to incur a cost equivalent to one-half the cost of a facility that is the same size and must convert all of its handling from wet to dry methods. BPC analysis projects that 98 facilities will be affected, either in whole or in part, by the ash handling requirements in the Regulatory Case.

FIGURE B-4: PROJECTED NATURAL GAS PRICES AT HENRY HUB

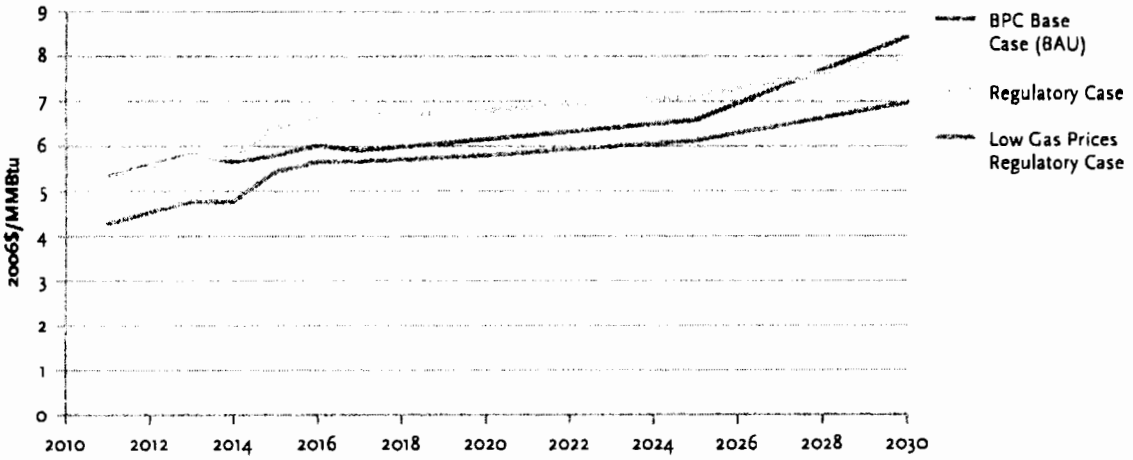


FIGURE B-5: CUMULATIVE PROJECTED CAPACITY ADDITIONS BY TYPE

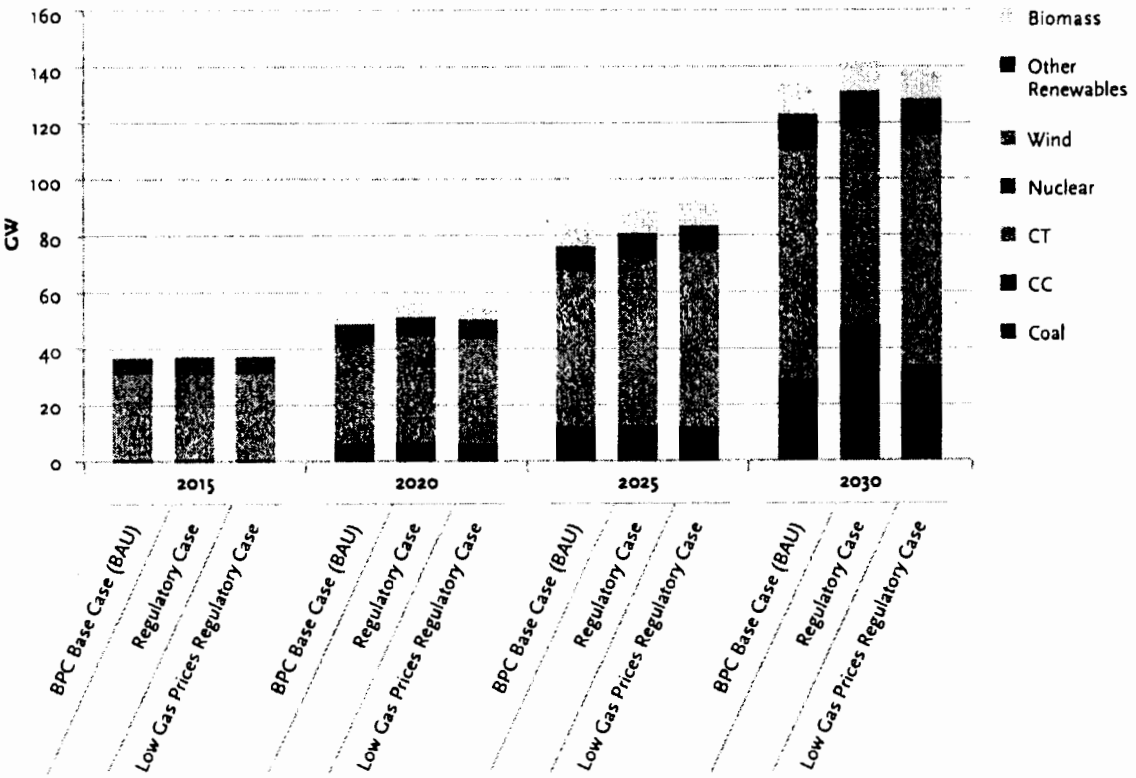


Figure B-4 shows projected natural gas prices at Henry Hub for the three cases. Prices in the BPC Base Case climb over time as demand for gas increases with electric demand growth. In the Regulatory Case, natural gas prices increase in 2015 and beyond in response to coal retirements and increased demand for gas to replace some part of that generation. As new coal capacity is brought online, gas demand and prices in the two cases approach each other and end up converging by 2030.

Figure B-5 shows cumulative U.S. capacity additions by type. In the BPC Base Case, the build mix is dominated by gas-fired capacity and renewable capacity, with the latter required to meet state RPS requirements. Higher natural gas prices in the Regulatory Case make new coal capacity an economic option, even with a financing risk premium to reflect potential carbon liabilities. Lower gas price assumptions in the Low Gas Price sensitivity case shift the economics back toward gas capacity, but some new coal capacity is also built.

FIGURE B-6: PROJECTED GENERATION MIX BY FUEL TYPE

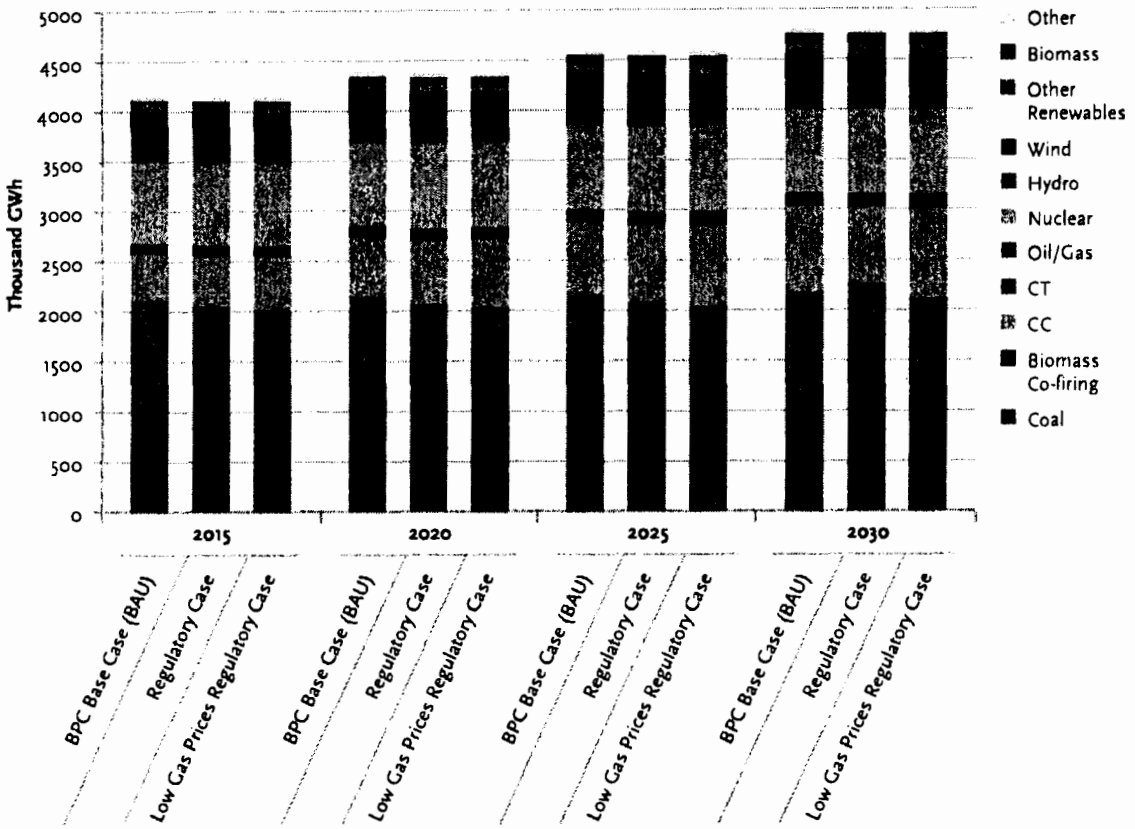


Figure B-6 shows the U.S. generation mix by type across the three cases. Generation from coal declines by 5–7 percent in the Regulatory Cases relative to the Reference Case due to retirements motivated by EPA's new regulatory requirements. Increased gas-fired generation makes up for the majority of that decline. In the Regulatory Case, generation from gas makes up roughly three-quarters of the decline in coal generation. With lower gas prices in the Low Gas Price Case, higher output from gas-fired generators makes up nearly 90 percent of the reduction from coal. In both cases, increased generation from renewables also contributes to meeting overall electricity demand growth over time.

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956 gal wastewater flow saved

106 lbs solid waste not generated

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1,594,600 BTUs energy not consumed

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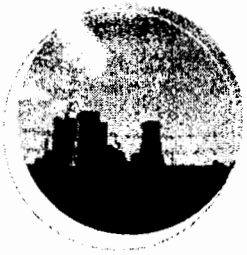

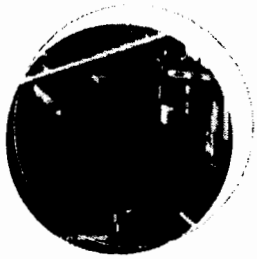

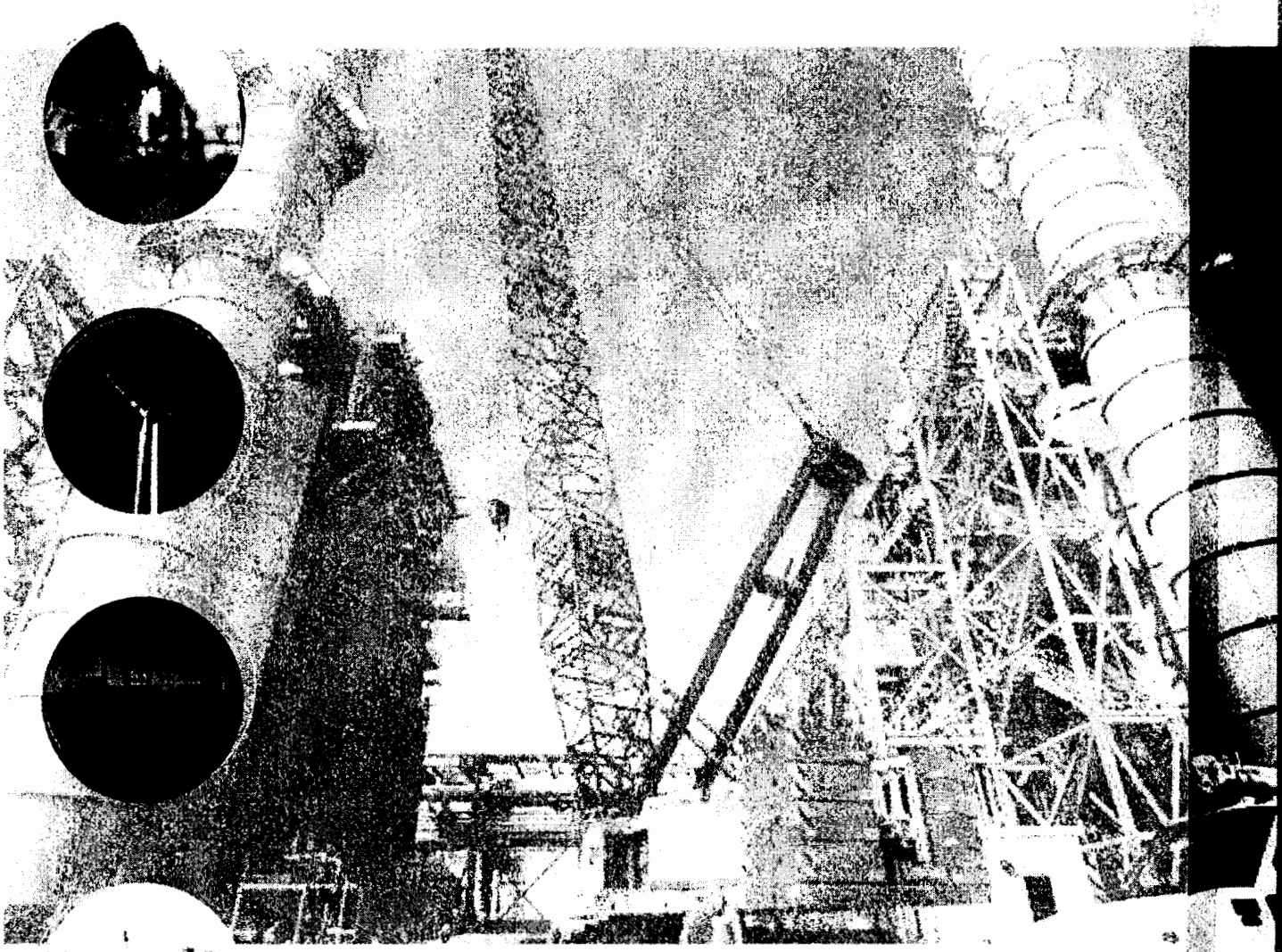

BIPARTISAN POLICY CENTER

AL-10-000-1535

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 2 2 2010

OFFICE OF
WATER

The Honorable James L. Oberstar
Chairman
Committee on Transportation and Infrastructure
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Oberstar:

Thank you for your letter of January 21, 2010, to Arvin Ganesan, Deputy Associate Administrator for Congressional and Intergovernmental Relations at the U.S. Environmental Protection Agency (EPA), requesting information and a briefing on the farm assessment grants awarded to Research Triangle Institute (RTI) and Environmental Resources Coalition (ERC). EPA is working diligently to fulfill your request.

On February 4, 2010, at the request of the Committee on Transportation and Infrastructure, we provided a briefing to Ms. Lelah Kahn of your staff. During that briefing we gave a full accounting of the status of both the RTI and ERC grants which included a specific discussion of the relationship between RTI and their subcontractor Validus. It is our hope that this briefing was useful and provided the necessary information. We would be happy to arrange another briefing with your staff to provide any additional information or materials. In the meantime, we are working to provide all of the currently requested materials to Ms. Kahn.

Again thank you for your interest in this very important matter. If you have any questions, please feel free to contact me or your staff may contact Greg Spraul in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Peter S. Silva
Assistant Administrator

AL-11-001-8452

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 0 9 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
U. S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of October 26, 2011, regarding recent lawsuits, settlements and consent decrees resolving litigation filed against the Environmental Protection Agency. Your letter requests responses to a number of detailed questions about lawsuits settled, pending or filed since January 1, 2009.

The EPA is currently working to identify, assemble and review the information requested in your letter. However, because of the comprehensive nature of the information requested, the EPA will need additional time to respond. Let me assure you that this request is a high priority, and we will provide a further substantive response as soon as possible.

Again, thank you for your letter. If you have any questions about this, please contact me or your staff may call Tom Dickerson of my staff at (202) 564-3638.

Sincerely,

Laura Vaught

Laura Vaught
Deputy Associate Administrator
for Congressional Affairs

cc: The Honorable Henry A. Waxman
Ranking Member

AC-11-001-8452

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 0 9 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

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Chairman
Committee on Energy and Commerce
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Again, thank you for your letter. If you have any questions about this, please contact me or your staff may call Tom Dickerson of my staff at (202) 564-3638.

Sincerely,

Laura Vaught
Deputy Associate Administrator
for Congressional Affairs

cc: The Honorable Henry A. Waxman
Ranking Member

AL-11-001-8452

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 17 2012

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Fred Upton
Chairman
Committee on Energy and Commerce
2125 Rayburn House Office Building
U.S. House of Representatives
Washington, D.C. 20510

Dear Chairman Upton:

Thank you for your letter of October 26, 2011, requesting information about environmental litigation against the U.S. Environmental Protection Agency (EPA) and the agency's practices with regard to the settlement of such litigation.

I am enclosing some general information on the EPA's practices in this area as well as responses to the questions in items 2 through 6 in your letter. EPA staff has discussed with your staff how best to accommodate your request for additional information. Consistent with those discussions, I am enclosing the first installment of the information requested in items 1, 7, and 8 of your letter. This information reflects available data from the Agency's databases and files. This first installment covers litigation under the Toxic Substances Control Act, the Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act), the Comprehensive Environmental Response, Compensation and Liability Act of 1980, the Superfund Amendments and Reauthorization Act, and the Emergency Planning and Community Right to Know Act. The EPA will continue to work to respond to the remainder of your request.

Again, thank you for your letter. If you have questions, please contact me or your staff may contact Tom Dickerson on my staff at (202) 564-3638.

Sincerely,

Arvin Ganesan
Associate Administrator

Cc: The Honorable Henry A. Waxman, Ranking Member

Enclosures

General Information

Under nearly a dozen environmental statutes, Congress has tasked the EPA with scores of duties, many with associated statutory deadlines. Pursuant to these duties, each year the EPA promulgates numerous rules and takes a broad array of other final agency actions. Many of these rules and other final actions are challenged in court. In addition, each year the EPA is subject to numerous "mandatory duty" and "unreasonable delay" lawsuits alleging that the Agency has failed to take an action it is required by law to take or has unreasonably delayed in doing so. These suits are brought by a variety of different types of entities, including corporations, industry organizations, environmental and community organizations, and State, local, and tribal governmental entities.[1]

The U.S. Department of Justice (DOJ) represents the EPA in defending these suits, and the Agency litigates many cases to final judgment. In some cases, however, the EPA determines, with DOJ's advice and concurrence, that it is in the best interests of the Federal government and the public to resolve the litigation through settlement. The determination whether to settle a lawsuit is based principally on the EPA's assessment, with DOJ's advice, of the Agency's duties under the relevant statute and the legal risks presented by the litigation. These factors are applied in an evenhanded manner, without regard to the identity or type of the plaintiff or petitioner in the case. The Assistant Attorney General for DOJ's Environment and Natural Resources Division must concur in any decision to enter into a settlement agreement or consent decree. With regard to consent decrees, a court generally will enter such a decree only if the court has determined that it is fair, reasonable, and consistent with the public interest and the underlying statute.

The EPA's use of consent decrees and settlement agreements to resolve lawsuits, whether brought by industry or environmental plaintiffs or petitioners or others, is a longstanding practice across both Republican and Democratic Administrations. The number and type of settlement agreements and consent decrees in any given year goes up and down over time and depends on a variety of factors, including the ebb and flow over time of Agency regulatory actions, of mandatory duties and deadlines triggered by such actions, and of lawsuits challenging such actions. Because the litigation process is often lengthy, settlement activity at any given time may be attributable in significant part to agency actions taken, or suits brought, years in the past.

The majority of the environmental lawsuits against the EPA are brought under the Clean Air Act.[2] Under section 113(g) of the Clean Air Act, the EPA is required to publish and take comment on a proposed settlement agreement or consent decree in litigation against the EPA under the Act at least 30 days in advance of finalizing such an agreement or decree. The EPA is not required to go through notice and comment on settlement agreements or consent decrees in defensive litigation under the other statutes it administers. However, public participation is provided for in most of the typical regulatory processes to

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[1] A recent Government Accountability Office (GAO) report on environmental litigation against the EPA found that "[n]o trend was discernible in the number of environmental cases brought against EPA from fiscal year 1995 through fiscal year 2010, as the number of cases filed in federal court varied over time." The report found that the average number of new environmental suits filed against the Agency per year during this period was 155. GAO, "Environmental Litigation: Cases against EPA and Associated Costs over Time" GAO-11-650 (Aug. 2011), at "Highlights" page and p. 13.

[2] A recent GAO report concluded that, from fiscal year 1995 through fiscal year 2010, Clean Air Act suits accounted for 59 percent of the environmental suits brought against the EPA. GAO, *supra* note 1, at "Highlights" page.

which the EPA commits in a settlement agreement or consent decree. Where the Agency commits to undertake rulemaking, for example, such participation generally is provided through public notice and comment procedures under the Administrative Procedure Act.

Responses to Questions 2-6

2. Does EPA notify all parties to the litigation, including intervenors, of EPA's and/or the Department of Justice's (DOJ) intention to potentially settle the lawsuit?

The EPA has no explicit policy or standard practice for notifying parties of its intent to pursue a settlement agreement in a given suit, and the Agency is not aware of DOJ having any such explicit policy or standard practice. The EPA's and DOJ's approach with respect to the potential settlement of any case or matter will depend upon the nature of the case and of the potential settlement. With DOJ's advice, case-by-case decisions are made regarding how best to handle each settlement process, including notification of other parties. In many cases, all parties to the case are informed of impending settlement discussions. This may be through filings with the court or through direct interactions with the other parties' counsel.

3. When settlement negotiations have commenced, does EPA and/or DOJ notify all parties to the litigation, including intervenors, that there are ongoing settlement discussions?

As explained above, the EPA does not have a standard operating procedure that governs communications with parties during settlement discussions, and the Agency is not aware of DOJ having any such standard operating procedure. Decisions with regard to such communications are made on a case-by-case basis. Once settlement discussions have commenced, other parties, including intervenors, are often informed.

4. What is EPA's and/or DOJ's process for deciding who will be included in the settlement discussions and therefore a party to the settlement agreement?

The EPA and DOJ evaluate each matter on a case-by-case basis to determine which parties to involve in settlement discussions. EPA litigation matters are often complex, involving multiple parties and multiple issues. Sometimes settlement discussions address only a portion of the issues in a pending matter, while other settlement efforts are intended to be more global with the goal of resolving the entire case.

5. Prior to announcing a settlement of litigation, does EPA and/or DOJ inform all of the parties to the litigation, including intervenors, of the anticipated resolution of the lawsuit?

The majority of the environmental lawsuits against the EPA are brought under the Clean Air Act.[3] Under section 113(g) of the Clean Air Act, the EPA is required to publish and take comment on a proposed settlement agreement or consent decree in litigation against the EPA under the Act at least 30 days in advance of finalizing such an agreement or decree. Thus, in Clean Air Act cases, notice of the anticipated resolution is provided to every party to the case as well as to the public before a final settlement is announced.

The EPA is not required to go through notice and comment on settlement agreements or consent decrees in defensive litigation under the other statutes it administers. Nonetheless, notice of the anticipated resolution is often provided to other parties, including intervenors. This may be through filings with the court or through direct interactions with the other parties' counsel.

6. Prior to announcing a settlement of litigation, does EPA and/or DOJ solicit the views of all of the parties to the litigation, including intervenors, on the draft terms of the anticipated settlement or resolution of the lawsuit?

As noted in the response to question 5, pursuant to 113(g) of the Clean Air Act, the EPA provides notice of, and the opportunity to comment on, the terms of proposed settlement agreements or consent decrees in suits brought under the Clean Air Act. Again, these constitute the majority of the environmental suits brought against the Agency. As explained in the response to question 4, litigation matters—and the efforts to settle them—vary greatly from case to case; each requires a unique consideration regarding which parties' inclusion would best serve the settlement process. Whether we solicit views of particular parties on draft terms varies depending on the details of the case at hand.

[3] A recent GAO report concluded that, from fiscal year 1995 through fiscal year 2010, Clean Air Act suits accounted for 59 percent of the environmental suits brought against the EPA. GAO, "Environmental Litigation: Cases against EPA and Associated Costs over Time" GAO-11-650 (Aug. 2011), at "Highlights" page.

Suits Filed from 10/1/2005 through 10/13/2011 under TSCA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
12/20/05	Public Employees for Environmental Responsibility v. EPA, 1-05CV02437 (D.D.C.)	Public Employees for Environmental Responsibility, Improving Kids' Environment, Project 504, Maine Lead Action Project, Group 14621 Community Action Assn, Organization of the New Eastside, Lutheran Metropolitan Ministry, The Lead and Environmental Hazards Assn, Bill Menrath	TSCA	Dismissed following settlement	Settlement finalized 1/28/08; dismissed 1/31/08.	$40,000.00
5/25/06	Coke Oven Environmental Task Force v. EPA, 06-1182 (D.D.C.)	Coke Oven Environmental Task Force	TSCA	Dismissed	3/5/07	N/A
11/13/06	Sierra Club v. EPA, 3:06-cv-05641-PJH (N.D. Cal)	Sierra Club, Improving Kids' Environment	TSCA	Dismissed following settlement	Settlement finalized 4/13/07; dismissed 6/25/2007.	$25,000.00
10/24/07	Sierra Club v. EPA, CV 07-05435 (N.D. Cal)	Sierra Club; Environmental Law and Policy Center; Pacific Coast Federation of Fisherman's Associations; Physicians for Social Responsibility; Unite Here.	TSCA	Dismissed following settlement	Settlement finalized 12/30/08; dismissed 6/26/2009.	$5,000.00

Suits Filed from 10/1/2005 through 10/13/2011 under TSCA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
2/15/08	Sierra Club v. Johnson, CV 08-0956 (N.D. Cal)	Sierra Club; Natural Resources Defense Council; Alliance for Healthy Homes	TSCA	Dismissed	12/12/08	N/A
3/9/08	Environmental Protection Services v. EPA, No. 08-1088 (D.C. Cir.)	Environmental Protection Services	TSCA	Case decided in favor of EPA.	11/25/09	N/A
5/15/08	Sierra Club et al v. EPA, No. 08-1193 (D.C. Cir.)	Sierra Club, Center for Environmental Health, Linda Kite, New York City Coalition to End Lead Poisoning, Make the Road to New York, New York Public Interest Research Group, Northern Manhattan Improvement Corporation, National Assn of Home Builders	TSCA	Settlement agreement; case held in abeyance pending completion of actions to which EPA committed in settlement agreement.	8/24/09	$127,882.00
5/15/09	John P. Vidiksis v. EPA, No. 09-12544 (9th Cir.)	John P. Vidiksis	TSCA	Case decided in favor of EPA	7/28/10	N/A

Suits Filed from 10/1/2005 through 10/13/2011 under TSCA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
7/8/10	Natl Assn of Homebuilders v. EPA, 10-1183 (D.C. Cir.)	Natl Assn of Homebuilders, Hearth Patio and Barbecue Assn, Natl Lumber and Building Materials Dealers' Assn, Window and Door Mfrs Assn	TSCA	Case pending	N/A	N/A
11/23/10	Center for Biological Diversity et al v. Jackson, 10-CV-02007 (D. D.C.)	Center for Biological Diversity, Project Gutpile, Public Employees for Environmental Responsibility, National Shooting Sports Foundation (intervenor), National Rifle Association (intervenor), Assn of Battery Recyclers, Inc. (intervenor)	TSCA	Dismissed in part on jurisdictional grounds; remainder pending	9/29/11 (partial dismissal)	N/A
12/22/10	Automotive Refrigeration Products Institute v. EPA, 10-1417 (D.C. Cir.)	Automotive Refrigeration Products Institute, Automotive Aftermarket Industry Association	TSCA	Case pending	N/A	N/A

Settlement Agreements and Consent Decrees in TSCA cases entered 10/1/05 through 10/13/11

Date of SA/CD Entry	SA or CD?	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Summary of SA/CD	Fees & Costs Paid
4/13/2007	SA	Sierra Club v. EPA, 3:06-cv-05641-PJH (N.D. Cal)	Sierra Club; Improving Kids' Health	TSCA	EPA agreed to send a letter to the Consumer Products Safety Commission identifying issues about the adequacy of quality control measures related to lead content of toy jewelry imported into and distributed in the US, and a letter to a number of companies alerting them to possible TSCA violations. EPA also agreed to pursue a rulemaking to require the submission of any existing health and safety studies pertaining to lead in consumer products intended for children. Plaintiffs agreed to dismiss the litigation.	$ 25,000.00
1/28/2008	SA	Public Employees for Environmental Responsibility v. EPA, 1-05CV02437 (D.D.C.)	Public Employees for Environmental Responsibility, Improving Kids' Environment, Project 504, Maine Lead Action Project, Group 14621 Community Action Assn, Organization of the New Eastside, Lutheran Metropolitan Ministry, The Lead and Environmental Hazards Assn, Bill Menrath	TSCA	EPA agreed to take final action by a date certain on an existing lead renovation, repair and painting proposed rule.	$ 40,000.00
12/30/2008	SA	Sierra Club v. EPA, C 07-05435 (N.D. Cal.)	Sierra Club; Environmental Law and Policy Center; Pacific Coast Federation of Fisherman's Associations; Physicians for Social Responsibility; Unite Here	TSCA	EPA agreed to specifically request comment on several chemical testing issues for the chemical nonylphenol ethoxylate and the chemical category nonylphenols in an advanced notice of proposed rulemaking it was already developing. Plaintiffs agreed to dismiss the litigation.	$ 5,000.00

Settlement Agreements and Consent Decrees in TSCA cases entered 10/1/05 through 10/13/11

8/24/2009	SA	Sierra Club et al v. EPA, No. 08-1193 (D.C. Cir.)	Sierra Club, Center for Environmental Health, Lind Kite, New York City Coalition to End Lead Poisoning, Make the Road to New York, New York Public Interest Research Group, Northern Manhattan Improvement Corporation, National Assn of Home Builders	TSCA	EPA agreed to propose certain changes to its recently promulgated lead renovation, repair and painting rule and to evaluate whether additional proposed changes were warranted.	$ 127,882.00

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
10/26/05	Rhode Island Resource Recovery Corporation v. Rhode Island Department of Environmental Management and United States Environmental Protection Agency, 05-451 (D.R.I)	Rhode Island Resource Recovery Corporation	CERCLA	Dismissed	3/7/06	none
11/3/05	Electronic Industries Alliance v. U.S. Environmental Protection Agency, 05-1414 (D.C. Cir.)	Electronic Industries Alliance	RCRA	Dismissed	5/9/06	none
12/14/05	Sunoco Partners Mktg & Terminals v. EPA, 05-74742 (E.D. Mich.)	Sunoco Partners Mktg & Terminals	RCRA	Dismissed	1/30/06	none
1/4/06	Cement Kiln Recycling Coalition v. EPA, Case No. 06-1005 (D.C. Cir.)	Cement Kiln Recycling Coalition	RCRA	Decision upholding EPA rule	7/13/07	none
1/27/06	Southeastern Environmental Task Force et. al. v. Bush, 1:06-cv-00498 (D. Ill.)	Southeast Environmental Task Force; Calumet Ecological Park Association	CERCLA	Dismissed	3/17/06	none
4/5/06	Davis v. EPA, No. 06-3049 (D. Kansas)	Davis -- pro se, prisoner suing EPA	CERCLA	Dismissed	5/15/07	none
10/24/06	Electronic Industries Alliance (EIA) v. EPA, 06-1359 (D.C. Cir.)	EIA	RCRA	Dismissed	8/15/09	none

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
10/27/06	Mark Townsend et. al., v. National Collegiate Athletic Assoc., Social Security Administration, Environmental Protection Agency, et. al., 6:07-cv-00007 (N. D. Ala.)	Mark Townsend (and all other truck drivers similarly situated)	RCRA	Dismissed	1/8/07	none
12/11/06	Stephens v. City of Anadarko, 06-1357-L (W.D. Okla.)	Vicki Y. Stephens, Trustee of the Stephens Children's Trust	RCRA	Dismissed	3/28/08	none
4/11/07	West VA Highlands Conservancy v. Johnson, No. 08-5153.	West VA Highlands Conservancy, Ohio Valley Environmental Coalition, Coal River Mountain Watch	RCRA	Dismissed	3/21/08	none
5/14/07	El Paso Natural Gas Company v. United States of American et al., 1:07-cv-00905.	El Paso Natural Gas Company (plaintiff) and the Navajo Nation (intervenor plaintiff)	Claim against EPA was under RCRA.	Case pending	n/a	n/a
6/14/07	Arizona Mining v. Johnson, 1:07-cv-01054 (D. D.C.)	Arizona Mining Association; Phelps Dodge Bagdad Inc.; New Mexico Mining Association	EPCRA	Dismissed	4/22/10	none
10/23/07	Howmet Corp. v. EPA, 07-cv-01306 (D.D.C.); APPEALED (09-5360, D.C. Cir.)	Howmet Corp.	RCRA	Case decided in favor of EPA.	Final Appeal decision issued 8/6/10	none
11/25/07	New York v. EPA, 07-CV-10632 (S.D. N.Y.)	NY, AZ, CA, CT, IL, ME, MA, MN, NH, NJ, PA, VT	EPCRA	Dismissed	5/19/09	none
1/28/08	U.S. Tecnology Corp. v. Johnson, 2:08 CV 82 (S.D. Ohio)	U.S. Technology Corp.	RCRA	Dismissed	1/13/09	none

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
3/12/08	Sierra Club, et. al. v. Johnson, 08-cv-01409-WHA (N.D. Cal.)	Sierra Club; Great Basin Resource Watch; Amigos Bravos, Idaho Conservation League	CERCLA	Part of Claim upheld in one part; other parts dismissed on various grounds at various times	07/23/2008 (Order Denying in Part Defendant's Motion to Dismiss); 08/08/2008 (Order Dismissing Plaintiffs' APA Claim Without Prejudice); 02/25/2009 (Order Granting in Part Motions for Summary Judgment); 08/05/2009 (Order Granting in Part Motions for Summary Judgment); 01/12/10 (Order Granting Entitlement to Attorney's Fees); 02/01/10 (Court Order on Plaintiff's Motion for Attorney's Fees and Costs; Order)	$115,358
3/25/08	Creosote Council v. EPA, 10:08-cv-00512-JR (D. D.C.)	Creosote Council, Koppers Inc., Southern Pressure Treaters Assoc., Western Wood Preservers Institute, Treated Wood Council	EPCRA	Stayed pending further action from EPA.	n/a	none

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
3/31/08	Vanadium Producers and Reclaimers Ass'n (VPRA) v. EPA (No. 08-1142) (D.C. Circuit)	VPRA; American Petroleum Institute (API); Louisiana Environmental Action Network (LEAN) and Sierra Club, and Environmental Technology Council (ETC)	RCRA	Case held in abeyance pending consideration of administrative petitions.	n/a	n/a
4/3/08	ATLANTIC WOOD INDUSTRIES, INC. v. EPA #08-1111 (D.C. Cir.)	Atlantic Wood Industries	CERCLA	Case held in abeyance pending cleanup	n/a	n/a
1/15/09	Waterkeeper Alliance v. EPA, 09-1017 (D.C. Cir.)	Waterkeeper Alliance; Sierra Club; Humane Society of the US; Environmental Integrity Project; Center for Food Safety; Citizens for Pennsylvania's Future; National Pork Producers Council	CERCLA/ EPCRA	Voluntary remand granted to US	10/19/10	none
1/18/09	Village of Stillwater, et al. v. General Electric Co. et al., 09-228 (N.D. NY)	Village of Stillwater, Town of Stillwater, Town of Waterford, Village of Waterford, Town of Halfmoon, County of Saratoga	CERCLA	Case dismissed -- EPA removed from case.	5/4/09	none

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

S

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
1/28/09	Sierra Club v. EPA, (Docket No. 09-1041) D.C. Circuit	Sierra Club, Alliance of Automobile Manufacturers, American Chemistry Council, American Coke and Coal Chemicals Institute, American Forest & Paper Association, Inc., American Gas Association, Edison Electric Institute, Environmental Technology Council, Inc., Metals Industry Recycling Coalition, National Mining Association, National Paint & Coatings Association, National Rural Electric Cooperative Association, Treated Wood Council, Utility Solid Waste Activities Group, Synthetic Organic Chemical Manufacturers Association, Inc.	RCRA	Settlement Agreement reached for EPA to consider revising definition of solid waste regulation. Under the agreement EPA will take final action by December 2012. Case remains open.	Settlement Agreement filed 9/10/2010.	n/a
1/28/09	American Petroleum Institute v. EPA, 09-1039 (D.C. Cir.)	API	RCRA	Litigation ongoing	n/a	n/a
2/12/09	Sierra Club v. EPA, 09-1063 (D.C. Cir.)	LEAN, SIERRA CLUB	RCRA	Dismissed	4/28/09	none
8/11/09	RAM, Inc. v. U.S. EPA, CIV-09-307-JHP (E.D. Okla.)	RAM, Inc.	RCRA	Court entered settlement agreement; case dismissed.	4/11/11	none
11/9/09	US Magnesium LLC v. EPA, 09-1269 (D.C. Cir.)	US Magnesium LLC	CERCLA	Dismissed	1/14/11	none

Suits Filed from 10/1/2005 through 10/13/2011 under RCRA/SWDA, CERCLA, and EPCRA

Opened	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Description of Outcome/Disposition	Date Decision Issued or Settled	Fees & Costs Paid
5/19/11	Waste Management Inc. v. EPA; Docket No. 11-1148 (D.C. Cir.)	Waste Management, Inc. , Metals Industries Recycling Coalition, American Gas Assoc., Rubber Manufacturers Assoc., Coalition for Responsible Waste Incineration, Edison Electric Institute, NORA, An Association of Responsible Recyclers, Inc., National Rural Electric Cooperative Assoc., Utility Solid Waste Activities Group, Arippa (coal miners assoc.), American Forest & Paper Assoc., Inc., American Home Furnishings Alliance, Inc., American Petroleum Institute, American Wood Council, Biomass Power Assoc., Cement Kiln Recycling Coalition, Construction Materials Recycling Assoc. Issues and Education Fund, Council of Industrial Boiler Owners, Downwinders At Risk, Hardwood Plywood & Veneer Assoc., Huron Environmental Activist League, LaFarge Building Materials, Inc., Montanans Against Toxic Burning, National Assoc. of Manufacturers, Portland Cement Assoc., Sierra Club, Rubber Manufacturers Assoc.	RCRA	Case pending		n/a

Settlement Agreements and Consent Decrees under RCRA/SWDA, CERCLA, and EPCRA
10/1/05 through 10/13/11

Date of SA/CD Entry	SA or CD?	Case Caption, #, and Court	Plaintiffs or Petitioners	Statute	Summary of SA/CD	Fees & Costs Paid
9/10/2010	SA	Sierra Club v. EPA, Docket No. 09-1041 (D.C. Cir.)	Sierra Club, Alliance of Automobile Manufacturers , American Chemistry Council, American Coke and Coal Chemicals Institute, American Forest & Paper Association, Inc., American Gas Association , Edison Electric Institute, Environmental Technology Council, Inc., Metals Industry Recycling Coalition, National Mining Association , National Paint & Coatings Association, National Rural Electric Cooperative Association, Treated Wood Council, Utility Solid Waste Activities Group, Synthetic Organic Chemical Manufacturers Association, Inc.	RCRA	EPA agreed to consider revising definition of solid waste regulation. Under the agreement EPA will take final action by December 2012. Case remains open.	n/a
4/11/2011	SA	RAM, Inc. v. U.S. EPA, CIV 09-307-JHP (E.D. Okla.)	RAM, Inc.	RCRA	RAM must pay $65,000 in civil penalties to EPA (in settlement of counter claim); case dismissed.	n/a

AC-10-002-0228

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 22 2010

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Barton:

Thank you for your December 8, 2010 letter which was a follow-up to your March 3, 2010 letter requesting information related to increases in the number of EPA employees reaching the highest levels of government pay scales as well as the potential use of funding from the American Recovery and Reinvestment Act of 2009 to augment already-high federal salaries. EPA replied to this request on November 30th, but the Committee staff requested additional information, including details of several professional services contracts.

In your recent letter, you have requested detailed information concerning several EPA professional service contracts. As per your request, we are working to gather information for the following contracts as identified in your letter:

- Contract # 68-W-02-056 with the Cadmus Group, Inc. for $1,775,996.00.
- Contract # 68-W-02-058 with Perrin Quarles Associates, Inc. for $1,821,453.66.
- Contract # 68-W-03-028 with ICF Services Company, LLC for $7,956,004.38.
- Contract # EP-D-04-069 with the Cadmus Group, Inc. for $5,919,124.00.
- Contract # EP-D-08-096 with the Cadmus Group, Inc. for $5,095,626.49.
- Contract # EP-S3-04-01 with Chenega Integrated Systems, LLC for $1,100,000.00.
- Contract # EP-S#-09-02 with Chenega Global Services, LLC for $587,862.00.
- Contract # EP-W-07-059 with E2 Inc. for $4,044,053.37.
- Contract # GS-10F-0090J with Booz Allen & Hamilton, Inc. for $1,377,032.50.

EPA will need additional time to respond to your request. Your request is a high priority, and we will respond further as soon as possible.

Again, thank you for your letter. If you have any questions, please contact me or your staff may call Christina Moody of my staff at (202) 564-0260.

Sincerely,

Arvin Ganesan
Deputy Associate Administrator
for Congressional Affairs

cc: The Honorable Henry A. Waxman
Chairman

AL-10-002-0208

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY - 4 2011

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Joe Barton
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your December 8, 2010, letter to Administrator Jackson, which is a follow-up to the U.S. Environmental Protection Agency's (EPA) November 30, 2010, response regarding several EPA professional service contracts. In your letter, you requested the following additional information concerning specific EPA professional service contracts:

- A copy of the contract;
- A description of the tasks carried out by the contractor and any subcontractors pursuant to the contract;
- The number of individuals included under the contract;
- Information on the nature of the final deliverable obtained by EPA; and,
- Where possible, a copy of the final deliverables.

The following are the contracts for which this information is requested:

1. Contract Number 68-W-02-056, The Cadmus Group, Inc. for $1,775,996.00.
2. Contract Number 68-W-02-058, Perrin Quarles Associates, Inc. for $1,821,453.66.
3. Contract Number 68-W-03-028, ICF Services Company, LLC for $7,956,004.38.
4. Contract Number EP-D-04-069, The Cadmus Group, Inc. for $5,919,124.00.
5. Contract Number EP-D-08-096, The Cadmus Group, Inc. for $5,095,626.49.
6. Contract Number EP-S3-04-01, Chenega Integrated Systems, LLC for $1,100,000.00.
7. Contract Number EP-S3-09-02, Chenega Global Services, LLC for $587,862.00.
8. Contract Number EP-W-07-059, E2 Inc. for $4,044,053.37.
9. Contract Number GS-10F-0090J (EP-W-06-018*), Booz Allen & Hamilton, Inc. for $1,377,032.50.

*This number indicates EPA's Delivery Order number under the GSA contract.

We have provided all of the requested information on the enclosed computer disks.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Ms. Christina Moody in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0260.

Sincerely,

Craig E. Hooks
Assistant Administrator

Enclosures

cc: The Honorable Fred Upton, Chairman
The Honorable Henry A. Waxman, Ranking Member

AL-002-0013

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 2 3 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Darrell Issa
Chairman
House Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Chairman Issa:

Thank you for your letter of November 21, 2011, to U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson regarding the EPA's recent proposal to collect certain information from concentrated animal feeding operations (CAFOs). I am pleased to respond on behalf of the Agency and am enclosing detailed responses to your questions.

Your letter expresses concerns about the EPA decision making regarding the proposed CAFO information collection rule and related litigation. The EPA is committed to conducting its litigation activities (including settlement negotiations) and administering its programs in accordance with the highest legal and ethical standards and in the public interest. As detailed in the enclosed responses, the EPA's actions in connection with the CAFO rulemaking are fully consistent with that commitment.

As explained in greater detail in the enclosure, the recent CAFO proposal is consistent with the EPA's authorities under the Clean Water Act and would support programs to improve water quality in a sound and reasonable manner. CAFOs represent a significant source of pollutants, such as nitrogen, phosphorus, and pathogens, which when discharged into nearby water bodies can harm public health and the environment. The proposed rule would call for the collection of basic information that would support efforts to improve regulatory and permitting programs for CAFOs. Ultimately, more complete and accurate information will assist governments, regulated communities, interest groups and the public in making more informed decisions regarding how best to protect water quality.

This rulemaking is still in the proposal stage, and the EPA has not committed to any final substantive outcome. The Agency published the notice of proposed rulemaking on October 21, 2011, and has requested comment on two proposed options as well as alternative approaches to achieve its water-quality related objectives. The Agency will closely review and respond to stakeholders' views on the proposal in the coming months as it begins its final decision-making process.

Thank you for your interest in this important subject matter. If you have further questions, please contact me or have your staff contact Tom Dickerson in my office at (202) 564-3638.

Sincerely,

Arvin Ganesan
Associate Administrator

Enclosures

Cc: The Honorable Elijah E. Cummings, Ranking Minority Member
Committee on Oversight and Government Reform

Responses to Questions in the November 21, 2011 Letter

1. Provide a full and complete explanation of EPA's decision to enter into, and subsequently finalize, settlement negotiations with NRDC in National Pork Producers v. U.S. Environmental Protection Agency. Provide all documents and communications referring or relating to EPA's decision-making process to settle with NRDC in National Pork Producers v. U.S. Environmental Protection Agency.

In November 2008, the EPA promulgated a rule revising the Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) regulations applicable to CAFOs in response to the decision in *Waterkeeper Alliance, et al v. EPA*, 399 F.3d 486 (2d Cir. 2005). 73 Fed. Reg. 70,418 (Nov. 20, 2008). Environmental and agricultural groups filed court challenges to the 2008 rule, which were consolidated in the U.S. Court of Appeals for the Fifth Circuit. In an effort to settle the litigation, the EPA reached out to all parties. The EPA met with agricultural petitioners to explore possible settlement. Unfortunately, the EPA and agricultural petitioners were unable to reach an agreement that would serve as the basis for a settlement. The EPA did reach settlement with the environmental petitioners (the Natural Resources Defense Council, Waterkeeper, and the Sierra Club). As explained below, the EPA's settlement with the environmental petitioners in this matter was reasonable and served the public interest.

The settlement agreement the EPA reached committed the EPA to take two actions: (1) to publish a guidance document to assist permitting authorities in implementing the 2008 rule, specifically by explaining which CAFOs were now required to obtain permit coverage; and (2) to propose a rule that would require CAFOs to provide certain information to the EPA pursuant to CWA section 308, or explain in the proposal why the EPA was not proposing that information be submitted, and to take final action on the proposed rule by May 25, 2012. The settlement agreement does not commit the EPA to the substance of any final action on the rulemaking. It states that nothing in the agreement shall be construed to limit or modify the discretion accorded to the EPA by the CWA or by general principles of administrative law.

The EPA decided to enter into the settlement agreement for several reasons. First, even if the EPA cannot settle claims with all parties, it is in the EPA's interest to reduce the issues to be addressed in litigation. Second, in deciding to pursue settlement, the EPA conducted a careful assessment of the risks and potential ramifications for the Agency and affected stakeholders of an adverse decision. If the EPA had lost on the claims articulated by environmental petitioners and the court had remanded the issues to the EPA, the Agency could have been required to evaluate potential establishment of more stringent regulatory requirements and to undertake further rulemaking in this area.

In addition to the litigation advantages of settling, the actions the EPA agreed to take in the settlement agreement serve the public interest. The EPA committed to issue guidance that would assist CAFO owners/operators and states implementing the program to determine whether a CAFO is subject to the EPA's permit requirements under the 2008 rule. This guidance was designed to provide clarity to producers and the public.

Finally, the EPA viewed a potential information collection rule as useful to more effectively implement the CWA and the 2008 CAFO rule. Despite more than 35 years of regulating CAFOs, reports of water quality impacts from large animal feeding operations persist. In the context of a 2003 rulemaking related to CAFOs, the U.S. Department of Agriculture provided the EPA with estimates indicating that livestock operations where animals are confined produce more than 300 million tons of manure annually. 68 Fed. Reg. 7180. On the basis of that figure, the EPA estimated that animals raised in confinement generate more than three times the amount of raw waste than the amount of waste generated by humans in the Unites States and that CAFOs collectively produce 60 percent of all manure generated by farms that confine animals. *Id.*

Pollutants from manure, litter, and process wastewater can adversely affect human health and the environment. Whether from poultry, cattle, or swine, manure, litter and process wastewater contains substantial amounts of nutrients (nitrogen, phosphorus, and potassium), pathogens, heavy metals, and smaller amounts of other elements and pharmaceuticals. This manure, litter, and process wastewater commonly is applied to crops associated with CAFO operations or transferred off site. Where over-applied or applied before precipitation events, excess nutrients can flow off of agricultural fields into nearby water bodies, causing harmful aquatic plant growth, commonly referred to as "algal blooms," which can cause fish kills and contribute to "dead zones." In addition, algal blooms often release toxins that are harmful to human health.

In September 2008, the United States Government Accountability Office (GAO) issued a report to congressional requesters, recommending that the EPA "should complete the Agency's effort to develop a national inventory of permitted CAFOs and incorporate appropriate internal controls to ensure the quality of the data." GAO, Concentrated Animal Feeding Operations – EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality, GAO-08-944 5 (2008), 48. EPA officials stated that "EPA does not have data on the number and location of CAFOs nationwide and the amount of discharges from these operations. Without this information and data on how pollutant concentrations vary by type of operation, it is difficult to estimate the actual discharges occurring and to assess the extent to which CAFOs may be contributing to water pollution." *Id.* at 31. The report also stated that "despite its long-term regulation of CAFOs, . . . EPA has neither the information it needs to assess the extent to which CAFOs may be contributing to water pollution, nor the information it needs to ensure compliance with the Clean Water Act." *Id.* at 48. The EPA responded to the draft GAO report by stating that the Agency would develop a comprehensive national inventory of CAFOs. *Id.* at 76.

The information the EPA proposed to collect pursuant to the first option in its proposed rulemaking would enable the EPA, states, and others to determine the number of CAFOs in the United States and their locations. Under a second proposed option, the Agency would collect this information only for CAFOs in focus watersheds where there are greater water quality concerns associated with CAFOs. Water quality impacts from CAFOs may be due, in part, to inadequate compliance with existing regulations or to limitations in CAFO permitting programs. The EPA believes that basic information about CAFOs would assist the Agency in addressing those problems. Complete and accurate information allows governments, regulated communities, interest groups and the public to make more informed decisions regarding ways to protect the environment.

If the Committee desires further information in connection with this subject, EPA staff will work with your staff to accommodate any such interest.

2. Provide a full and complete explanation of EPA's decision to hire Nancy Stoner as Deputy Assistant Administrator for Water in February 2009, including whether EPA was aware or concerned about any potential conflicts of interest surrounding Stoner's hiring. Provide all documents and communications referring or relating to EPA's consideration, evaluation, and determination of Nancy Stoner's apparent conflict of interest, including any authorization of Stoner's work on the settlement agreement with the environmental petitioners.

Nancy Stoner serves in a non-career Senior Executive Service (SES) position at the EPA. These types of positions exist pursuant to the Civil Service Reform Act of 1978, Pub. L. 95-454, 92 Stat. 111, and 5 C.F.R. 214.401(a). Non-career or other general SES appointments are not subject to competitive staffing requirements, but Agency heads must certify that the appointee meets qualifications required for the position. In addition, both the White House Office of Presidential Personnel and the Office of Personnel Management must approve each non-career appointment prior to the Agency's making the appointment.

Ms. Stoner began her non-career service on February 1, 2010, as the Deputy Assistant Administrator for Water. Since February 13, 2011, she has served as acting Assistant Administrator for Water. In January 2010, the EPA Ethics Office received notification that Ms. Stoner was under consideration for a position at the EPA, and consequently began discussions with her about potential conflicts and recusals. Because she would be a non-career SES candidate, the EPA Ethics Office reviewed Ms. Stoner's public financial disclosure report and informed her that she would be subject to Executive Order 13490, and therefore required to sign the President's ethics pledge. Prior to her appointment, the EPA Ethics Office reviewed and certified Ms. Stoner's financial disclosure report and also drafted a screening arrangement to ensure she avoided any conflicts or impartiality issues. On February 4, 2010, the EPA Ethics Office met with Ms. Stoner to provide her with initial ethics training on these and other issues, as required by 5 C.F.R. 2638.703. Because of her position, Ms. Stoner is also required by 5 C.F.R. 2638.704 to take an ethics training course in each successive year, and has met this training requirement as well.

As evidenced by her signed screening arrangement, Ms. Stoner agreed not to participate in any particular matter involving her former employer, the Natural Resources Defense Council (NRDC), as a specific party under the federal impartiality regulations until February 1, 2011. In addition, consistent with the President's ethics pledge, she agreed for an additional year, until February 1, 2012, not to participate in any particular matter involving specific parties in which NRDC is a party or represents a party.

Consistent with her screening arrangement, Ms. Stoner was not involved in any decision-making related to the settlement of claims related to the 2008 CAFO rule. In fact, most of the Agency's negotiations took place prior to her joining the EPA in February 2010. As early as October 2009, the EPA and the environmental petitioners filed a joint motion with the Fifth Circuit Court

of Appeals to extend the briefing schedule to allow the parties to continue settlement discussions. The court granted that motion. During her time at the EPA, Ms. Stoner has not been involved in any discussions related to the settlement with the environmental petitioners.

Under Executive Order 13,490 and federal ethics regulations, Ms. Stoner was precluded from participating in any specific party matter that involved her former employer, NRDC. In recognition of these restrictions, she properly recused herself from participation in any litigation or other matter in which NRDC was a party or represented a party. As part of the settlement agreement, the EPA agreed to propose and take final action on the CAFO information collection rulemaking. Generally speaking, however, rulemaking is not a "specific party matter" but rather a matter of general applicability. Since the CAFO information collection rulemaking is indeed a matter of general applicability, EPA ethics officials determined that Ms. Stoner could participate in it without violating her ethics pledge or her ethics obligations.

3. Provide a full and complete explanation of Nancy Stoner's involvement in EPA's decision-making process leading up to its settlement agreement in National Pork Producers v. U.S. Environmental Protection Agency.

a. **What role did Nancy Stoner, as EPA Deputy Assistant Administrator for Water, play in EPA's settlement negotiations with NRDC?**
b. **What interaction did EPA have with Nancy Stoner when she served as co-director of NRDC's Water Program?**
c. **Did Nancy Stoner alert EPA officials – including, but not limited to, Administrator Lisa Jackson, Assistant Administrator for Water Peter Silva, General Counsel Scott Fulton, and Senior Counsel for Ethics Justina Fugh – about her apparent conflict of interest?**
d. **If Nancy Stoner alerted EPA officials, what steps did EPA take to mitigate the appearance of a conflict of interest?**
e. **If Nancy Stoner did not alert EPA officials, when did EPA become aware of the apparent conflict of interest?**
f. **At the time Nancy Stoner rejoined EPA, was EPA aware of Nancy Stoner's apparent conflict of interest stemming from her employment by NRDC? If no, please provide an explanation.**
g. **Did EPA take any steps to notify the court, the other litigants, or industry stakeholders about Nancy Stoner's apparent conflict of interest? If no, please provide an explanation.**
h. **Did EPA institute a firewall, screen, or similar sequestration mechanism around Nancy Stoner as a result of her apparent conflict of interest? If no, please provide an explanation.**
i. **Did Nancy Stoner receive authorization from EPA to participate in the settlement negotiations with NRDC? If yes, explain who gave the authorization and provide documents sufficient to support your answer.**

Please see the response to Question 2.

4. Identify all EPA officials who were involved with or consulted in the settlement negotiations with NRDC in National Pork Producers v. U.S. Environmental Protection Agency, and provide their names and titles.

The following EPA officials contributed to the Agency's decision-making in settlement negotiations in *National Pork Producers v. EPA*:

Name	Title
Linda Boornazian	(Former) Director, Water Permits Division
Randy Hill	Deputy Director, Office of Wastewater Management
Jim Hanlon	Director, Office of Wastewater Management
Peter Silva	(Former) Assistant Administrator, Office of Water
Steven Neugeboren	Associate General Counsel, Office of General Counsel
Avi Garbow	Deputy General Counsel, Office of General Counsel
Scott Fulton	General Counsel, Office of General Counsel

5. Identify all EPA officials who ultimately approved the settlement agreement with NRDC in National Pork Producers v. U.S. Environmental Protection Agency, and provide their names and titles. Provide all decisional memoranda and coordination sheets referring or relating to EPA's action.

The following EPA officials approved the settlement agreement. If the Committee desires further information on this subject, EPA staff will work with your staff to accommodate any such interest.

Name	Title
Peter Silva	(Former) Assistant Administrator, Office of Water
Scott Fulton	General Counsel, Office of General Counsel

6. Identify all EPA officials, employees, or contractors who were involved or consulted in drafting the recently proposed CAFO regulation, and provide their names and titles.

The Office of Water (OW) was the lead program office in developing the EPA's proposed CAFO regulation published on October 21, 2011. The following officials in OW and the Office of General Counsel played a significant role in the development of the proposed rule:

Name	Title
Deborah Nagle	Director, Water Permits Division
Linda Boornazian	(Former) Director, Water Permits Division
Randy Hill	Deputy Director, Office of Wastewater Management
Jim Hanlon	Director, Office of Wastewater Management
Ellen Gilinsky	Senior Policy Advisor, Office of Water
Peter Silva	(Former) Assistant Administrator, Office of Water

Nancy Stoner	Acting (formerly Deputy) Assistant Administrator, Office of Water
Steven Neugeboren	Associate General Counsel, Office of General Counsel
Avi Garbow	Deputy General Counsel, Office of General Counsel

7. Identify all EPA officials who ultimately approved the recently proposed CAFO regulation, and provide their names and titles. Provide all decisional memoranda and coordination sheets referring or relating to EPA's action.

The officials identified in the response to question 6 each had a role in approving the proposed rule. If the Committee desires further information on this subject, EPA staff will work with your staff to accommodate any such interest.

8. Part of EPA's stated purpose in proposing the information-gathering regulation is to "improve EPA's ability to effectively implement the NPDES program and to ensure that CAFOs are complying with the requirements of the CWA. However, "if EPA's [NPDES] authority is limited to the regulation of CAFOs that discharge," as EPA acknowledges in the proposed rulemaking, for what purpose is EPA seeking information from CAFOs that do not discharge and over which EPA has no NPDES authority?

The EPA proposes to gather information from CAFOs pursuant to its authority in CWA section 308 to collect information. 33 U.S.C §1318(a). Section 308 authorizes information collection from "point sources," which includes CAFOs that discharge or may discharge. See 33 U.S.C. §1362(14) (the term "point source" is defined as "any discernible, confined, and discrete conveyance, including . . . any . . . concentrated animal feeding operation . . . from which pollutants are or may be discharged . . ."). The plain language of section 308 authorizes information collection to carry out the objectives of the Act, specifically including assisting in developing, implementing, and enforcing effluent limitations or standards, such as the prohibition against discharging without a permit. 33 U.S.C. 1318(a).

The EPA and authorized states need site-specific information regarding CAFOs that are subject to NPDES regulations to provide well-informed NPDES program direction (including issuance of regulations, policy and guidance documents), to provide oversight and enforcement of the NPDES program for CAFOs, to inform Congress and the public about environmental and human health impacts of CAFOs, and to better ensure protection of public health and the environment. The information the EPA proposes to collect is limited to basic information about CAFOs and would, in the case of the first proposed option, enable the EPA, states, and others to determine the number of CAFOs in the United States and where they are located. Under a second proposed option, the Agency would collect this information only for CAFOs in focus watersheds where there are greater water quality concerns associated with CAFOs. Under either option, this information would assist the EPA in developing, implementing, and enforcing the requirements of the Act. For further discussion of the importance of this rulemaking, please see the response to Question 1.

9. The proposed rule estimates that compliance with the regulation would collectively cost CAFOs $200,000 in additional administrative expenses. Please describe in detail how EPA

arrived at this figure and provide documentation sufficient to support your response. Is EPA concerned that this proposed rule may overly burden CAFOs, especially CAFOs that do not discharge, or small -to-medium CAFOs that are operating within their margins?

The EPA described burden and costs of the proposed rule in the Impact Analysis chapter of the preamble to its October 21, 2011 proposed rule. The proposed rule would not alter existing NPDES technical requirements for CAFOs, and therefore the cost impacts to CAFOs from the rulemaking are limited to the information collection burden it would impose. The EPA estimated this burden as part of the assessment of the administrative burden impacts that the Agency is required to complete under the Paperwork Reduction Act (PRA). The EPA submitted this analysis for review by the Office of Management and Budget (OMB) as stipulated in the PRA. We have enclosed a copy of this analysis along with our response to your letter.

As a starting point for estimating the reporting burden faced by CAFOs under the proposed rule, the EPA examined its PRA analyses as approved by OMB for the 2003 and 2008 CAFO rules. For these analyses, EPA had already accounted for the time CAFOs would require to document any nutrient management practices pursuant to these rules. These analyses had also estimated that those CAFOs applying for NPDES permit coverage under these rules would incur a nine-hour administrative burden to complete and file NPDES permit applications or notices of intent to be covered by a general NPDES permit. Any facilities that would be required to provide information related to land application in response to the proposed reporting rule are already assumed to have this information on file pursuant to the documentation requirements in the 2003 and 2008 rules. Moreover, permit applications require significantly more information than what the EPA is proposing to collect as part of the proposed rule. Therefore, the EPA estimated that a CAFO would need one hour to gather and submit the information on the proposed survey form to the EPA as indicated in the proposed rulemaking.

The EPA then combined the estimates of numbers of CAFOs that would be required to respond to the information collection request in the proposed rule with the estimates of the reporting burden under the proposed rule. The EPA thus projected that CAFO operators would collectively experience an increase in total annual administrative burden of approximately $200,000 on a national basis, or $29.30 per facility, as further described in our response to question 10 below.

In addition, as part of the required analysis under the Regulatory Flexibility Act, the EPA compared the administrative costs that would be incurred by CAFOs under the proposed rule to the existing compliance burden of NPDES CAFO regulations. The Agency concluded that the increment in annualized compliance costs would be significantly less than one percent of estimated annual sales for any of the affected entities.

10. Pursuant to the Regulatory Flexibility Act, EPA certified that the proposed rule "would not have a significant economic impact on a substantial number of small entities." Please describe in detail how EPA arrived at this determination, including any calculations and assumptions relied upon by EPA. Provide documentation sufficient to support your response.

As discussed in the Regulatory Flexibility Act section of the preamble to the proposed rule, the EPA examined sales figures reported in the U.S. Department of Agriculture's (USDA) publicly available aggregated data. The EPA concluded that it is unlikely that the estimated upper-bound burden impact (one hour per CAFO) would exceed one percent of the average annual sales of any of the livestock operations for whom sales figures were reported.

The EPA based its conclusion in part on an assumption that the extra hour of work that the CAFO would incur would equate to a one-time expenditure of $29.30. This figure is based on current U.S. Bureau of Labor statistics, which report an hourly wage of $29.30/hour for the category of First-Line Supervisors/Managers of Farming, Fishing, and Forestry Workers (45-1011) in the 2008 National Industry-Specific Occupational Employment and Wage Estimates (adjusted to March 2009 dollars using the Employment Costs Index for Private Industry workers and a fringe rate of 50 percent). The EPA compared this one-time expense with sample sales data from the 2007 USDA agricultural census. This data showed, for example, that a sub-sample of dairies in a representative geographic region reported annual sales that equated to a range of $2,490 to $4,830 in a calculation of one percent of annual sales. Comparable sales calculations for cattle feedlots in a representative watershed indicated a range of $3,344 to $28,612 for one percent of annual sales.

11. Given that two federal courts have struck down EPA's CAFO regulations in the last decade, will EPA ensure that the final rule conforms to the rulings in these cases, which reaffirm the plain language of the CWA?

The EPA will follow the holdings in the two decisions in question, *Waterkeeper* and *National Pork Producers (NPPC)*, with respect to any rulemaking action related to CAFOs. In *Waterkeeper*, the Second Circuit Court of Appeals vacated the provision in the EPA's 2003 CAFO rule requiring all CAFOs with a "potential to discharge" to apply for NPDES permits. The court ruled that the EPA has no statutory authority to require CAFOs to apply for NPDES permits on the basis of a mere potential to discharge, but rather only requires permits for "actual discharges." 399 F.3d at 505. The 2003 rule's permit application requirement was based on a presumption that a CAFO has the potential to discharge, and provided for individual CAFOs to demonstrate on a case-by-case basis that they had no potential to discharge. The court noted that "the EPA has not argued that the administrative record supports a regulatory presumption to the effect that Large CAFOs actually discharge. As such, we do not consider whether, under the CWA as it currently exists, the EPA might properly presume that large CAFOs—or some subset thereof – actually discharge." 399 F. 3d at 506, n.22.

In responding to the *Waterkeeper* decision, the EPA's 2008 CAFO rule proposed a "duty to apply" provision to require CAFOs that "discharge or propose to discharge" to apply for NPDES permits. CAFO owners or operators would assess whether the CAFO discharges or proposed to discharge. The rule required CAFOs that "discharge or propose to discharge" to seek permit coverage, and further defined "propose to discharge" as "designed, constructed, operated, or maintained such that a discharge will occur." 40 C.F.R. section 122.23(d)(1). On March 15, 2011, the Fifth Circuit Court of Appeals vacated the requirement that CAFOs that "propose" to discharge obtain NPDES permits and held that CAFOs are not liable under the CWA for failing to apply for NPDES permits. *Nat'l Pork Producers Council (NPPC) v. EPA*, 635 F.3d 738, 751

(5th Cir. 2011). In vacating the requirement that CAFOs that propose to discharge apply for an NPDES permit (the "duty to apply" provision) the court held that "there must be an actual discharge into navigable waters to trigger the CWA's requirements and the EPA's authority. Accordingly, the EPA's authority is limited to the regulation of CAFOs that discharge." *Id.* The court affirmed that "a discharging CAFO has a duty to apply for a permit." *Id.*

The EPA fully intends that any new regulatory requirements or revisions the Agency issues will adhere to the *Waterkeeper* and *NPPC* decisions described above.

12. In light of the decision of the Court of Appeals for the Fifth Circuit in National Pork Producers v. U.S. Environmental Protection Agency, 635 F.3d 738 (5th Cir. 2011), will EPA restrict any future permitting requirements solely to CAFOs that actually discharge pollutants?

As discussed above, the EPA fully intends to ensure that all future permitting requirements will adhere to the holding in *NPPC* that the EPA can only require CAFOs that discharge pollutants to apply for NPDES permits.

AL-09-000-9707

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 22 2009

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Darrell E. Issa
Ranking Member
Committee on Oversight and Government Reform
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Issa:

Thank you for your letter of June 23, 2009 concerning the *Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(1) of the Clear Air Act* that EPA issued in April 2009.

I appreciate your interest in this important matter. As you may know, much of the underlying information and analysis for the proposed endangerment finding had been included in the July 2008 *Advanced Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act* (73 FR 44353) and the supporting Technical Support Document in the docket. Earlier this year, the Office of Air and Radiation also convened a cross-office workgroup to develop the endangerment proposal. This workgroup received input from across the Agency, including the National Center for Environmental Economics. EPA also held two public meetings and is currently considering the comments it received as part of a 60-day public comment period on the proposal. I am confident that the proposed endangerment finding reflects the best available science and was developed through careful deliberation as part of a robust internal process.

EPA will need additional time to respond to your requests for records. In the interim, please find enclosed copies of documents concerning the development of the endangerment proposal that EPA has recently released under the Freedom of Information Act. Your request is a high priority, and we will respond further to your request as soon as possible.

Again, thank you for your letter. If you have any questions about this, please contact me or your staff may call Tom Dickerson of my staff at (202) 564-3638.

Sincerely,

Arvin Ganesan
Deputy Associate Administrator
For Congressional Affairs

cc: The Honorable Edolphus Towns
Chairman

AL-09-000-9707

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 22 2009

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable F. James Sensenbrenner, Jr.
Ranking Member
Select Committee on Energy Independence and Global Warming
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Sensenbrenner:

Thank you for your letter of June 23, 2009 concerning the *Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(1) of the Clear Air Act* that EPA issued in April 2009.

I appreciate your interest in this important matter. As you may know, much of the underlying information and analysis for the proposed endangerment finding had been included in the July 2008 *Advanced Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions under the Clean Air Act* (73 FR 44353) and the supporting Technical Support Document in the docket. Earlier this year, the Office of Air and Radiation also convened a cross-office workgroup to develop the endangerment proposal. This workgroup received input from across the Agency, including the National Center for Environmental Economics. EPA also held two public meetings and is currently considering the comments it received as part of a 60-day public comment period on the proposal. I am confident that the proposed endangerment finding reflects the best available science and was developed through careful deliberation as part of a robust internal process.

EPA will need additional time to respond to your requests for records. In the interim, please find enclosed copies of documents concerning the development of the endangerment proposal that EPA has recently released under the Freedom of Information Act. Your request is a high priority, and we will respond further to your request as soon as possible.

Again, thank you for your letter. If you have any questions about this, please contact me or your staff may call Cheryl MacKay of my staff at (202) 564-2023.

Sincerely,

Arvin Ganesan
Deputy Associate Administrator
For Congressional Affairs

cc: The Honorable Edward J. Markey
Chairman

Enclosure

AL-09-000-9707

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 03 2009

THE ADMINISTRATOR

The Honorable F. James Sensenbrenner
Ranking Member
Select Committee on Energy Independence and Global Warming
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Sensenbrenner:

Thank you for your letter of July 17, 2009, co-signed by Congressman Issa, requesting additional information and documents related to the U.S. Environmental Protection Agency's (EPA or Agency) proposed endangerment and cause or contribute findings and technical support document (TSD).

Your letter asks a number of questions and requests supporting documents related to the timeline used for developing the draft TSD as well as the role that the National Center for Environmental Economics (NCEE) and its staff played in reviewing the proposal and the draft TSD. Many of your questions also focus on the comments of Dr. Alan Carlin, a member of NCEE. I appreciate your interest in this important issue, and I agree with you that science and the law should be the forces that guide our work.

Dr. Carlin's views on climate science were included in the public docket of the Agency's proposed endangerment and cause or contribute findings for greenhouse gases on July 8, 2009. (Docket No. EPA-HQ-OAR-2009-0171). I believe that high quality science should inform the ultimate decision on this proposal. EPA will fully consider Dr. Carlin's views as we develop final endangerment and cause or contribute determinations.

As you know, EPA staff from across the Agency have been working for a number of years on evaluating the science that led to the proposed endangerment and cause or contribute findings, which EPA published in the Federal Register in April 2009. 74 Fed. Reg. 18886 (April 24, 2009). EPA is working expeditiously to review the approximately 400,000 comments it received during the 60-day public comment period and two public meetings it held. Please be assured that EPA decision makers are open to a diversity of viewpoints from both inside and outside the Agency. We are committed to using the best available science when evaluating these comments and making final endangerment and cause or contribute findings.

Attached, please find detailed answers to your questions, as well as responsive documents. EPA has carefully reviewed each of the documents responsive to your request and understands the time sensitivity of your request. At this time, we are not releasing a number of documents that would ordinarily remain internal to EPA in these circumstances, due to their inclusion of detailed personal privacy information about personnel matters. We are also not releasing a number of internal documents due to the ongoing deliberative process with respect to the proposed endangerment and cause or contribute findings. We are willing to re-visit and re-evaluate this body of documents upon completion of the deliberative process.

Thank you again for your letter. If you have further questions, please contact me, or your staff may contact Arvin Ganesan in EPA's Office of Congressional and Intergovernmental Affairs at (202) 564-4741.

Sincerely,

Lisa P. Jackson

Enclosures

cc: The Honorable Ed Markey, Chairman, Select Committee on Energy Independence and Global Warming
The Honorable Edolphus Towns, Chairman, Oversight and Government Reform Committee (without enclosures)
The Honorable Darrell Issa, Ranking Member, Oversight and Government Reform Committee

AL-11-000-6067

U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

U.S. Department of the Interior
1849 C Street, NW
Washington D.C. 20240

U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, D.C. 20250

U.S. Department of Commerce
1401 Constitution Ave., NW
Washington, D.C. 20230

April 27, 2011

The Honorable Frank Lucas
Chairman
Committee on Agriculture
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Doc Hastings
Chairman
Committee on Natural Resources
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas and Chairman Hastings:

We are writing in response to your recent request to our agencies to provide witnesses for a joint hearing of the House Committees on Agriculture and Natural Resources focusing on the Endangered Species Act (ESA) consultation process with regard to the Environmental Protection Agency's (EPA) pesticide registration actions under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). We look forward to presenting testimony to your Committees on May 3, 2011.

We respect the central role of your Committees with regard to this important subject matter and stand ready to provide you with the information you need to exercise your legislative duties. We wish to inform you, however, that the participation of officials from our agencies in this hearing could present substantial concerns with regard to its potential impact on pending and foreseeable litigation.

As you know, EPA and the National Marine Fisheries Service (NMFS) are both currently involved in litigation in federal court regarding the issuance and implementation of two NMFS's biological opinions, issued in 2008 and 2009 respectively, that address the effects of certain pesticides to threatened and endangered (listed) Pacific salmonids. In *Dow Agrosciences v. NMFS*, pesticide industry plaintiffs have challenged both the scientific basis for, and the adequacy of the process used to develop, NMFS' 2008 biological opinion addressing three organophoshate pesticides and 28 salmonid species listed as threatened or endangered under the ESA. Plaintiffs seek an order vacating and remanding that biological opinion back to NMFS for further consideration. Recently in that case, the 4th Circuit held that this litigation could go forward in U.S. district court in Maryland. In *Northwest Coalition for Alternatives to Pesticides v. EPA* (*NCAP*), the plaintiffs allege that EPA is violating sections 7 and 9 of the ESA because to date it has not implemented the reasonable and prudent alternatives and measures in NMFS 2008 biological opinion and in the 2009 opinion that addresses three carbamate pesticides. The *NCAP* plaintiffs seek an order compelling EPA to take action under FIFRA on a strict timeline to implement these opinions and they seek interim injunctive relief on the use of these pesticides pending completion of that FIFRA action. Also, in January 2011, EPA was sued by the Center for Biological Diversity for failing to consult with the Fish and Wildlife Service (FWS) and NMFS on large numbers of pesticides. Similarly, the Fish and Wildlife Service has received a formal notice of intent to sue, alleging unlawful delay in completing certain consultations, and thus is likely to be faced with litigation on related issues in the foreseeable future.

EPA, NMFS and FWS are represented by the U.S. Department of Justice (DOJ) in current and anticipated litigation and are working with DOJ to assess and determine the U.S. government's litigation position in the pending cases and other closely related matters. Our agencies and DOJ believe it is critical for the government to retain the discretion to develop its litigation position before federal government officials are asked to address and defend these matters before Congress in a public proceeding. We are concerned that a broad array of potential questions at the proposed hearing could effectively require the witnesses to provide answers to questions that are now squarely before the courts. A response from any agency witness to such questions could compromise the U.S. government's ability to fully develop its position and appropriately defend these cases or related litigation.

Areas of the subject matter of the proposed hearing that would present such concerns include, but are not necessarily limited to:

- Questions regarding the scientific soundness and/or legal support for the NMFS' biological opinions or the process through which they were developed;
- Questions regarding EPA's comments and views on the drafts of those opinions or regarding the substance and adequacy of EPA's responses to the final versions of those opinions;
- Questions regarding the relationship between the ESA standard for assessing jeopardy to threatened or endangered species and the FIFRA standards for cancelling and suspending pesticide registrations;
- Questions regarding EPA's legal authority and/or duty and/or plans to implement the biological opinions and/or specific elements thereof;
- Questions regarding the time frame necessary for implementing the biological opinions and and/or for developing a notice of intent to cancel or suspend affected pesticide registrations under FIFRA; and
- Questions regarding the impact of the pending National Academy of Sciences review of the science underlying the biological opinions on the obligations and plans of agencies concerned.

If you have further questions, feel free to contact us.

Sincerely,

Arvin Ganesan
Deputy Associate Administrator
for Congressional Affairs
U.S. Environmental Protection Agency

Christopher Mansour, Director
Office of Congressional and Legislative
Affairs
U.S. Department of Interior

Oscar Gonzales,
Acting Assistant Secretary
for Congressional Relations
U.S. Department of Agriculture

Daraka Satcher,
Deputy Assistant Secretary
for Legislative and Intergovernmental Affairs
U.S. Department of Commerce

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 06 2013

OFFICE OF
RESEARCH AND DEVELOPMENT

The Honorable Mary L. Landrieu
United States Senate
Washington, DC 20510

Dear Senator Landrieu:

Thank you for your letter dated March 5, 2013, to Bob Perciasepe, Acting Administrator of the U.S. Environmental Protection Agency (EPA), regarding legislation and targeted provisions in the 2012 National Defense Authorization Act of 2012. Because the Office of Research and Development is responsible for operating the agency's Small Business Innovation Research (SBIR) Program, your letter was referred to me for response.

Several of the questions that you have outlined in your letter regarding Phase III awards to the SBIR and the Small Business Technology Transfer (STTR) Award Program do not apply to the EPA's program, which includes only Phases I and II of SBIR. In addition, the EPA does not have an STTR Program. However, we are pleased to respond to your questions.

1. ***Has your Department or Agency put in place a tracking system to determine how many Phase III awards have been issued? If yes, please explain. If not, why not and when will this be completed?***

   Because the EPA is not a final customer for the technologies developed through SBIR, we do not issue Phase III awards.

2. ***Are your contracting officers aware of the SBIR/STTR policy directives that authorize sole source contracts for technologies that are an outgrowth of an SBIR/STTR project? If not, why not and how will the contracting officers be trained?***

   While we are aware of the SBIR/STTR policy directives that authorize sole source contracts for technologies that are an outgrowth of an SBIR/STTR project, and our contracting officers are aware of the provisions of the SBIR Reauthorization, unlike other agencies, the EPA is not the final customer for technologies developed under SBIR.

3. ***Has your Department or Agency decided to create a Commercialization Readiness Program? If yes, please give us information about its implementation. If no, please explain why not?***

   The agency does not currently plan to participate in the Commercialization Readiness Pilot Program for Civilian Agencies given the modest size of the EPA's SBIR budget.

4. ***If your Department or Agency has not established a Commercialization Pilot Program, please detail what actions your agency will take to promote the commercialization of its SBIR technology.***

   The EPA believes strongly in the importance of commercialization of the technologies supported through its SBIR Program. The EPA currently provides commercialization assistance to both its Phase I and Phase II companies through a commercialization contractor. In addition, the EPA provides a commercialization option to its Phase II awardees to incentivize partnerships. This year, this supplement is being raised to a dollar for dollar match to $100,000 if companies demonstrate third party investment. Lastly, while there has been considerable uncertainty surrounding the budget this year, the EPA always strives to issue awards to small businesses as quickly as possible. We did make funding recommendations according to our regular schedule, but had some delays in making final awards this year. All but one of our Phase I awards has now been issued.

We are pleased to inform you that we have made a Phase I award to Providence Photonics, LLC of Baton Rouge this year. They are working on an important environmental technology which will help improve air quality by monitoring the efficiency of flares at industrial facilities. We will be contacting your staff to ask if you would like to contact this company directly.

Again, thank you for your letter. If you have further questions, please contact me or your staff may contact Laura Gomez in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-5736.

Sincerely,

Lek Kadeli
Principal Deputy Assistant Administrator

AL-09-000-1256

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 18 2009

THE ADMINISTRATOR

The Honorable Nick J. Rahall, II
Chairman
Committee on Natural Resources
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Rahall:

Thank you for your letter of February 3, 2009, congratulating me on my appointment by President Obama to lead the U.S. Environmental Protection Agency (EPA) as its Administrator. I am grateful and humbled that President Obama selected me for this honor.

I appreciate your interest in the regulation of the disposal of coal combustion wastes, or coal combustion residuals (CCR). As your letter notes, such residues can often be put to safe, beneficial use and EPA promotes such use over disposal. Beneficial use can be an effective way to produce quality concrete and similar materials for infrastructure construction while reducing greenhouse gas emissions and energy consumption associated with the use of virgin material. For more information on the Agency's Coal Combustion Products Partnership, please see *http://www.epa.gov/c2p2.*

As you know, on March 9, 2009, I announced that EPA is quickly moving forward to develop regulations addressing CCR. EPA anticipates proposing a rule, open for public comment, by the end of this year. After the May 2000 Regulatory Determination concluding that national non-hazardous waste regulations under the Resource Conservation and Recovery Act Subtitle D were appropriate for CCR disposed of in surface impoundments and landfills, additional information and data became available. This information was made available for public comment in EPA's August 2007 Notice of Data Availability (NODA) (72 FR 49714). The NODA included an update of waste management practices—a joint U.S. Department of Energy (DOE) and EPA report entitled, "Coal Combustion Waste Management at Landfills and Surface Impoundments, 1994-2004," a further assessment of damage cases, and a draft risk assessment. In addition, the draft risk assessment was subject to peer review, which was completed in September 2008. Approximately 400 comments and recommendations were received, including those from the peer reviewers. EPA will consider this information as we move forward quickly to develop regulations to address the management of CCR in surface impoundments and landfills.

Finally, EPA is continuing to work with the Office of Surface Mining Reclamation and Enforcement (OSMRE) to modify the Surface Mining Control and Reclamation Act (SMCRA) and RCRA regulations to more effectively regulate the placement of CCR in surface or underground coal mines, as recommended by the National Research Council. In light of the December 2008 impoundment failure, and as I committed to doing in my confirmation hearing, I announced on March 9, 2009, that EPA will send letters to electric utilities with surface impoundments or similar units requesting information about the structural integrity of their units. These information requests are legally enforceable and must be responded to fully. EPA will work closely with other Federal agencies and the states to review the information provided and to visit these facilities to learn first hand whether these management units are structurally sound. A report of these findings will be made available to the public. Additionally, if any facilities are found to pose a risk of potential failure of their units, EPA will require appropriate remedial action.

I understand that my staff has been in contact with your office to provide updates about our activities related to this information request, as well as our efforts to follow up on the regulatory determination on the management of CCR in surface impoundments and landfills. We expect to continue to provide periodic updates as we move forward with these activities.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Amy Hayden, in EPA's Office of Congressional and Intergovernmental Relations, at (202) 564-0555.

Sincerely,

Lisa P. Jackson

AL-08-000-7130
AL-08-000-7640

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 11 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
U.S. Senate
Washington, D.C. 20510

Dear Chairman Bingaman:

Thank you for your letter of May 22, 2008, to Brian McLean, Director of EPA's Office of Atmospheric Programs, Office of Air and Radiation. Your letter contained questions for the record from the May 20, 2008, hearing entitled: "Energy and Related Economic Effects of Global Climate Change," before the Committee on Energy and Natural Resources.

Please find enclosed responses to your questions. I hope this information will be useful to you and the other members of the Committee. If you have any further questions, please contact me or your staff may contact Patricia Haman in my office at (202) 564-2806.

Sincerely,

Christopher P. Bliley
Associate Administrator

Enclosure

cc: The Honorable Pete V. Domenici
Ranking Member

Responses to
Questions for Brian J. McLean
U.S. Environmental Protection Agency
Committee on Energy and Natural Resources Hearing- May 20, 2008

Questions from Senator Bingaman:

1. **In his testimony, Larry Parker from CRS aptly quoted a former director of EIA, Dr. Lincoln Moses, who said: "There are no facts about the future". I think we can all appreciate the relevance of this statement to the debate in front of us. Since EPA was heavily involved in the previous sulfur dioxide trading regime, I am wondering if you would care to comment on the factors that caused early estimates of SO_2 allowance prices to be lower than originally projected and on the relevance of those factors to the question of CO_2 allowance prices.**

Two significant assumptions in our analysis of both SO_2 and NOx programs led us to overestimate allowance prices. First, end-of-pipe pollution control solutions were more effective than expected. In the case of SO_2, incentives were put in the bill to encourage state-of-the-art scrubbers that achieved 90% efficiency, but as the bill was being finalized, scrubbers with 98% efficiency became available. Today new scrubbers routinely attain 98% emission removal efficiency. Similarly, in the case of NOx, we assumed selective catalytic reduction (SCR) could achieve 70% to 80% emission reductions and that the lowest rates that could be achieved were around 0.06 lbs of NOx/mmBtu. SCRs have performed better than that (upwards of 90%) and we have seen rates on many units below 0.06 lbs/mmbtu.

Second, we did not anticipate the full suite of low cost options that have been deployed. In the case of SO_2, competition among railroads shipping low-sulfur coal led to substantial reductions in transport costs, a major component of coal cost. As low-sulfur coal became more readily available, it competed with scrubber design and equipment advances, reducing the cost of abatement. All of this contributed to medium-sulfur coal becoming marketable in the absence of a coal sulfur content limit which had existed under the traditional regulatory program. In the case of NOx, improved combustion controls reduced costs.

Depending on the precise terms of the legislation approved, EPA could expect to see similar performance as companies respond to the CO_2 price signal by developing and deploying technologies and innovative compliance strategies in ways that differ from the assumptions in our models.

2. **Both EIA and EPA project that the amount of CCS deployed under the Lieberman-Warner bill would be less than the amount deployed under the Bingaman-Specter bill, even though the implied bonus to CCS (on a per ton basis) is greater under the Lieberman-Warner bill. Could you comment on the factors driving these differences in CCS deployment? How do the costs of CCS compare the cost of nuclear in these models?**

While it is correct to say that the bonus *ratio* for CCS (on a per ton basis) is greater under the Lieberman-Warner bill, the total number of bonus allowances *available* for CCS projects is lower. In Section 3601 of S. 2191, the bill instructs the Administrator to create a Bonus Allowance Account for carbon capture and storage deployment and to allocate 4 percent of the emission allowances to the account for each calendar year from 2012 through 2030. The Bingaman- Specter bill does not contain any such limitation on the number of bonus allowances available for CCS projects. This limit on the total number of bonus allowances is the main factor driving the differences in EPA's modeled results of CCS deployment under the two bills.

Nuclear power is one of the lower-cost low-carbon generating options in our model when a carbon constraint is imposed, and the model builds as much as possible within the resource constraints. Advanced coal generation with CCS is a more expensive low-carbon electricity generation option that generally gets built after new nuclear generation capacity reaches the model constraint. During the 2015-2020 time period, our model finds that CCS is cost-effective only if the bonus allowances are available. Without the bonus allowance provisions, the model would not build CCS capacity until CO_2 allowance prices are high enough to make it attractive relative to other generation alternatives. The allowance prices reach this point by 2025 under EPA modeling and assumptions.

3. **All of the model analyses of Lieberman-Warner show that offsets are an important part of the compliance strategy in early years. If offsets are assumed not to be available as widely as the provisions allow, then the early targets become much more difficult to achieve at low cost. Since EPA generates the offset supply curves that other modeling groups employ, could you describe in some detail the steps that were taken to determine whether sufficient number of offsets would be available to meet the Lieberman-Warner targets and to calculate the cost and implied carbon price of such projects?**

EPA drew on experience gained through its government-industry greenhouse gas partnership programs to develop mitigation cost data for the non-CO_2 greenhouse gases in the energy, waste and industrial sectors, as well as for the forestry and agriculture sectors. These analyses were peer reviewed and published in EPA reports on Global Mitigation of Non-CO_2 Greenhouse Gases (EPA 430-R-06-005, 2006) and Greenhouse Gas Mitigation Potential in U.S. Forestry and Agriculture (EPA 430-R-05-006, 2005). Domestic and international offset supply curves were initially developed for EPA's

analysis of the Lieberman-McCain bill (S. 280) and described in EPA's March 26, 2007 memo to EIA. These offset supply curves were subsequently adapted for use in EPA's analyses of the Bingaman-Specter bill (S. 1766), and the Lieberman-Warner bill (S. 2191). In developing these offset supply curves EPA evaluated each individual domestic and international mitigation option to determine potential eligibility and feasibility over time for a future mitigation program. The offset supply curves therefore represent the costs associated with the "eligible" mitigation options. This detailed vetting of individual options, based on EPA's substantial emissions inventory and mitigation program expertise, substitutes and improves upon previous post-processing adjustments to the offset supply curves. The previous post-processing adjustments involved an across the board 50% reduction of the offset supply curves at every price. The detailed vetting of individual options results in a reduction of the offset supply curves that is similar in size to the previous post-processing adjustment.

The EPA reports, our memo to EIA, additional detailed explanations, and the data used for development of the offset supply curves which are all available on our web site: http://www.epa.gov/climatechange/economics/economicanalyses.html.

Questions from Senator Domenici:

4. **What are the major factors causing signatories to the Kyoto Protocol to miss their greenhouse gas emission reduction targets and are those shortcomings similarly foreseeable for the United States under a cap and trade regime?**

Signatories to the Kyoto Protocol (KP) are required to meet their emission limitation and reduction commitment under the Protocol for the five-year period from 2008 to 2012. Parties are not expected to report emissions data for 2008 until 2010. Because these commitments can be met by domestic action, through emissions trading or by acquiring reductions from either the Clean Development Mechanism or through Joint Implementation activities, national inventories for one year do not necessarily indicate whether a country will be in compliance at the end of the commitment period. Compliance will be determined after 2012 on the basis of whether or not a Party has sufficient Kyoto allowances to cover its emissions over the entire five-year period.

Although the U.S. can learn from steps being taken under the Kyoto Protocol as well as lessons learned from current U.S. cap and trade programs, we are not bound to any shortcomings that might ultimately be found in the Kyoto Protocol system.

5. **I hear supporters of a cap and trade approach to global climate change mitigation consistently refer to the sulfur dioxide program at the Environmental Protection Agency and compare it to the potential implementation of this legislation.**

Please compare the size and scope, including the ways in which regulated entities complied with sulfur dioxide limits and can be expected to comply with limits on carbon dioxide, of the two programs so that we may have a better sense of perspective on this comparison.

The U.S. experience with cap and trade since the passage of the 1990 Clean Air Act Amendments has been very successful and forms the basis on which other countries have modeled cap and trade programs, and are modeling their greenhouse gas (GHG) reduction programs.

The sulfur dioxide cap and trade program, known as the Acid Rain Program, began in 1995, targeting 110 coal-fired power plants (263 individual sources) in 21 eastern and Midwestern states. In 2000, Phase 2 of the program affecting virtually all electric power generators created the robust and dynamic market that has resulted in reducing emissions by nearly 50% and achieving the cap levels ahead of schedule. Currently, over 3,500 individual sources participate in the Acid Rain Program (2007 data). The flexibilities inherent in the program allowed for cost-effective decision making on a case-by-case basis by the owner or operator of a facility, without government interference, as to how a source chose to comply with the program requirements. If a source chose to change its method of compliance, it was free to do so without government review or approval. This resulted in huge economies of scale previously unimagined in traditional regulation (sometimes referred to as command-and-control). What made this possible were basic and straightforward requirements in the cap and trade program design that were easily understood by everyone: each ton of SO_2 emissions had to be offset by an allowance; if you wished to reduce below your allocation, you were free to sell your extra allowances or bank them for future use; if you emitted beyond your allocation, you needed to and were able to buy allowances from the market; at the end of the year, your emissions had to be equal to or less than the allowances you held in your account. A firm cap ensured the environmental goal was met and stringent continuous monitoring and reporting assured the integrity of every allowance, while providing the accountability that makes flexibility possible. All program data is made publicly available. Market and data transparency instilled public confidence in the process. Compliance is over 99%; the few instances of excess emissions have had compensating allowances automatically subtracted from accounts and stiff penalties automatically applied. EPA has issued a progress report every year on the status of the program. (For more detailed information, please see http://www.epa.gov/airmarkets/progress/progress-reports.html.)

The scope of the SO_2 program and a potential U.S. GHG mitigation program would be different. Currently, there are roughly 1,200 facilities covered by the existing Acid Rain Program (or roughly 3,500 individual sources of emissions). EPA estimates that 2,000-3,000 facilities would be covered by S. 2191. The primary difference is that the source

category for the Acid Rain Program focuses on electricity generators; while for the Lieberman-Warner proposal, source categories contributing to GHG emissions that cover the breadth of the economy have been discussed. The scale of the needed emission reductions under a future CO_2 program, as specified in bills EPA has analyzed, is both larger and more complex than under the SO_2 program. The electricity generation sector made up over 70% of the SO_2 contribution of total nationwide emissions, and restricting those emissions greatly reduced the acid rain problem and transport of SO_2. CO_2 emissions from electricity generation comprise about 30% of the total U.S. CO_2 emissions and other sectors, such as industry and transportation, contribute a significant portion of the total emissions.

Even though the scale of the problem is different, much of the experience that has been gained from the existing EPA cap and trade programs can be applied to GHG cap and trade programs, including the establishment of a robust market, a strong institutional infrastructure, and cooperative relationships with States and industry that focus on results and assisting with compliance.

It might also be useful to consider how a GHG cap and trade program would compare to the NOx cap and trade program used to reduce ozone transport in the Eastern U.S. In that case electricity generators and other industrial sources included in the program represented about 30% of the NOx emissions. The NOx Budget Trading Program successfully reduced those emissions by more than 70%. Because NOx contributes to the formation of ground level ozone, such reductions significantly contributed to a reduction in ozone transport. Coupled with significant reductions from mobile sources, 80% of the ozone nonattainment areas in the East were brought into attainment.

6. **I am concerned that the effect Lieberman-Warner would have on global greenhouse gas concentrations, as opposed to emissions, has been consistently overlooked. In the absence of meaningful reductions by other countries, I am told that your agency's analysis of S. 2191 finds that global concentrations would be reduced by about 1 percent by 2050.**

   What is the probable impact of a 1 percent reduction in global greenhouse gas concentrations? What potential consequences of global climate change would such a reduction prevent?

Legislative action by any one country – including the U.S. – would not be able to reduce GHG concentrations in the atmosphere enough to have much impact on the climate challenge. Global participation – especially by major economies – is needed. Our analysis of the Lieberman-Warner bill presents both the impact of the US acting alone, which would result in a 1.3% reduction in global CO_2 concentrations by 2050 taking into account the emissions leakage; and one possible assumption, based on a recent MIT report, where the Annex I Kyoto countries (except Russia) gradually reduce emission levels to 50% below 1990 levels and the rest of the world gradually reaches 2000 levels by 2050, which would result in a 9.7% reduction in global CO_2 concentrations. However,

it is noteworthy that only the European Union and Norway have made pledges to meet or exceed the 50% target by 2050 and very few countries have policies in place to set them on a trajectory to meet such targets.

The current analytic capabilities of EPA, and of the climate change research community in general, do not allow us to quantify with confidence what the specific change in end-point impacts (e.g., on human health, agricultural production, water resource availability) would be due to an incremental change in concentrations. The climate change research community has traditionally not examined the differences in potential future impacts between two incrementally different scenarios, but has instead focused on the impacts associated with different scenarios that diverge more significantly over time.

Nevertheless, because we know, from the scientific literature assessed by the Intergovernmental Panel on Climate Change, that risk to human health, society and the environment increases as the rate and magnitude of climate change increases, near term mitigation actions reduce long-term risks (including risk of exceeding critical thresholds), and increase our chances of eventually reaching lower stabilization targets.

7. We currently have no domestic capacity for the fabrication of large nuclear components such as pressure vessels, and we are told that our existing workforce can support the construction of no more than three reactors at a time.

Have you analyzed how many reactors we are physically capable of building by 2030?

We have not performed a comprehensive analysis of the number of new reactors that could be built in the U.S. by 2030; however, a 2005 study performed for the Department of Energy concluded that the necessary infrastructure is available or can be readily available to support the construction of 8 units in the 2010 to 2017 time period. In developing our projections for nuclear power, we drew on analyses performed for the Climate Change Science Program as well as the Electric Power Research Institute. Currently there are a number of factors constraining the ability to build reactors. For example, there is only one manufacturer (located in Japan) currently capable of manufacturing nuclear-grade, ultra-heavy (>350 tons) forgings needed to build a nuclear reactor and since there has been limited activity in the nuclear field since the early 1990s there is only a small trained US workforce in this area. However, Japan Steel Works has indicated that it is going to increase capacity and a number of other manufacturers have indicated their intention to develop capabilities needed for increased nuclear construction. In addition, the nuclear industry, recognizing the potential shortage of skilled workers and professionals, is actively recruiting and implementing training programs to ensure workforce adequacy for new construction.

8. **These analyses tend to list natural gas, nuclear, clean coal, renewables, and other forms of electrical generation as ways in which the caps in S. 2191 can be adhered to. As a result, we get some odd results that are likely impossible to achieve.**

Do any of the models you have looked at allow for economic slow-down as a compliance mechanism?

EPA's models do not use an economic slow-down as a compliance mechanism. In EPA's analysis, the first step is to develop a reference case for projected economic growth, technology deployment, and GHG emissions. EPA's reference case is traditionally benchmarked to the reference case in EIA's *Annual Energy Outlook*. The next step in the analysis is to estimate the effect of changes in technology investments that result from the climate mitigation policy on reductions in GHG emissions, economic growth, and energy and other commodity prices.

9. **As we discuss issues related to the share of allowances that will be auctioned or given away, what would be the consequences of these permits being bought up by people who don't intend to emit greenhouse gases?**

What would that do to the cost to emitters and their ability to comply with S.2191?

It is possible that individuals or institutions may purchase allowances with no intention of submitting them as compliance for the targeted emission levels of greenhouse gases. Such purchases may be made for several reasons. The purchase of an allowance could be used as a financial asset in the hope that this investment may result in higher returns than may be available elsewhere.

Individuals or groups may also decide to purchase allowances simply to retire them, thus effectively lowering the cap. This has occurred to a very limited extent in the Acid Rain program, but has not been enough to significantly affect the cap or allowance prices. Given the size of the market created by a bill like S.2191, EPA does not believe that such purchases would significantly affect the cap level or costs.

<u>Questions from Senator Menendez:</u>

10. **Current oil prices are nearly double those assumed in EIA's and EPA's analysis of climate policy. We can already see that high gasoline prices are inducing changes in consumer driving and vehicle purchasing behavior. Goldman Sachs recently estimated that oil prices might climb to $150-$200 per barrel within the near future. How might the projected costs of Lieberman-Warner and other climate policies change if the models were run**

with the higher (and more realistic) energy prices that we are already seeing today?

Does this mean that allowance prices and the total cost to the economy of the cap will be lower than current models suggest? Can the EPA or EIA rerun the models with estimates that reflect a future with sustained high prices for petroleum and other fossil fuels?

EPA's economy-wide models are designed to compare responses across policy and reference scenarios, not to forecast energy prices. To compare policy responses, we benchmark the EPA models to reference scenarios from EIA's Annual Energy Outlook. If we were to benchmark the models to the EIA High Energy Price Case, GDP would be slightly lower and total GHG emissions would also be lower compared to our standard reference case that had lower energy prices. If we modeled the Lieberman-Warner bill off of the High Price case, allowance prices would likely be lower than in our standard case, although it is difficult to estimate the precise impact. In a scenario that also limits the availability of nuclear and carbon capture and storage technologies, where we expect to see an increase in natural gas usage in the electricity sector, the increased cost of natural gas usage would likely offset some of the potential decrease in allowance prices.

Yes, EPA can run scenarios with sustained high prices for petroleum and other fossil fuels.

Questions from Senator Sanders:

11. Assumptions about offsets

The use of offsets is being defined in the models as a cost avoidance mechanism, but there is more to offsets than cost avoidance. Now, I understand the theory that paying someone to do something can be easier than changing your own behavior, but if we don't actually ensure emission reductions, it doesn't really matter.

What are the assumptions regarding the actual emissions reductions from offsets? Do the models assume a 1 to 1 relationship or do the models include some calculation for the fact that offsets can be difficult to quantify, or even difficult to verify?

The data and approach developed for EPA's assessment of offset potential is described in the answer to Senator Bingaman's third question. When applying the offset supply curves, EPA evaluates a variety of issues related to each mitigation option and adjusts the curve accordingly. The adjustments account for challenges in measuring, monitoring, and verifying offset reductions, as well as the lack of a clear market signal that the allowance price in the model run assumes.

To illustrate the approach, for international energy-related CO_2 emissions, the full abatement potential is included in the offset supply curve when a region has a market based greenhouse gas policy in place. When a region does not have a market-based emissions policy in place, the abatement potential is reduced by 90 or 75 percent, depending on the year. The approach used to estimate both domestic offsets and international credits is described in detail in EPA's March 26, 2007 memo to EIA which is on our web site:
http://www.epa.gov/climatechange/economics/economicanalyses.html.

Does the usage of offsets create opportunity costs for the adoption of renewable technologies, such as wind and solar, that reduce our overall emissions? Said another way: does the use of offsets have the potential to, in any way, delay a transition to renewables, since polluters could just pay someone to plant a tree instead of actually moving to sustainable energy?

To the extent offsets reduce the costs of achieving an emissions cap and the allowance price, they can delay the adoption of higher cost technologies. At the same time, the ability of offsets to reduce costs can provide the private sector more time to develop new advanced technologies, including renewables. Determining which higher-cost mitigation options might be delayed and by how much is dependent on the specific policy proposal as well as the assumptions made about the cost and performance of various technologies.

If one believed that offsets were delaying deployment of available technologies one could set a lower cap, set it sooner, or restrict the amount of offsets. Cap levels and timing and the availability of offsets should all be considered together.

Also, what are the assumptions in the models that determine the permanence of offsets? Is there a discount factor for offsets that fail because of natural or manmade reasons?

Our analysis takes a comprehensive accounting of GHG emissions, both crediting emission reductions and debiting emission increases. Therefore, we do not use a discount factor for offsets related to the possibility of failure.

Our analysis does include adjustments to the total amount of potential offsets. The adjustments made to mitigation potential for each offset category are designed to account for difficulties in measuring, monitoring, and verifying offset reductions in countries without a market-based greenhouse gas emissions policy. These adjustments include verifying that the offset emission reductions are achieved.

How is additionality worked into the models?

Since mitigation in our modeling is a function of a GHG allowance price, all mitigation undertaken is by definition additional to the reference case, that is, it would not have taken place in the absence of a GHG allowance price.

12. Failure to assess the benefits of action on global warming:

To date, all of the analyses of Lieberman-Warner and other bills assess only the costs of acting – they do not assess the benefits of acting and avoiding or mitigating global warming. Agencies typically analyze the costs AND benefits of their regulations. However, in the case of climate change, economists have a long way to go in monetizing benefits, assuming many of the benefits – like preventing catastrophic events such as hurricanes, droughts, and other extreme weather events, along with the spread of diseases, wars over resources, and the extinction of species – can even be monetized. The analyses of Lieberman-Warner by EIA and EPA do not attempt to quantify the benefits. They thus run the risk of focusing attention on the costs of climate legislation without balancing that information with the benefits of reducing climate change.

Do your analyses assess the benefits of avoiding or mitigating climate change? Aren't there important benefits that have not been considered at all? Examples that come to mind include the avoidance of risks from increased or more severe droughts, floods, hurricanes and wildfires; increased air pollution; catastrophic events such as melting ice sheets; unrest overseas affecting U.S. national security; and changing disease patterns.

Current analyses do not include the benefits of avoided climate change. At this time, these analyses only estimate the cost of achieving the levels of greenhouse gas emission reductions specified in the proposed legislation.

Although we cannot yet provide a cost-benefit analysis of proposed legislation, EPA is assessing the benefits of climate change mitigation. EPA has developed preliminary ranges of estimates for the marginal benefit of carbon dioxide reductions (Social Cost of Carbon). These estimates include many of the climate impacts listed in your question. We recognize, however, that the IPCC concluded that current estimates are still "very likely" to be underestimated because they do not include significant impacts that have yet to be monetized. Current estimates do not capture many of the main reasons for concern about climate change, i.e., non-market damages, the effects of climate variability, risks of potential extreme weather (e.g., droughts, heavy rains and wind), socially contingent effects (such as violent conflict), and potential long-term catastrophic events. We are thus reviewing available literature on a range of climate impacts to develop more robust and complete estimates of the benefits of greenhouse gas mitigation.

A related, but different, question is: do the "Business as Usual" scenarios included in your models (or the models you have seen, in the case of CRS) assume increased costs from the types of events I just mentioned, given that we are told that the events will become increasingly common unless we reduce global warming.

No, most modeling of legislative proposals do not address the costs of climate change impacts under Business as Usual scenarios.

What efforts is your agency making to assess the value of the benefits of climate change mitigation?

See answer to the first part of Question 2.

13. Untapped potential for renewables and energy efficiency:

Electricity from coal, nuclear power, and other traditional energy sources appear prominently in the modeling of Lieberman -Warner. Several renewable technologies, however, are available today that can generate inexpensive electricity without emitting carbon.

<u>Concentrating Solar Power</u> uses the sun to provide heat that drives a steam power plant. This one resource could provide up to 17% of our nation's electricity. A typical CSP plant being built today produces 250 Megawatts of power, emits very little CO2, and costs 1-2 billion dollars (about the same as a traditional coal plant and significantly less than a new nuclear plant, which can run between 4-12 billion). Over its operating life, today's CSP plants deliver power at $0.13 per kilowatt-hour, but the Department of Energy estimates that the costs for CSP will drop below $0.08 per kilowatt-hour once economies of scale are achieved. There are close to 400 Megawatts of CSP already operating in the southwest, and at least 3,000 Megawatts are in various stages of development.

<u>Wind</u> is another major opportunity. Just last week the Department of Energy's National Renewable Energy Laboratory released a report showing that wind could provide up to 20% of our nation's electricity needs by 2030. This resource will only cost $0.05 per kilowatt-hour, which is competitive with what we are paying for coal today.

<u>Geothermal</u> is another great opportunity. A report for the U.S. Department of Energy by the Massachusetts Institute of Technology suggests that geothermal energy could provide 100,000 Megawatts of new carbon-free electricity at less than $0.10 per kilowatt-hour, comparable to cost projections for coal with carbon capture and storage. This single renewable

resource could account for almost 10% of our nation's electricity needs in the future.

There are many other the possibilities, for biomass, photovoltaics, hydropower, and other renewable technologies, for example. But, once you add it all up, the United States could meet 2/3 of its electricity needs from sustainable energy.

Now, add on what we could be doing with energy efficiency, and it gets really exciting. According to the McKinsey Report, released last year, we have the technologies needed to reduce greenhouse gases at our disposal today.

Do your analyses take into account the strategies identified in the McKinsey Report for reducing greenhouse gases, including improving the economy's energy efficiency?

EPA modeling takes into account many of the strategies identified in the McKinsey Report. Our model results show more than 55 GW of additional new renewable energy capacity relative to the reference case by 2025, and much of the new capacity is from wind power. For energy efficiency, the models include the consumer response to higher electricity prices and capture some energy efficiency investments. EPA recognizes that energy efficiency is an important, readily available resource that can, under the right circumstances, be implemented at relatively low cost, and we are drawing on the expertise gained through these programs to improve the representation of energy efficiency opportunities in our models. Our review of the McKinsey analysis indicates that we have consistent estimates of mitigation available in 2030 for comparable costs. We also recognize that technologies continuously evolve and improve and thus we have an ongoing commitment to incorporate new information on cost and performance into our models.

The modeling approaches used by EPA and for the McKinsey analysis are different, however. The McKinsey analysis identifies a number of specific technologies and strategies to reduce emissions at a cost of less than $50 per ton of CO_2e. Our models do not explicitly represent individual end-use technologies, but rather represent changes in end-use demand for energy in aggregate. In addition, our models represent capital markets and can show the effect on the economy of increased investment in the energy sector, as well as mitigation tradeoffs across sectors. Despite these differences, the McKinsey analysis and our models have fairly consistent estimates of mitigation available in 2030 for similar CO_2 prices.

AL-08-000-3593

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 2 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

Thank you for your letter of March 18, 2008, which included questions for the record for the March 12, 2008 hearing on hardrock mining. Responses to your questions are provided as an enclosure to this letter.

As noted in Mr. Grumbles' testimony, EPA is committed to using all appropriate regulatory tools and collaborative partnerships to prevent or reduce pollution at mining sites and restore impaired watersheds.

EPA remains committed to protecting water resources and, by extension, public health from the impacts of mining. Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul, in EPA's Office of Congressional and Intergovernmental Relations, at (202) 564-0255.

Sincerely,

Joyce Frank

Joyce Frank
Principal Deputy Associate Administrator

Enclosure

QUESTIONS FOR THE RECORD
Committee on Energy and Natural Resources Hearing March 12, 2008
Questions for the Honorable Benjamin Grumbles

Questions from Senator Bingaman:

(1) **I am interested in how any AML program that we would enact should interface with the Superfund program. If a mine site is on the National Priority List, should funds under the hardrock AML program be used for remediation? Do you care to comment on that?**

As currently drafted, HR 2262 indicates royalty payments would be distributed by the Secretary of the Department of the Interior [sections 411(a) and (b)]. In addition, according to section 412, funds from the "Hardrock Reclamation Account" (Subtitle B of HR 2262) could only be used at Abandoned Mine Lands (AML) on Federal lands, Indian lands, or water resources that traverse, or are contiguous to Federal lands or Indian lands and affected by past mineral activities.

As you are aware, many AMLs in the western part of the US are "mixed ownership" sites where the AML is composed of both public and private lands. If the AMLs present significant public health or environmental concern and EPA's Superfund program cannot identify a PRP, we use appropriated funds from the Superfund Trust Fund to address contamination at AMLs located on private lands. As discussed in the response to Question 2 below, EPA may use its Superfund removal authorities on public lands, but must seek reimbursement to the Trust Fund of its costs from the federal agency that owns the land. Allowing funds from the "Hardrock Reclamation Account" to be used for the cleanup of "orphan" NPL sites, regardless of whether they are on public or private lands, would allow the Superfund program to focus its resources on other sites that pose a significant risk to human health and the environment.

(2) **Are Superfund monies available for use on mine sites located on federal lands? Do the land management agencies expend funds for cleanup of the sites on the lands that they administer?**

Under section 111(e)(3) of CERCLA, Superfund monies are generally not available for remedial actions "with respect to federally owned facilities." Therefore, to the extent mine sites on federal lands are "federally-owned facilities," EPA cannot use the Superfund for remedial actions to address releases of hazardous substances from those facilities. Further, under CERCLA section 120 and Executive Order (E.O.) 12580, the responsibility for non-emergency cleanup of these sites falls to the given federal land management agency. EPA does provide technical assistance to these cleanups where requested.

To address emergency situations, EPA has discretion under E.O. 12580, §9(i), to use Superfund money to pay for removal actions at sites under the jurisdiction, custody, or control of another federal executive agency. E.O. 12580 requires that these funds be reimbursed to the Superfund Trust Fund by the agency with jurisdiction, custody, or control.

Finally, yes, the land management agencies expend their appropriated funding for the cleanup of sites on the lands they administer.

(3) What water quality issues are posed by a uranium in-situ leach recovery facility? What regulations apply?

Possible water quality impacts from uranium in-situ leach (ISL) mining operations are primarily to ground water at the facility, although contamination of soil, surface water and air also may occur. Ground water contamination from uranium ISL mining can occur in three ways: (1) through unavoidable contamination of the exempted portion of the aquifer in which the uranium deposit is localized, (2) through unintentional contamination due to contaminants moving outside of the exempted aquifer area, and (3) as a result of facility structural failure and surface spills.

Examples of ground water excursions and contamination at ISL sites with references to various other studies, compiled by the United States Geological Survey and others organizations, are included in Appendix III of the report "*Technologically Enhanced Naturally Occurring Radioactive Materials from Uranium Mining, Volume 2: Investigation of Potential Health, Geographic, and Environmental Impacts of Abandoned Uranium Mines*", which is available through the EPA website at: http://www.epa.gov/radiation/docs/tenorm/volume-ii/402-r-05-007.pdf.

Regarding applicable water quality regulations, uranium ISL operators are required to comply with radiation, environmental and ground water protection standards developed by EPA, in accordance with Uranium Mill Tailings Radiation Control Act (UMTRCA). These standards are set out in 40 CFR Part 192. The Nuclear Regulatory Commission (NRC) and its Agreement States enforce these radiation, environmental protection, ground water protection and restoration regulations (NRC Regulations at 10 CFR Part 40). The licensing agency also must enforce all other applicable environmental laws, and the operator must comply with orders from the licensing agency for any required site cleanup.

EPA has authority to oversee remediation should the NRC or the Agreement State fail to achieve appropriate remediation or environmental law compliance under the Clean Water Act, Safe Drinking Water Act, Clean Air Act, Resource Conservation and Recovery Act (RCRA), or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

EPA has authority under the Safe Drinking Water Act to regulate the injection of the fluids at these sites. Consequently, prior to any ISL mining at these sites, a mine owner/operator must receive a license from the NRC or NRC Agreement State as well as receive an Underground Injection Control Program (UIC) Class III permit provided by either EPA or a State with UIC primary enforcement authority. The relevant UIC requirements for Class III wells are found in 40 CFR Part 144 and 146.

Under regulations promulgated pursuant to the Clean Water Act at 40 CFR 440 Subpart C, new source discharge of process wastewater to navigable waters is generally not allowed from mills using acid leach, alkaline leach, or combined acid and alkaline leach process for the extraction of uranium or from mines and mills using ISL methods. The only exception occurs if annual precipitation falling on the treatment facility and the drainage area, contributing surface runoff to the treatment facility, exceeds the annual evaporation. In such cases, the volume of water

exceeding annual evaporation may be discharged subject to numerical limitations for uranium, radium, and other listed pollutants.

(4) **What steps does EPA plan to take under the draft five-year plan to address the concerns regarding past uranium mining on Navajo Nation lands?**

EPA and its federal agency partners have developed a program of assistance to mitigate the health and environmental impacts of uranium contamination in the Navajo Nation. As part of this plan, EPA has agreed to lead and support a series of specific actions that are outlined in detail in the plan that was submitted to the House Government Reform and Investigations Committee on March 3, 2008, titled "Health and Environmental Impacts of Uranium Contamination in the Navajo Nation: Five-Year Plan". The plan may be accessed on the internet at: http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/63d4ce17a198b2e3882573c5007fae76/bf9a1608e7578ba388257405000499f8!OpenDocument

The plan includes EPA participation in the following activities:

EPA Led Activities:

- Assess and Remediate Contaminated Structures
- Assess Potentially Contaminated Water Sources and Assist Affected Residents
- Assess and Require Cleanup of Abandoned Uranium Mines
- Clean up the Highest-Priority Mine Site: Northeast Church Rock

Activities Involving EPA:

- Characterize the Highway 160 Site
- Assess the Tuba City Dump

(5) In 2004, the EPA Inspector General identified 63 hardrock mining sites on the Superfund National Priority List, and another 93 sites that could be added—with potential cleanup costs ranging between $7 billion and $24 billion. The IG estimated EPA's maximum costs for these cleanups as approximately $15 billion.

(5a) Your testimony today suggests there were, through FY 2007, 84 hardrock mining-related sites on the NPL, indicating the list is getting longer. Are all of the hardrock mining sites on this National Priority List now confined to nonfederal land?

Through 2007, most AML sites on the NPL are primarily located on private land, though there are some mixed ownership sites. EPA estimates that about 25% of the AML NPL sites are located on mixed ownership (private and public) lands, with larger portions being on the private lands.

(5b) Is it possible to assess the number of these nonfederal sites on the NPL list that have resulted from operations on previously-federal lands, patented before Congress established the existing moratorium?

EPA does not have the information needed to directly assess the number of non-federal sites on the NPL that resulted from operations on previously-federal lands, patented before Congress established the existing moratorium. This assessment may be possible but would require substantial involvement and leadership by the involved federal land management agencies.

(6) Previous GAO reports have suggested EPA consider the hardrock mining industry "a high priority" in developing financial assurance regulations mandated under the Superfund law—since the mining industry "presents taxpayers with an especially serious risk of having to pay cleanup costs for thousands of abandoned, inactive, and operating mines in the U.S."

(6a) What is the current status of EPA's efforts to develop such regulations?

EPA is currently analyzing whether financial assurance requirements under CERCLA section 108(b) may be needed for certain classes of facilities in light of modern waste management regulations and practices. No final decisions have been made yet regarding the timing and scope of any action that we may take under CERCLA section 108(b).

(6b) We have heard testimony before this Committee noting that modern mining operations may occur on a combination of private, state and federal lands. In your view, would the EPA's authority to require financial assurances under current Superfund laws extend to operations that span categories of land ownership?

CERCLA section 108(b) authorizes the promulgation of requirements for classes of facilities to establish and maintain evidence of financial responsibility consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances and does not differentiate between public or private land ownership.

EPA has not made a decision on what classes or sectors, if any, may be included under regulations pursuant to CERCLA section 108(b). In making that determination, EPA would take into account existing financial assurance under other federal laws.

EPA does have some options in dealing with existing Superfund sites. Under the principal of "Enforcement First," EPA negotiates settlements with Potentially Responsible Parties (PRPs) where the parties enter into a consent decree to cleanup hazardous substances at Superfund sites. EPA's model consent decree includes a financial assurance provision where the private PRP ensures they have adequate financial resources to conduct the cleanup. These agreements are developed on a case by case basis.

(7) Under a "Good Samaritan" provision, waivers need to be granted under what environmental laws in order for the provision to be effective? Why?

Under EPA's Good Samaritan Initiative, the CERCLA administrative tools issued in June 2007 do not involve the waiver of environmental laws. The administrative tools are based on CERCLA and its regulations. In order to get the protections afforded by the administrative tools, Good Samaritans must describe how the proposed cleanup project will be consistent with the National Contingency Plan (NCP). The Administration is working with key stakeholders, such as the Western Governors' Association, individual Governors, and watershed organizations, to enact targeted bipartisan legislation to remove remaining clean water liability roadblocks and obstacles deterring volunteer Good Samaritans from cleaning abandoned hardrock mines.

(7a) Please describe the administrative steps taken by EPA to facilitate Good Samaritan work at abandoned mine sites.

The Good Samaritan administrative CERCLA tools were published on June 6, 2007 and are posted on EPA's website at http://www.epa.gov/ow/goodsamaritan/. The tools include a model comfort letter, a model settlement agreement (an administrative order on consent or "AOC"), and other information to assist potential Good Samaritans.

(8) Does the reclamation of abandoned uranium mine sites involve any unique concerns or additional action or expense compared to the reclamation of other hardrock mine sites?

First, it is important to point out that "*reclamation*" generally means restoration of mined land to original contour, use, or condition. However, in the event of a release of hazardous constituents to the environment, EPA would be involved in the "remediation" of the hazardous constituents found in all media of concern, including soils, sediments, and ground and surface water.

Because of the dangers of radiation, both reclamation and remediation at abandoned uranium mine sites generally may present unique concerns and require additional action and expense relative to hardrock mine sites. The presence of radionuclides in the waste found at abandoned uranium mine sites, in general, requires specialized laboratory analyses and field instrumentation. Health and safety precautions as well as risk assessments need to take into consideration that radionuclides may also pose risks from gamma radiation, even when there is no physical contact with the contaminants. In addition, radioactive decontamination of equipment used in site cleanup or the disposal of radioactive materials can also present some unique issues and additional cost. We have also found a particular secondary concern exists where abandoned uranium mine wastes have been used to construct buildings. Such buildings can pose significant radiation health hazards to the residents, and may require a separate cleanup action at remote distances from the mine itself. Finally, the generation of dangerous radon gas from ore and waste rock also poses unique challenges and expenses.

Question from Senator Domenici:

(1) It is my understanding that the geologic layers in which I-S-L is undertaken need to be exempted before operations commence. What does that mean exactly – is the water in those areas potable prior to the siting of an I-S-L operations facility?

It is correct that under the Safe Drinking Water Act neither EPA nor a State with primary enforcement authority or "primacy" for the Underground Injection Control Program (UIC) will permit in-situ leach mining for uranium at a site unless an aquifer, or portion of an aquifer, which is an underground source of drinking water (USDW), is exempted. A USDW is defined at 40 CFR 144.3 as "an aquifer or its portion: (1) which supplies any public water system or which contains a sufficient quantity of ground water to supply a public water system; and (2) currently supplies drinking water for human consumption or contains fewer than 10,000 mg/l total dissolved solids and which is not an exempted aquifer."

While an exempted area within the aquifer may be potable prior to mining, in many situations, the naturally occurring ground water associated with uranium deposits, while technically a USDW prior to exemption, is not potable due to dissolved uranium species and degradation products. Nevertheless, an aquifer or portion of an aquifer may be exempted if it meets at least the federal minimum requirements set in 40 CFR 146.4.

The regulations allow an exemption if the aquifer does not currently serve as a source of drinking water; and it cannot now, and will not in the future, serve as a source of drinking water because it is: (1) mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a UIC Class II (oil and gas field) or III (solution mining) operation to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible; or (2) situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical; or (3) so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or (4) located over a UIC Class III well mining area subject to subsidence or catastrophic collapse. An aquifer can also be exempted if it has a total dissolved solids content of the ground water that is more than 3,000 and less than 10,000 mg/l and it is not reasonably expected to supply a public water system.

Exempting an aquifer or a portion of an aquifer means that protection of that aquifer, or portion, is excluded from protection that ensures nonendangerment of an USDW. Essentially, the exempted aquifer or portion thereof is therefore not a USDW in perpetuity. However, federal or state UIC regulations (e.g., construction, monitoring, reporting, mechanical integrity tests) still apply to the injection wells and the injection processes themselves to ensure protection from endangerment of contiguous USDWs.

Questions from Senator Wyden:

(1) **Ms. Struhsacker from the Northwest Mining Association stated in her testimony that existing environmental regulations are adequate to protect human health and the environment.**

Mr. Bisson and Mr. Grumbles, as representative of BLM and EPA, respectively, do you agree with Ms. Struhsacker's assessment? Or is the problem that existing regulations such as the Surfacing Mining Rule and the Clean Water Act are not adequate to manage hard rock mining activities and any subsequent environmental damage? Or is the problem this Administration's lack of enforcement of environmental laws?

EPA agrees that there are a wide range of current regulations that govern mining operations, including those promulgated under the Surface Mining Control and Reclamation Act and the Clean Water Act. In addition, it is important to note that states also regulate the environmental impact of mining under a variety of state laws and programs. Finally, the National Research Council generated a report entitled "Hardrock Mining on Federal Lands" in 1999, at the request of Congress, in order to assess the adequacy of the regulatory framework for hardrock mining on federal lands. The report identified what the Council saw as inadequacies in the regulatory framework at that time. This report can be found at: http://books.nap.edu/html/hardrock_fed_lands/index.html

EPA supports the appropriate use of state and federal enforcement to assure that those regulations are being complied with. For example, EPA's Office of Enforcement and Compliance Assurance (OECA) has a national enforcement priority for FY 08 – FY 10 on mineral processing and mining operations. This initiative is described at: http://www.epa.gov/Compliance/resources/publications/data/planning/priorities/fy2008priorityrcra.pdf.

Finally, regarding the question of whether there is a problem with the lack of enforcement of environmental laws, it is important to recognize that recent pollution control and cleanup commitments achieved through EPA's enforcement program is evidence of EPA's strong commitment to the enforcement of environmental laws. For example, in FY 07 alone, the program obtained commitments from industry, governments and other regulated entities to reduce pollution by nearly 900 million pounds. Through EPA's Superfund enforcement actions in FY 07, parties held responsible for pollution will invest $688 million to clean up sites and will reimburse $252 million to the Superfund, the highest total since 2001.

Questions from Senator Salazar:

(1) With regards to in situ leach extraction uranium mining, what are the criteria that the EPA uses to define the baseline level of water quality of the aquifer before mining operations begin?

As noted in a previous answer, the Nuclear Regulatory Commission (NRC) licenses uranium mills and ISL facilities under the authority of the Atomic Energy Act. NRC regulates all site operations including the injection of fluids using environmental and ground water protection standards developed by EPA in accordance with the Uranium Mill Tailings Radiation Control Act (UMTRCA).

In accordance with UMTRCA, in setting out standards in 40 CFR Part 192, which must be utilized by the NRC or its Agreement States in their own regulations and licenses for uranium extraction facilities, EPA utilized the regulatory requirements developed [(under what is now the Resource Conservation and Recovery Act (RCRA)] for hazardous waste facilities. The requirements are that the license permit establishes the baseline ground water concentration limits for hazardous constituents during processing operations and prior to closure. The concentration limits, in accordance with RCRA regulatory requirements, are either the existing background levels, or the EPA drinking water Maximum Contaminant Levels (MCLs) set under the Safe Drinking Water Act (plus a standard for molybdenum), whichever are higher. The EPA regulations also require the establishment of a point of compliance, ground water monitoring, and corrective actions.

The NRC's extensive application requirements for establishing existing ground water conditions in order to obtain a uranium source materials license are listed in 10 CFR Part 40, and its associated Appendix A, as well as NRC's guidance documents for approving ISL license applications. We are working closely with the NRC as they develop revisions, specifically for ISL facilities, to their existing ground water regulations to ensure that they incorporate EPA regulatory requirements developed under UMTRCA and are consistent with EPA regulations for UIC Class III injection wells.

(2) To what condition does the EPA require the aquifer be remediated and how is this condition verified?

EPA's regulations implementing UMTRCA in 40 CFR Part 192, require hazardous ground water contaminants to be restored to background or MCLs (plus a separate standard for molybdenum), whichever is higher. This standard is applied to the underground extraction area, regardless of whether or not it is or has been determined to be an exempted aquifer under the SDWA. If achieving these standards are deemed impossible or impractical after demonstrated restoration efforts by the ISL facility license operator, that operator can apply to the NRC, or Agreement State, for use of "Alternate Concentration Limit (ACL)" determinations for a contaminant.

The NRC or Agreement State can approve the application if they can determine that the ACL is as low as reasonably achievable, after considering practicable corrective actions, and that it will not pose a substantial present or potential hazard to human health or the environment, as long

as the alternate concentration limit is not exceeded. Acceptance of an ACL can only be agreed to after a rigorous 19 criteria review by NRC or the Agreement State (under RCRA regulations for hazardous waste facilities) is applied.

Under UMTRCA, the NRC (and its Agreement States), not EPA, is responsible for oversight and verification of the license restoration effort. Verification of the restoration by the ISL facility operator is based on the requirements in EPA regulations that a rigorous detection monitoring and reporting program must be established in accordance with 40 CFR 264.97 and 264.98 which were established under RCRA. The NRC has adopted these standards and requirements in its current 10 CFR Part 40 regulations. The facility operator must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent using the frequency of monitoring specified in the permit (license). Should contamination be found, NRC or an Agreement State requires detailed action for further restoration and compliance.

(3) Is the remediation condition codified in statute?

Under UMTRCA, the Atomic Energy Act (AEA), Section 83 (Ownership And Custody of Certain Byproduct Material and Disposable Sites) was amended to state that the Nuclear Regulatory Commission is responsible "...for any activity which results in the production of any byproduct material...shall contain terms and conditions as the Commission determines to be necessary to assure that, prior to termination of such license– (I) the licensee will comply with decontamination, decommissioning, and reclamation standards prescribed by the Commission for sites (A) at which ores were processed primarily for their source material content and (B) at which such byproduct materials deposited..."

Under UMTRCA, the AEA, Section 84 (Authorities of Commission Respecting Certain Byproduct Material) was also amended to state that "[t]he Commission shall insure that the management of any byproduct material..., is carried out in such manner as–(1) the Commission deems appropriate to protect the public health and safety and the environment from radiological and nonradiological hazards associated with the processing and with the possession and transfer of such material, (2) conforms with applicable general standards promulgated by the Administrator of the Environmental Protection Agency under section 275, and (3) conforms to general requirements established by the Commission, with the concurrence of the Administrator, which are, to the maximum extent practicable, at least comparable to requirements applicable to the possession, transfer, and disposal of similar hazardous material regulated by the Administrator under the Solid Waste Disposal Act, as amended."

UMTRCA further amended the AEA by inserting a new section 275 "Health And Environmental Standards For Uranium Mill Tailings." That section required EPA to develop, for these facilities, the environmental protection standards which are now embodied in 40 CFR Part 192, and incorporate to the maximum extent possible, the requirements developed by the Agency under the Solid Waste Disposal Act (now RCRA). These standards include the requirements for site and ground water remediation.

AL-10-000-3691

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 2 3 2010

THE ADMINISTRATOR

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515-6115

Dear Congressman Barton:

Thank you for the letter that you sent to me and Secretary of Energy Steven Chu on March 15, 2010. In it, you ask that President Obama's administration take appropriate action to ensure that the InterAcademy Council's review of the Intergovernmental Panel on Climate Change's (IPCC's) processes and procedures will be careful and transparent.

The Environmental Protection Agency (EPA) does not fund the InterAcademy Council or participate in its governance. Certainly, I agree that the Council's review should be careful and transparent. Fortunately, the statement issued by the Council on March 10, 2010 indicates that the Council concurs.

I am enclosing a copy of the letter that EPA Assistant Administrator Gina McCarthy sent to you on March 19, 2010. That letter describes EPA's use of peer-reviewed scientific findings compiled in the IPCC's Fourth Assessment report.

Again, thank you for your letter. If you have further questions, please contact me, or your staff may call Diann Frantz in EPA's Office of Congressional and Intergovernmental Relations at 202-564-3668.

Sincerely,

Lisa P. Jackson

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 19 2010

OFFICE OF
AIR AND RADIATION

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515-6115

Dear Congressman Barton:

Thank you for your letter of February 4, 2010, co-signed by Congressman Greg Walden, concerning the U.S. Environmental Protection Agency's (EPA) review of the science underlying the *Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act* (herein referred to as the Findings). Administrator Jackson has asked me to respond on her behalf. While many of your comments and questions were addressed in detail in EPA's Response to Comments document, I am happy to provide responses to your inquiries. In addition, EPA has received petitions to reconsider the Findings and we will be glad to provide you with our final response to the petitions when it is complete.

As you know, as a result of the Supreme Court's decision in *Massachusetts v. EPA*, the Agency became obligated to determine whether greenhouse gas emissions endanger the health or welfare of the American people. After EPA staff conducted a comprehensive survey of the soundest available science and carefully reviewed hundreds of thousands of public comments, Administrator Jackson determined last December that greenhouse gas emissions do endanger Americans' health and welfare.

The science supporting the Findings is clear and convincing based on observational data and multiple lines of evidence and types of analyses. Our current understanding of climate science and the causal linkage between human-caused greenhouse gas emissions and warming of the climate system has not been altered by the allegations regarding the United Nations International Panel on Climate Change (IPCC). The Findings do not rely on a single line of evidence, a single study, or a single assessment report. Other assessment reports, in particular those of the U.S. Global Change Research Program and National Research Council have also examined the information, taken a fresh look at the literature and existing assessments, and reached similar compelling conclusions regarding the threat of climate change. In its latest June 2009 report, the U.S. Global Change Research Program concluded that the climate is changing and the temperature is rising; that human activities are a major cause of this warming; that the consequences of this warming are significant and disruptive; and that risks to human health will increase as a result of climate change. Numerous National Research Council reports also support these conclusions.

Major scientific organizations in the United States, including the American Geophysical Union, American Institute of Physics, and the American Meteorological Society, among others, have issued statements affirming the human contribution to climate change and its impacts. Individual scientists have also spoken out publicly regarding the climate threat. In Texas, faculty from prominent universities published a joint statement that given the results of their own research and the "immense body of independent research conducted around the world," there is "no doubt" that heat-trapping gases from human activities are very likely responsible for most of the warming observed over the past half century, and that higher amounts of these gases in the atmosphere increase the risks to humans and the environment.[1]

In response to your questions regarding the development and peer review of the Findings' Technical Support Document (TSD), a full discussion of this process is described in the Response to Comments (RTC). As noted there, EPA did not develop new science as part of this action and rather synthesized the existing peer-reviewed assessment literature. The Agency relied primarily on the major assessment reports which collectively reflect the current state of knowledge on climate change science, vulnerabilities and potential impacts. These assessments are comprehensive in their coverage of greenhouse gases and climate change, and address the different stages of the emissions-to-impact chain necessary for the endangerment analysis. The assessments synthesize thousands of individual studies and convey the consensus conclusions on what the body of scientific literature tells us. The few examples of errors in the IPCC Fourth Assessment report that have come to light do not negate the credibility of the entire work of the IPCC. The Fourth Assessment report is a vast body of work contained in three volumes and a synthesis report comprising 2,927 pages, which cites thousands of references and states thousands of individual conclusions. Given the limited number and nature of the concerns raised, it would be premature to make the leap that either the overall integrity of the IPCC process or its conclusions are now in question.

We did not cite or rely on the specific Himalayan glacier study in question, nor did we rely on any other specific details about impacts in particular countries around the world in reaching our assessment of the threat of climate change to the health and welfare of U.S. citizens. The Findings were developed after considering observed and projected effects of greenhouse gases in the atmosphere, their effect on climate, and the public health and welfare risks and impacts associated with such climate change. The focus was on public health and welfare risks and impacts within the United States. Some evidence with respect to impacts in other world regions was also examined and these impacts serve to strengthen the case for endangerment because public health and welfare impacts in other world regions can in turn adversely affect the United States.

EPA submitted the TSD for review by a group of twelve federal climate experts, representing a range of technical specialties, in order to ensure that the TSD accurately summarized the conclusions and associated uncertainties from the assessment reports. The federal expert review was only one part of a much larger process of developing the TSD from

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[1] Statements from faculty at Texas A&M (http://atmo.tamu.edu/weather-and-climate/climate-change-statement) and the University of Texas (http://www.ig.utexas.edu/jsg/css/statement.html)

2007 until the present. In addition to the three rounds of technical review by the 12 federal experts, the TSD underwent three rounds of internal EPA review and two rounds of public comment. All documents reflecting the 2007 and 2009 Federal Expert Review of draft TSDs were released to you on September 3, 2009, in response to a previous request.

In response to your question concerning the role of EPA's Office of Research and Development (ORD) in the preparation of the TSD, staff from ORD reviewed and commented on the TSD throughout its development. A number of sections in the TSD were drafted by ORD staff, and ORD also participated in the intra-agency review process.

Concerning EPA's Action Development Process for developing the Findings, this process complied with all applicable Agency guidelines. An analytic blueprint is a document that details the Agency's plans "for data collection and analyses that will support development of a specific action" and serves to "expand EPA's opportunities to consider a broad range of regulatory (and non-regulatory) strategies...." EPA's senior leadership considered options for and provided significant input on developing the Findings. In light of the fact that the Findings do not themselves impose any requirements on industry or other entities, and that no new science or economic analyses were appropriate for this action, an official analytic blueprint document was not considered necessary.

In response to your question about contractor involvement in the preparation of the RTCs, EPA staff exclusively handled the substantive comment evaluation and response process, including analysis of the comments and development of comment responses. An EPA contractor played a limited role in the process, providing logistical and administrative support. For example, given the volume of comments received, the contractor helped to sort comments, which was important for ensuring that each significant argument, assertion and question contained within the totality of comments received a response. The contractor also tracked sources that were referenced in the public comments submitted, collected copies of the referenced sources for review by EPA staff, and provided non-technical copy editing of the documents. EPA staff evaluated and responded to the issues raised in the comments. The contractor did not have a substantive role in preparing the responses to public comments received or in EPA's use of scientific assessment reports, therefore we have no documents responsive to your request.

Regarding your questions on EPA's evaluation of the IPCC process, we note that the IPCC reports were one of several broad assessment reports that the Agency drew upon in developing the Findings, along with the wealth of information submitted through public comment to inform the decision. In considering the IPCC as a source for the Findings' TSD, EPA recognized that the IPCC reports have been officially vetted and approved by the U.S. Government through an open and transparent inter-agency review process led by the White House's Office of Science and Technology Policy. Given the involvement of EPA staff and other U.S. officials during the development of the IPCC reports, and the rigorous vetting and approval of IPCC products across the U.S. Government and by other governments, EPA determined that a duplicative evaluation of IPCC's conclusions would not be warranted.

Nonetheless, in considering public comments on the Proposed Findings and preparing the Final Findings, EPA did evaluate the review processes of the IPCC and other cited assessments (such as those of the US Global Change Research Program and the National Research Council). EPA's conclusions from this evaluation are described in the Final Findings and in the RTC document (RTC).[2] In particular, Volume 1 of the RTC, General Approach to the Science and Other Technical Issues, includes extensive discussion of EPA's use of assessment literature including the IPCC reports. On the basis of its evaluation, EPA concluded that the review processes of all of the assessment reports cited were robust, and that the use of these assessments, of which IPCC is one, as the primary basis for the Findings is consistent with the Information Quality Act (IQA) and internal information quality guidelines.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz in EPA's Office of Congressional and Intergovernmental Relations at 202-564-3668.

Sincerely,

Gina McCarthy
Assistant Administrator

[2] The Findings and eleven-volume Response to Comments document may be accessed at http://www.epa.gov/climatechange/endangerment.html

AL-08-000-2602

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 24 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable John Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Dingell:

Thank you for your letter of February 26, 2008, containing follow-up questions from the October 4, 2007, hearing before the Subcommittee on Environment and Hazardous Materials on the Environmental Protection Agency's Environmental Justice Program, and H.R. 1103, the Environmental Justice Act of 2007. Your letter requests responses to questions submitted by several Members of the Committee. As requested, separate letters have been developed for each Member, responding to the specific questions submitted.

Please find enclosed responses to your questions. I hope this information will be useful to you and the Members of the Committee. If you have further questions, please contact me or your staff may contact Carolyn Levine in my office at (202) 564-1859.

Sincerely,

Christopher P. Bliley
Associate Administrator

Enclosure

cc: The Honorable Albert Wynn, Chairman
Subcommittee on Environment and Hazardous Materials

EPA Responses to Questions for the Record:
October 4, 2007 Hearing on "Environmental Justice and the Toxics Release Inventory Reporting Program: Communities Have a Right to Know"
H.R. 1103, the "Environmental Justice Act of 2007"
H.R. 1055, the "Toxic Right to Know Protection Act"
Before the House Committee on Energy and Commerce
Subcommittee on Environment and Hazardous Materials

The Honorable Joe Barton and the Honorable John Shimkus

QUESTION 1: Can you name some successes from your EJ program, and related grant programs? How have communities benefited from the grant programs?

ANSWER: The Environmental Justice Small Grant Program has reached approximately 1,000 communities around the country and achieved notable successes in increasing awareness and building community capacity to address local environmental and public health issues. A few of these programs are highlighted below (see also Attachment 1, "Regional Success Stories"):

- Using an Environmental Justice Small Grant, the Cedar Tree Institute worked with 9 faith leaders, representing 200 congregations, to conduct a clean-sweep collection of household hazardous waste and increase the public's awareness of environmental impacts in the Central Upper Peninsula of Michigan. This is a rural area with a large tribal and low-income population. The community benefit from this collaborative effort is the collection of 47 tons of materials (including mercury) in one day, exceeding the amount collected by the Delta County Waste Facility over the last 7 years.

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- "We Mean Green Clean," a project conducted by the Healthy Homes Campaign in Chicago, Illinois, resulted in the Chicago Public School Office of Purchasing adopting a single source purchasing initiative that meets the Green Seal, ensuring products contain no carcinogens, are not combustible or corrosive to the skin and eyes, and that cleaners do not contain mercury, lead, arsenic, cadmium and other harmful compounds. The Chicago Board of Education also adopted a formal district policy that emphasizes green cleaning goals. The Chicago Public School Policy on green cleaning impacts 600 schools, over 430,000 students, and over 2,600 janitorial workers.

- Our EJ Collaborative Problem Solving (CPS) cooperative agreements have garnered many successes as well. For example, our recipients have:

    - Cleaned up and prepared an abandoned lot for redevelopment in Anahola, Hawaii;
    - Educated the residents of Tacoma, Washington about safe and sustainable methods of harvesting shellfish;
    - Reduced exposure to asthma causing contaminants and increased community access for asthma treatment for residents of a Brooklyn, New York community;
    - Helped the residents of Mebane, North Carolina address issues with failing septic systems, potentially impacting 500 homes; and
    - Reduced lead exposure among residents of Pacoima, California, a Los Angeles area city.

QUESTION 2: H.R. 1103 requires EJ efforts at all agencies of the federal government. Does your testimony represent the views of every agency and department of the federal government?

ANSWER: EPA's testimony was approved through the inter-agency review process. EPA provides a leadership role in the federal government as the Chair of the Federal Interagency Working Group (IWG) on Environmental Justice. Through the IWG, EPA encourages and supports other federal agencies' efforts to integrate environmental justice into their programs, policies and activities. EPA has also developed formal agreements with federal agencies to enhance our collective efforts to address the environmental and public health concerns facing communities (e.g., a Memorandum Of Understanding with CDC/ATSDR), including communities with EJ concerns (see Attachment 2)).

Have any other federal agencies attempted to institutionalize their EJ Programs as comprehensively as EPA is doing?

ANSWER: EPA is comprehensively integrating environmental justice into its core programs, policies and activities and its planning and budgeting processes. We intend to lead by example: EPA's Strategic Plan 2006-2011 has EJ commitments and targets in all 5 goals, and has designated eight national EJ priorities. Each program office and region is implementing an EJ Action Plan, and program offices are working to integrate EJ into the National Program Managers' guidance. EPA is developing and conducting EJ Reviews of specific programs and Agency functions. EPA has also developed regulatory template language to discuss EJ concerns in its regulatory actions. Other agencies are best able to answer questions about their own EJ programs and efforts.

QUESTION 3: Where do you see the EJ Programs in 5 years?

ANSWER: We believe that we have put into place many of the building blocks necessary to show results in terms of environmental or public health improvements. Over the course of the next five years, we foresee the continued development and integration of EJ into EPA's daily work, with the goal of improving our ability to show tangible results.

- Measurable results in program activities – via EPA Strategic Plan goals/targets and EJ Action Plans
- Integration into EPA's rulemaking process – via EJ regulatory template language, EJ training for rule writers, and results of EJ Reviews of rulemaking/standard-setting functions
- More effective EJ integration into programs, policies and activities – as a result of EJ Reviews
- More consistent way of identifying areas with potential EJ concerns – as a result of EJSEAT (see answer to question 4 below).

How would H.R. 1103 alter this plan?

ANSWER: We have no reason to believe that H.R. 1103 would alter our plan.

QUESTION 4: How do you intend to consistently identify areas of potential EJ concern?

ANSWER: The Office of Enforcement and Compliance Assurance (OECA) is developing the Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT), which uses select federally-recognized environmental, health, compliance, and socio-demographic data to create a consistent method for identifying areas with potential disproportionately high and adverse human health or environmental effects. OECA is continuing development of the tool this year, by testing potential applications to OECA's programs.

How are you conducting the EJ Reviews?

ANSWER: EPA is nearing completion of developing protocols to begin conducting EJ Reviews to determine the extent to which the Agency's programs, policies, and activities identify and address environmental justice concerns. EPA convened an Agency-wide EJ Reviews Workgroup that developed the protocols for conducting EJ reviews, covering the Agency's core function areas (i.e., rule-making/standard setting, permitting, enforcement, and remediation/cleanup). Each Program Office and Region will identify activities for EJ reviews and establish a schedule for this first round of reviews in their FY09 EJ Action Plans (due June 2008 for Program Offices and November 2008 for Regional Offices).

QUESTION 5: I understand EPA used its funding to create a documentary film. Why did you create this documentary film about one community when you could have used those funds on another grant that could have benefited more than one community?

ANSWER: We developed the DVD to serve as a collaborative problem solving training tool that can reach thousands of communities and other stakeholders.

QUESTION 6: Resources for the Future released a study (April 2007) criticizing the EJ Small Grants Program for not having an impact in reducing TRI emissions. Do you agree with their conclusions?

ANSWER: The EJ Small Grants Program is a competitively awarded program based on the strength of project proposals that EPA receives during the Request for Application period. Applicants must demonstrate a level of capacity to qualify for the grants and operate according to the grant requirements. The EJ Small Grants Program has reached, and continues to reach, many of the communities that are most affected by environmental harms and risks. TRI emissions are only one potential measure of such potential risks.

QUESTION 7: Your testimony demonstrates numerous successes in EPA's environmental justice efforts under Executive Order 12898. Is it the Agency's position that E.O. 12898 alone gives the Agency adequate and meaningful authority to carry out its environmental justice missions?

ANSWER: EPA continues to believe that using its range of statutory, regulatory and enforcement authorities, in tandem with building the capacity of communities and other stakeholders to participate meaningfully in the environmental decisions that affect them, is a most effective way to protect the health and environment of all our nation's people and communities.

Executive Order 12898 established federal executive policy on environmental justice. The federal agencies subject to the Order, including the U.S. Environmental Protection Agency (EPA), were directed to make environmental justice part of their missions, to the greatest extent practicable and permitted by law. EPA accomplishes this goal by utilizing existing statutory authorities and regulations.

QUESTION 8: How would H.R. 1103 change the function, organization, and/or mission of the Office of Enforcement and Compliance Assurance, and for that matter, the EPA as a whole?

ANSWER: EPA recognizes that minority and low-income communities frequently may be exposed disproportionately to environmental harms and risks. We are all working to find the most effective ways to protect these and other burdened communities from adverse impacts to human health and the environment. We do not believe that codification of a 14-year-old Executive Order (which does not provide any additional authorities to the Agency) is either appropriate, or the best way to advance our shared goals.

QUESTION 9: Key definitions affecting EJ program efforts have been adjusted a couple of times in the last dozen years. Does the Agency disagree or have any concerns with H.R. 1103's definitions of "environmental justice" or "fair treatment"? How will these definitions affect your office's mission and programs?

ANSWER: Environmental Justice is the <u>fair treatment</u> and <u>meaningful involvement</u> of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This EPA definition has not changed and is consistent with the definitions in H.R. 1103.

QUESTION 10: I have some questions about OECA and your involvement in the final stages of the TRI burden reduction rule.

a) Could you please elaborate on these efforts and describe the involvement you had and your Office's final position on the rulemaking?

ANSWER: OECA's Office of Civil Enforcement participated throughout the rulemaking process and was involved in the decision-making that led to the important changes between the proposed rule and the final rule, including the Agency's decision to maintain many aspects of the TRI program without change.

EPA's Office of Environmental Justice recommended that an environmental justice assessment be conducted as part of the final rule development process. An environmental justice assessment was completed and considered by Agency senior managers. Following this analysis, OECA determined that the Agency had given careful consideration to the level of detailed information provided to minority and low- income communities and raised no further objections to the final rule.

b) Do you believe this involvement led to further consideration of the potential environmental justice concerns associated with the rulemaking?

ANSWER: Yes. As evidenced by the environmental justice assessment that was completed and considered by Agency senior managers.

AL-08-000-2602

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 1 1 2008

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Barton:

Thank you for your letter of February 26, 2008, requesting responses to questions for the record following the October 4, 2008 hearing before the Subcommittee on Environment and Hazardous Materials titled, "Environmental Justice and the Toxics Release Inventory Reporting Program: Communities Have a Right to Know."

The U.S. Environmental Protection Agency (EPA) is working diligently to provide responses to your questions and will forward them to you shortly.

Again, thank you for your letter. If you have any further questions, please contact me, or you staff may contact Carolyn Levine or Pamela Janifer in EPA's Office of Congressional and Intergovernmental Relations. Carolyn can be reached at (202) 564-1859, and Pamela can be reached at (202) 564-6969.

Sincerely,

Christopher P. Bliley

AL-08-000-2602

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 24 2008

OFFICE OF CONGRESSIONAL AND
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b) Do you believe this involvement led to further consideration of the potential environmental justice concerns associated with the rulemaking?

ANSWER: Yes. As evidenced by the environmental justice assessment that was completed and considered by Agency senior managers.

AL-11-000-6995

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 22 2011

OFFICE OF
AIR AND RADIATION

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515-6143

Dear Mr. Chairman:

Thank you for your letter of May 2, 2011, following up on my testimony before the House Oversight and Government Reform Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending regarding the impact of the U.S. Environmental Protection Agency's greenhouse gas (GHG) regulations on small business. I have provided responses to your enumerated questions in the enclosed document. In addition, I am including documents responsive to your request on the enclosed CD.

As I stated in my testimony before the Subcommittee, the EPA is taking a common sense, phased approach to meeting our obligations under the Clean Air Act to address carbon pollution. The Agency is keenly aware of the concerns of small businesses in regard to greenhouse gas standards, and has taken numerous steps to eliminate or minimize the impacts of such standards on small businesses. The EPA has a long history under the Clean Air Act of protecting human health and the environment while supporting strong economic growth. The Agency is applying the same tools that we have been using for the last 40 years to protect public health to now address greenhouse gas emissions. Those tools have proven their worth over the years in improved public health, economic and job growth, and technological innovation.

The EPA undertakes extensive economic analysis of the costs and benefits of its Clean Air Act standards, including the greenhouse gas standards addressed by your letter. As indicated in the enclosed responses, the Agency has fully complied with its obligations to analyze its greenhouse gas standards under section 317 of the Clean Air Act. Section 321 of the Clean Air Act authorizes the EPA to investigate specific allegations that actions under the Act have resulted or will result in job losses. The EPA has not received any request under section 321 to investigate any such alleged impacts of those standards. Finally, our analyses of the cumulative benefits and costs of Clean Air Act programs have consistently shown large benefits that greatly exceed, by factors of 30 or more, the costs of implementing the Act.

Again, thank you for your letter and for your interest in this important subject. I look forward to continuing to work with you. If you have any questions regarding the subject of this response, please contact me or your staff may call Tom Dickerson in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3638.

Sincerely,

Gina McCarthy
Assistant Administrator

Enclosures

cc: The Honorable Elijah E. Cummings
Ranking Member

Responses to Questions and Requests

1. **A full and complete explanation as to whether a section 317 analysis has been completed for the Car Rule, Tailoring Rule, and Endangerment Finding and submission of any of these analyses.**

The EPA was not required to do a section 317 analysis of the Endangerment Finding because that finding is not an action listed in section 317(a), and thus was not an action to which section 317 applies.

The EPA met its obligations under section 317 for both the Car Rule and the Tailoring Rule. The economic analyses completed by the EPA to support the Car Rule and the Tailoring Rule fully satisfy the requirements of section 317, including both the procedural requirements in section 317(b) and the substantive requirements for the analysis in section 317(c).

The text and legislative history of section 317 make clear that Congress intended this provision to be applied pragmatically. Section 317(d) states that "[t]he assessment required under this section shall be as extensive as practicable, in the judgment of the Administrator taking into account the time and resources available to the Environmental Protection Agency and other duties and authorities which the Administrator is required to carry out under [the Clean Air Act]." See also 123 Cong. Rec. 26850 (Aug. 4, 1977) (Senate consideration of the Conference Report) ("Consequently, the Administrator may make reasonable judgments about which analyses must be done to comply with this section and the depth of analysis required.").

An overview of how each of the substantive requirements of section 317(c) was satisfied for both the Car Rule and the Tailoring Rule follows. For each of the two rules, this explanation is organized on the basis of the five paragraphs of section 317(c).

Car Rule:

"(1) the costs of compliance with any such standard or regulation, including extent to which the costs of compliance will vary depending on (A) the effective date of the standard or regulation, and (B) the development of less expensive, more efficient means or methods of compliance with the standard or regulation;"

The rulemaking fully assesses the costs of the model year (MY) 2012-2016 standards, and these assessments are fully described in the preamble and Regulatory Impact Analysis (RIA). The EPA's cost assessment included a full range of costs, including costs for individual automobile manufacturers, industry average per-vehicle compliance costs, industry average technology outlays, and consumer savings due to saving money on fuel costs. See Preamble Section III.H.2 Costs Associated with the Vehicle Program (75 Fed. Reg. 25,513) (May 7, 2010) and Section III.H.4 Reduction in Fuel Consumption and Its Impacts (75 Fed. Reg. 25,516); RIA Chapter 6: Vehicle Program Costs Including Fuel Consumption Impacts. The EPA also explained in detail how the effective dates for the standards provided sufficient lead time for compliance, and how the choice of standard stringency was tied to the industry's vehicle redesign cycles to assure the most cost effective means of compliance. 75 Fed. Reg. 25,467-68. Similar analyses were part of the record for the proposed rule.

In addition, the EPA assessed the impacts and costs of both more and less stringent standards. Specifically, the EPA assessed standards that would reduce CO2 emissions at a rate of 4% per

year and 6% per year. The EPA's basis for rejecting these alternative standards is discussed at 75 Fed. Reg. 25,465-68, and the assessment is fully presented in the RIA, Chapter 4.

"(2) the potential inflationary or recessionary effects of the standard or regulation;"

The EPA's assessment in the MY2012-2016 final rule analysis does not indicate that there will be any inflationary or recessionary effects of the standards. The light-duty greenhouse gas program results in a net savings to consumers, as the fuel savings due to improved fuel efficiency over the lifetime of a vehicle far outweigh the initial up front increased vehicle costs. The EPA estimates that the average cost increase for a model year 2016 vehicle due to the national program will be approximately $950. Consumers would save more than $3,000 over the lifetime of a model year 2016 vehicle (that is, the $4,000 saved on fuel more than offsets the increased cost of the vehicle). See 75 Fed. Reg. 25,516-20.[1]

This issue is also discussed further in section (4) below.

"(3) the effects on competition of the standard or regulation with respect to small business;"

The EPA exempted from the greenhouse gas emissions standards small entities meeting the Small Business Administration (SBA) size criteria of a small business as described in 13 C.F.R. 121.201. This exemption is described in the Final Rule preamble at 75 Fed. Reg. 25,424 and 75 Fed. Reg. 25,440, and in Chapter 9 of the Final Regulatory Impact Analysis. The Car Rule thus has no direct impact on small businesses.

"(4) the effects of the standard or regulation on consumer costs;"

As noted above, the EPA estimates that the average cost increase for a model year 2016 vehicle due to the national program will be approximately $950. U.S. consumers who pay for their vehicle in cash will save enough in lower fuel costs over the first three years, on average, to offset these higher vehicle costs. Consumers using an average 5-year, 60-month loan would see immediate savings due to their vehicle's lower fuel consumption in the form of reduced annual costs of $130-$180 a year throughout the duration of the loan (that is, the fuel savings will out-weigh the increase in loan payments by $130-$180 per year). Whether a consumer takes out a loan or pays for their vehicle in cash, consumers would save more than $3,000 over the lifetime of a model year 2016 vehicle (that is, the $4,000 saved on fuel more than offsets the increased cost of the vehicle). To calculate these fuel savings, fuel prices (including taxes) were estimated to range from $2.61/gallon in 2012, to $3.60/gallon in 2030, to $4.49/gallon in 2050, based on Department of Energy projections.

"(5) the effects of the standard or regulation on energy use."

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[1] See also H.1 - Conceptual Framework for Evaluating Consumer Impacts (75 FR 25510); H.2 – Costs Associated with the Vehicle Program (75 FR 25513); H.4 – Reduction in Fuel Consumption and Its Impacts (75 FR 25516); H.5 – Impact on U.S. Vehicle Sales and Payback Period (75 FR 25517); RIA Chapter 6: Vehicle costs and consumer fuel savings estimates. RIA Chapter 8 Section 8.1 includes Consumer Vehicle Choice Modeling (p.8-4), Consumer Payback Period and Lifetime Savings on New Vehicle Purchases (p. 8-13). Section 8.3 includes analysis/discussion of other consumer related impacts including; (1) Reduced Refueling Time (p. 8-18), (2) Value of Additional Driving (p. 8-19), (3) Noise, Congestion and Accidents (p. 8-19).

The EPA fully assessed the impacts of the MY2012-2016 standards on energy use. Over the lifetime of the vehicles sold during MY 2012-2016, the standards are projected to save 1.8 billion barrels of oil. The light-duty vehicles subject to this national program account for about 40 percent of all U.S. oil consumption. The EPA also assessed the impacts of these standards on energy security.[2]

Tailoring Rule:

"(1) the costs of compliance with any such standard or regulation, including extent to which the costs of compliance will vary depending on: (A) the effective date of the standard or regulation, and (B) the development of less expensive, more efficient means or methods of compliance with the standard or regulation;"

As explained in the RIA for the rule, the Tailoring Rule provides regulatory relief for over 6 million small greenhouse gas-emitting Title V sources and tens of thousands small greenhouse gas-emitting new or modifying PSD sources.[3] The benefits of the rule are the avoided Title V and PSD permitting and associated regulatory requirements. These benefits will accrue to smaller sources of greenhouse gases and state and local permitting authorities that are granted regulatory relief.[4] The costs of the rule are the foregone greenhouse gas emission reductions that would otherwise occur absent the regulatory relief mandated by the rule.[5] In developing the rule, the EPA considered alternative levels of regulatory relief as well as differing effective dates of the phase-in period prior to establishing the phased-in threshold approach.[6]

There are no emission control requirements or associated costs imposed by the Tailoring Rule because it is a regulatory relief rule. The rulemaking assesses the costs of the rule in terms of foregone emission reductions at alternative regulatory thresholds and the associated benefits of the rule (i.e. avoided permitting costs) at alternative threshold levels both more and less stringent than the final rule levels. See the RIA for "The Final Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule" in the docket to the final rule for more details.

"(2) the potential inflationary or recessionary effects of the standard or regulation;"

Since the Tailoring Rule provides regulatory relief, it has neither inflationary nor recessionary effects on the economy.[7]

"(3) the effects on competition of the standard or regulation with respect to small business;"

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[2] See also Preamble Section H.4 - Reduction in Fuel Consumption and Its Impacts (75 FR 25516); Preamble Section III.H.8 - Energy Security Impacts (75 Fed. Reg. 25,531); RIA Chapter 6 Section 6.3 provides Fuel Consumption Impacts analysis (p. 6-14); RIA Chapter 8 Section 8.2 includes Energy Security Impacts (p. 8-16).

[3] See the Regulatory Impact Analysis for the Final Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule available in the docket for the rulemaking or at http://www.epa.gov/ttn/ecas/regdata/RIAs/riatailoring.pdf

[4] Final Tailoring Rule RIA Chapter 3

[5] Final Tailoring Rule RIA Chapter 4

[6] Final Tailoring Rule RIA Chapter 2 and Final Rule Preamble Sections IV.B. and V.B. .

[7] Final Tailoring Rule RIA Chapter 7, Section 7.1

As explained in the RIA for the rule, the Tailoring Rule provides regulatory relief and therefore has no adverse effects on competition in the economy or on small businesses. The EPA considered the impact of the Tailoring Rule on small entities (small businesses, governments and non-profit organizations) as required by the Regulatory Flexibility Act (RFA) and the Small Business Regulatory Enforcement Fairness Act (SBREFA). For informational purposes, the RIA for the final rule includes the SBA definition of small entities by industry categories for stationary sources of greenhouse gases and potential regulatory relief from Title V and NSR permitting programs for small sources of greenhouse gases. Since the Tailoring Rule does not impose regulatory requirements, but rather lessens the regulatory burden of the Clean Air Act requirements on smaller sources of greenhouse gases, no economic costs are imposed upon small sources of greenhouse gases as a result of the rule. Rather the final Tailoring Rule provides regulatory relief for small sources. These avoided costs or benefits accrue because small sources of greenhouse gases are not required to obtain a Title V permit, and new or modifying small sources of greenhouse gases are not required to meet PSD requirements. Some of the small sources benefitting from this action are small entities, and as a result, these entities will benefit from the regulatory relief finalized by the Tailoring Rule.[8]

"(4) the effects of the standard or regulation on consumer costs;"

The effects of the Tailoring Rule on consumer costs were considered in the RIA for the rule. The Tailoring Rule is deregulatory in nature and as such has no adverse impacts on consumer costs.

"(5) the effects of the standard or regulation on energy use."

As required by Executive Order 13211, the EPA assessed the impact of the rule on energy supply and use. The EPA concluded that the Tailoring Rule would not create any new requirements for sources.[9]

2. **If the aforementioned analyses have not been completed, I request EPA immediately initiate the analysis and provide it to the Committee.**

As explained above, the analyses have been completed for the actions for which they were required.

3. **My understanding is a section 317 analysis may not be substituted by other analyses. If you have a different view, please provide a legal explanation that justifies your view.**

There is no language in section 317 indicating that any specific labeling of the analysis is required to satisfy the section's requirements. The EPA may satisfy its duties under section 317 by means of documents such as Regulatory Impact Analyses or preambles, provided that these documents address the substantive and procedural requirements set forth in the provision, subject to the flexibility provided by section 317(d). As explained above, the EPA has done so fully with regard to the rulemakings at issue here.

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[8] Final Tailoring Rule RIA Chapters 6 and 7 and Final Rule Preamble Sections VII.C. and VIII.C.

[9] Final Tailoring Rule RIA Chapter 7, Section 7.8 and Final Rule Preamble Sections VII.G. and VIII.H.

4. **A section 321(a) analysis on the individual and cumulative impact of the GHG regulations on potential job losses.**

The EPA has provided detailed regulatory impact analyses for each of its major greenhouse gas regulations that provide extensive information about the economic impact of those rules. Consistent with relevant Executive Orders, EPA estimates the benefits and costs of all of its economically significant rules. EPA's regulatory impact analyses often contain hundreds of pages of detailed work which draws heavily on peer-reviewed literature. Labor, a key factor of production, is intrinsically incorporated into EPA's economic analyses. The economic impacts of the Car Rule, as analyzed in the Regulatory Impact Analysis for that rule, are discussed in the responses to questions 1 and 5. As explained elsewhere in this response, the Endangerment Finding has no economic impact independent of any impacts of the Car Rule, and the Tailoring Rule operates to reduce any potential economic impacts from stationary source preconstruction permitting requirements under the Clean Air Act.

Section 321 of the Clean Air Act authorizes the Administrator of the EPA to investigate, report and make recommendations regarding employer or employee concerns that requirements under the Clean Air Act will adversely affect employment. Section 321(a) provides for "continuing evaluations of potential loss or shifts of employment which may result from the administration or enforcement of the provision of this Act and applicable implementation plans, including where appropriate, investigating threatened plant closures or reductions in employment allegedly resulting from such administration or enforcement." Sections 321(b) and (c) authorize, in general, an employee to petition for an investigation of alleged loss of employment due to Clean Air Act requirements, and establish procedures for such an investigation. Finally, section 321(d) provides that the evaluations or investigations authorized in section 321 do not authorize or require the EPA or the States to modify any Clean Air Act requirement.

Section 321 was added in the 1977 amendments to the Clean Air Act. Both the House and Senate Committee Reports for the 1977 amendments describe the purpose of section 321 as addressing situations where employers make allegations that environmental regulations will jeopardize employment, possibly in order to stimulate union or other public opposition to environmental regulations. The section was intended to create a mechanism to investigate and resolve those allegations. In addition, the section was designed to provide individual employees whose jobs were threatened or lost allegedly due to environmental regulations with a mechanism to have EPA investigate those allegations. The legislative history makes clear that Congress intended to provide a mechanism to respond to specific allegations in particular cases:

> "In any particular case in which a substantial job loss is threatened, in which a plant closing is blamed on Clean Air Act requirements, or possible new construction is alleged to have been postponed or prevented by such requirements, the committee recognizes the need to determine the truth of these allegations. For this reason, the committee agreed to section 304 of the bill [which became section 321 of the Act], which establishes a mechanism for determining the accuracy of any such allegation." H.R. Rep. 95-294, at 317; *see also* S. Rep. 95-127, at 1474-76.

The committee reports do not describe the provision as applying broadly to all regulations or implementation plans under the Clean Air Act.

In keeping with congressional intent, the EPA has not interpreted section 321 to require the Agency to conduct employment investigations in taking regulatory actions. Conducting such investigations as part of rulemakings would have limited utility since section 321(d) expressly prohibits the EPA

(or the States, in case of applicable implementation plans) from "modifying or withdrawing any requirement imposed or proposed to be imposed under the Act" on the basis of such investigations. As noted above, section 321 was instead intended to protect employees in individual companies by providing a mechanism for the EPA to investigate allegations – typically made by employers – that specific requirements, including enforcement actions, as applied to those individual companies, would result in lay-offs. The EPA has not received any request for any such investigation with regard to its GHG regulations.

5. **An analysis of the cumulative impact of all the EPA's GHG regulations on all sectors of the economy and small business.**

The EPA has finalized three significant regulations to control greenhouse gas emissions (the Renewable Fuel Standard, the Tailoring Rule, and the Car Rule), and has proposed one other significant regulation (medium- and heavy-duty vehicle standards). The EPA's practice with significant greenhouse gas rules, as it is for all significant rules, is to conduct a regulatory impact analysis of each rule pursuant to Executive Order 12866 and any applicable statutory or other requirements. When the EPA conducts a regulatory impact analysis, the Agency's normal practice is to include in the base case previously finalized rules that impose regulatory obligations on sources. Thus, for example, when the EPA analyzes the effect on gasoline costs of a new rule, the effect of prior rules on gasoline costs is already accounted for.

The Energy Independence and Security Act of 2007 established lifecycle greenhouse gas emission requirements for biofuels to qualify for the Renewable Fuel Standard (RFS). The EPA issued a final rule (RFS2) implementing that and other changes mandated by the 2007 law (Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program: Final Rule, 75 Fed. Reg. 14,669 (March 26, 2010)). As part of that rulemaking, the EPA conducted a regulatory impact analysis, which can be found at http://www.epa.gov/otaq/renewablefuels/420r10006.pdf. This analysis estimated that, when fully implemented in 2022, the RFS would save $11.8 billion in gasoline and diesel costs, reduce oil imports by $41.5 billion and increase farm income by $13 billion. Other estimated economic impacts are included in the regulatory impact analysis. The EPA also conducted a Regulatory Flexibility Analysis for the RFS2, which can be accessed at http://epa.gov/otaq/renewablefuels/420r10006.pdf and is summarized in the preamble to the RFS2 (see 75 Fed. Reg. at 14,858-862). As detailed in the preamble to the final rule, the EPA took a number of steps to minimize the impact of the RFS2 on small refiners.

In April 2010, the EPA and NHTSA finalized a joint rule to establish a national program consisting of new standards to increase the efficiency of, and reduce the greenhouse gas emissions from, model year 2012 through 2016 light-duty vehicles. Light-duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,323 (May 7, 2010). As part of that rulemaking, the EPA conducted a regulatory impact analysis to fully assess the costs of these standards. See Preamble Section III.H.2 Costs Associated with the Vehicle Program (75 Fed. Reg. 25,513) (May 7, 2010) and Section III.H.4 Reduction in Fuel Consumption and Its Impacts (75 Fed. Reg. 25,516); RIA Chapter 6: Vehicle Program Costs Including Fuel Consumption Impacts, which can be found at http://www.epa.gov/otaq/climate/regulations/420r10009.pdf. Among other things, the analysis estimated that, over the lifetime of the covered vehicles, these standards would save 1.8 billion barrels of oil and would save consumers more than $3000 per vehicle. The EPA did not analyze the effect on small businesses because small businesses are exempt from these standards.

In November 2010, the EPA and NHTSA proposed joint rules to establish a Heavy-Duty National Program consisting of new standards to increase the fuel efficiency of, and reduce the greenhouse gas emissions from, model year 2014 through 2018 medium- and heavy-duty engines and vehicles. Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles; Proposed Rules, 75 Fed. Reg. 74,15274152 (November, 2010). As part of that rulemaking, the EPA is conducting a regulatory impact analysis to fully assess the costs of these proposed standards. The draft proposed RIA can be accessed at http://www.epa.gov/otaq/climate/regulations/420d10901.pdf. See Preamble Section VIII "What are the agencies' estimated cost, economic, and other impacts of the proposed program?" (75 Fed. Reg. 74,302)74302) (Nov. 30, 2010) and RIA Chapter 9: "Economic and Social Impacts." The EPA accounted for RFS2 impacts in the baseline emission inventories for this program. Among other things, the analysis estimated that, over the lifetime of the covered vehicles, these proposed standards would save 500 million barrels of oil and would provide benefits to private interests of $35 billion in fuel savings. The EPA did not analyze the effect on small businesses because EPA proposed not to cover small businesses as part of this rulemaking.

In 2010, the EPA finalized the Tailoring Rule, which provides regulatory relief for over six million small greenhouse gas-emitting Title V sources and tens of thousands small greenhouse gas-emitting new or modifying PSD sources. (Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule; Final Rule, 75 Fed. Reg. 31,514 (June 3, 210). The EPA conducted a regulatory impact analysis, which is available at http://www.epa.gov/ttn/ecas/regdata/RIAs/riatailoring.pdf. In calculating the benefits of the Tailoring Rule, the EPA analyzed the avoided regulatory burden by sources given regulatory relief by the Rule. The avoided burden focused on the avoided costs for those given regulatory relief of going through the permitting process, but not of any control requirements that would have resulted from the permitting process. The EPA lacked the data necessary to estimate the costs of the avoided control requirements.

The EPA cannot analyze the economic impacts of policies when it is unclear what regulatory obligation would be imposed and on whom. Quite simply, if one does not know what a source will be required to do, one cannot analyze how much it will cost. The greenhouse gas PSD permitting obligations are not sufficiently detailed to be analyzed because the actual regulatory obligation is set through a case-by-case determination by the permitting authority (which is usually a local or state agency) and because the obligation only arises when a new source is built or an existing source increases its emissions significantly and undertakes a major modification. When local permitting authorities make the case-by-case determination through which they set greenhouse gas permit requirements for affected sources, the permitting authorities are required under federal law to take cost into account.

The EPA did not conduct a regulatory impact analysis of the Endangerment Finding because it was a scientific finding and did not itself impose regulatory obligations on private entities.

The EPA has conducted three analyses of the cumulative benefits and costs of regulations promulgated under the Clean Air Act. The first report, "The Benefits and Costs of the Clean Air Act, 1970 to 1990," (October 15, 1997) estimated that the mean estimate of the benefits in 1990 of implementing the Clean Air Act (to the extent they could be monetized) exceeded the costs by approximately 40 to 1. The second report, "The Benefits and Costs of the Clean Air Act, 1990 to 2010" (November 15, 1999), and third report, "The Benefits and Costs of the Clean Air Act from

1990 to 2010" (March, 2011), both analyzed the benefits and costs of implementing Clean Air Act programs since the passage of the 1990 Clean Air Act Amendments. The third report is an updated version of the second analysis; the benefits and costs it analyzed are in addition to the benefits and costs estimated in the first report. The central benefits estimates (to the extent that benefits can be monetized) in the third report exceeds the costs by 30 to 1. All three reports were multi-year efforts (six years each for the first two reports, five years for the third report) and were subjected to extensive peer review, including review by the EPA's independent Science Advisory Board Council on Clean Air Act Compliance Analysis.

6. **All documents and communications referring or relating to any analysis EPA conducted on GHG regulations that were sent to the Office of Information and Regulatory Affairs (OIRA).**

The enclosed CD provides EPA analyses of the light-duty vehicle and medium- and heavy-duty vehicle GHG rules, the RFS2 and the Tailoring Rule that were sent to OIRA in connection with these rulemakings.

AL-11-000-9156

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 13 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Darrell Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to questions for the record that followed a May 24, 2011 hearing entitled "Pain at the Pump: Policies that Suppress Domestic Production of Oil and Gas." I hope the information contained in these responses will be helpful to you and members of the Committee.

If you have any further questions, please contact me at (202)564-5200 or your staff may contact Diann Frantz at (202)564-3668.

Sincerely,

Arvin Ganesan
Associate Administrator

Enclosure

Questions for Administrator Lisa Jackson
Environmental Protection Agency
Rep. Blake Farenthold
Committee on Oversight and Government Reform

Hearing on, "Pain at the Pump: Policies that Suppress Domestic Production of Oil and Gas."

1. Could you please provide a list of all pending permits for refineries and Greenfield energy centers in the state of Texas?

Response to Question 1

The Texas Commission on Environmental Quality (TCEQ) is the authorized Clean Air Act permitting authority in Texas. TCEQ operates the largest air permitting program in the county. While the number of permit applications under review by the state varies day to day as work is completed, it is not uncommon for 800 to 1,000 permit applications to be under review by Texas at any given time. TCEQ maintains an on-line tracking system for pending air permits, which is available on their public website at http:www5.tceq.state.tx.us/airperm/index.cfm.

2. Could you please provide me with the economic impact these pending permits would have on the local economy of the proposed sites?

Response to Question 2

We suggest that you contact TCEQ, the authorized Clean Air Act permitting authority in Texas for this information.

3. Could you please provide the date the permit applications were received by the EPA and what date do you expect the EPA to produce a decision on permitting?

Response to Question 3

To date, TCEQ has not requested authority to implement the greenhouse gas portion of the permitting program in Texas. Under federal law, the U.S. Environmental Protection Agency (EPA) is the permitting authority in the interim for those pollutants.

EPA currently has five PSD permit applications for GHGs in Texas. Applications have been received (1) Lower Colorado River Authority (LCRA) Thomas Ferguson Power Plant; (2) BASF Fina Petrochemcials; (3) Ineos Olefins and Polymers; (4) Energy Transfer Jackson County Compressor Station; and (5) Calpine Deer Park Power Plant.

EPA proposed the GHG PSD permit for Lower Colorado River Authority (LCRA), Thomas Ferguson Plant located in Llano County, Texas on September 28, 2011 for public comment.

The public comment period will be for 30 days after publication. After careful consideration, EPA will issue the final permit.

The GHG PSD permit from BASF FINA Petrochemicals in Port Arthur, Texas is currently being reviewed. EPA anticipates proposing this permit for public comment later this fall. EPA anticipates beginning its permit development work on the Ineos, Energy Transfer, and Calpine permits in late September or early October if the permit applications are determined to be complete.

4. While answering a question I posed in last week's hearing, you stated that EPA was not implementing a back door cap and trade policy, but that the agency was pursuing an initiative to monitor and control green house gas emissions. What authority, statutory or administrative, gives the EPA the power to regulate and monitor green house gas emissions?

Response to Question 4

The Supreme Court has held twice that EPA has authority under the Clean Air Act to regulate greenhouse gas emissions. As the Supreme Court said this year, "[the Court's opinion in] *Massachusetts* made plain that emissions of carbon dioxide qualify as air pollution subject to regulation under the Act." *American Electric Power Co. v. Connecticut,* Docket No. 10-174 (2011), referencing *Massachusetts v. EPA,* 127 S.Ct. 1438 (2007). Please see the Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 FR 44354, pages 72-564 (July 30, 2008) for a comprehensive discussion of the Clean Air Act's statutory authority related to controlling greenhouse gas emissions.

Section 821 of the Clean Air Act Amendments of 1990 required electric generating units to monitor and report their CO2 emissions, which they have been doing since 1994.

In addition to the Clean Air Act,the Fiscal Year 2008 Consolidated Appropriations Act (P.L. 110-161) required EPA to issue a final rule providing for mandatory reporting of greenhouse gases no later than June 26, 2009. We issued the Mandatory Reporting of GHG rule on October 29, 2009, under the authority of CAA Sections CAA sections 114 and 208.

5. My understanding is that EPA has sent a draft of the final regulations for the Clean Air Transport Rule to OMB. EPA has said that a final rule should be released to the public by the end of June. I understand EPA did not include Texas for sulfur dioxide reductions in the proposed rule, but accepted comment on whether to include Texas in the final rule for S02 reductions. Can you please tell me if Texas was specifically included for sulfur dioxide reductions in this rule?

Response to Question 5:

Yes, Texas was included for sulfur dioxide reductions in the Clean Air Transport Rule (now known as the Cross-State Air Pollution Rule). The final rule was published on August 8, 2011. The basis for including Texas in the final CSAPR is identical to the basis considered at proposal

and the basis for including all other states covered by the CSAPR programs -- whether emissions in an upwind state contribute at least 1% of the relevant NAAQS at a downwind site with projected nonattainment or maintenance concerns with that standard, and whether cost-effective reductions can be identified in that upwind state to eliminate that state's significant contribution to nonattainment or interference with maintenance. EPA's modeling at proposal showed that certain facilities in Texas would increase consumption of higher-sulfur coals if left out of the CSAPR annual programs, effectively raising their emissions to a level that would significantly contribute to downwind nonattainment.

6. In the event Texas is included in a state specific sulfur dioxide rule, wouldn't it be necessary to allow notice and comment on such a rule?

   Response to Question 6:

   As you noted, EPA has already provided opportunity for comment on whether Texas should be included in the Transport Rule for annual SO_2 emissions reductions and has made available for public comment the emissions data and air quality modeling assumptions and inputs that support all analyses EPA has conducted to develop state-level emission requirements for the final rule. EPA also issued notices of data availability (NODAs) following the proposal seeking public comment on power sector modeling assumptions and all emission inventories that inform these analyses, and EPA received detailed public comment from the Texas Commission on Environmental Quality as well as other entities in Texas that provided updated information that EPA has taken into account in its modeling to develop the final Transport Rule (now known as the Cross-State Air Pollution Rule, CSAPR). Full documentation of the rulemaking process for the final CSAPR is available to the public on the web at: www.epa.gov/crossstaterule.

7. Does the EPA apply cost benefit analysis to proposed regulation, especially those associated with air quality in green house gas issues in 2011?

   Response to Question 7:

   Consistent with relevant Executive Orders, EPA estimates and reports the social costs, benefits and economic impacts of every economically significant regulation, including those associated with greenhouse gases, following guidance provided by OMB and detailed in our Guidelines for Economic Analysis.

Question Representative Ann Marie Buerkle

What implications does Avenal v. EPA have for understanding the legal basis of EPA's Tailoring Rule?

Response to Rep. Buerkle

In the Tailoring Rule, EPA acknowledged that the Clean Air Act (CAA) established applicability thresholds for the Prevention of Significant Deterioration (PSD) program at 100 or 250 tons per year (tpy), depending on the source category, and the Title V program at, in general 100 tpy. *See* CAA §§165(a)(1) and 169(1) (PSD), and §§502(a), 501(2)(B), 302(j) (Title V). EPA went on to find, however, that in applying those applicability thresholds to sources that emit greenhouse gases (GHGs), various judicial doctrines of statutory interpretation authorized EPA to apply different numerical thresholds, up to 100,000 carbon dioxide equivalent tpy. Those judicial doctrines included the doctrines of absurd results, administrative necessity, and one-step-at-a-time, in conjunction with the two-part process for statutory interpretation set forth by the U.S. Supreme Court in *Chevron v. Natural Resources Defense Council*, 467 U.S. 837 (1984). *See* 75 Fed. Reg. at 31,541-31,549 (June 3, 2010) (Tailoring Rule discussion of the judicial doctrines). In *Avenal Power Center, LLC v. EPA* (Civ. Action No. 10cv383(RJL) (D.D.C. May 26, 2011) (slip op.) the District Court reviewed a provision of the CAA – §165(c) – that is separate from the PSD and Title V applicability provisions, and the Court did not consider whether any of the judicial doctrines that EPA considered in the Tailoring Rule applied. Accordingly, we do not believe that the *Avenal* decision has precedential value for the Tailoring Rule in this regard.

AL-11-000-5627

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 14 2011

OFFICE OF CONGRESSIONAL
AND INTERGOVERNMENTAL RELATIONS

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Chairman Issa:

Thank you for your April 8 letter requesting information on the Environmental Protection Agency's plan in the event of a lapse in the Congressional appropriations that fund the Federal Government. Detailed information on EPA's plan is posted on the Agency's website, at http://www.epa.gov/adminweb/images/EPAContingencyPlanAPRIL82011.pdf.

Sincerely,

David McIntosh
Associate Administrator

cc: The Honorable Elijah E. Cummings
Ranking Minority Member

AL-11-000-5627

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 14 2011

OFFICE OF CONGRESSIONAL
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Sincerely,

David McIntosh
Associate Administrator

cc: The Honorable Elijah E. Cummings
Ranking Minority Member

AL-11-000-0134

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 19 2011

OFFICE OF CONGRESSIONAL
AND INTERGOVERNMENTAL RELATIONS

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your two letters of December 29, 2010. They enclose your requests for copies of documents, and responses to numerous specific questions, regarding: the appointment of Cameron Davis as an Environmental Protection Agency ("EPA") official; the planning of travel by EPA officials to events with elected officials or candidates; and Recovery Act grants that were awarded to particular school districts in Ohio for retrofitting school buses.

We appreciate your interest in these matters and are committed to providing you with the information necessary to satisfy the Committee's oversight activities to the extent possible, consistent with Constitutional and statutory obligations. Your requests are a high priority, and work on them is currently in progress.

Again, thank you for your letters. We look forward to working with you and your staff on these and future issues. If you have any questions, please contact me or your staff may call Tom Dickerson of my staff at (202) 564-3638.

Sincerely,

David McIntosh
Associate Administrator

cc: The Honorable Elijah E. Cummings
Ranking Member

AL-11-000-0133

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 19 2011

OFFICE OF CONGRESSIONAL
AND INTERGOVERNMENTAL RELATIONS

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

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Sincerely,

David McIntosh
Associate Administrator

cc: The Honorable Elijah E. Cummings
Ranking Member

AC-11-000-0133

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 28 2011

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
U. S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of December 29, 2010 following up on a previous request for information from your Committee regarding American Recovery and Reinvestment Act (ARRA) funded Diesel Emissions Reduction Act (DERA) grants. You expressed concern regarding DERA funding awarded to identified school districts in the State of Ohio. We have examined the identified awards and offer the following information.

- EPA made a federal formula grant award (award # 00E83501) on April 8, 2009 to the Ohio Environmental Protection Agency (Ohio EPA) in the amount of $1,730,000 to support a grant and loan program administered by the State that was designed to achieve significant reductions in diesel emissions. The award was authorized in accordance with Title VII, Subtitle G, Section 793 of the Energy Policy Act of 2005, codified at 42 U.S.C. 16133. The award was funded with funds appropriated by the American Recovery and Reinvestment Act of 2009 and the award was subject to terms and conditions imposed by the Act. The Ohio EPA distributed funds from this award through a statewide competitive Clean Diesel School Bus Program. (http://www.epa.state.oh.us/oeef/schoolbus.aspx).

- State formula grants, such as the award made to the Ohio Environmental Protection Agency, are made available by the State to sub-recipients for projects that reduce diesel emissions and diesel fuel usage. The Ohio EPA, as the prime recipient of the award, is required to make subsequent awards (subgrants and loans) to qualifying subgrantee or loan applicants throughout their State.

- The awards that are the subject of your inquiry were made by Ohio EPA. The US Environmental Protection Agency was not involved in the selection of the subrecipients.

- Ohio EPA made all decisions to fund sub-recipients and as such, should maintain all records related to project descriptions, criteria used to make the sub-awards, and the process used for award. The Ohio EPA point-of-contact for their DERA grant award is:

  Carolyn Watkins
  Chief, Office of Environmental Education
  Administrator, Ohio Environmental Education Fund
  Administrator, Ohio Clean Diesel School Bus Fund
  Ohio EPA
  P.O. Box 1049
  Columbus, OH 43216-1049
  Phone: (614) 644-2873
  e-mail carolyn.watkins@epa.state.oh.us

In addition, your letter states that Office of Management and Budget (OMB) Circular A-110 requires that Federal grant awards be made on a competitive basis. This statement is based on an interpretation of language in the Circular at 2 C.F.R. § 215.43, *Competition*, providing that "[a]wards shall be made to the bidder or offeror whose bid or offer is responsive to the solicitation and is most advantageous to the recipient...."

EPA's Office of General Counsel (OGC) has reviewed this matter and advised that OMB Circular A-110 does not apply to the grant awarded by EPA to the State of Ohio. This is because, as noted at 2 CF.R. § 215.0 (a), the purpose of the Circular is to provide guidance to Federal agencies on the administration of grants to institutions of higher education, hospitals and other non-profit organizations, and thus does not affect grants to State, local or tribal governments. Further, OGC has advised that the quoted language on competition refers only to procurement contracts awarded by non-profit organizations with grant funds as opposed to the award of grants by a Federal agency. This conclusion is consistent with the requirements of the Federal Grant and Cooperative Agreement Act, 31 U.S.C. § 6301 et seq., which encourages, but does not require, that Federal grants be awarded competitively.

EPA does not award DERA State program funds competitively. EPA is required to allocate funds under the DERA State program in accordance with the statutory formula in Title VII, Subtitle G, Section 793 of the Energy Policy Act of 2005, as amended. EPA's grant to the State of Ohio was a DERA State formula grant. Because Ohio is a State grantee, its grant is governed by the Federal common rule for grants to States, local and tribal governments codified by EPA at 40 C.F.R. Part 31. Under Section 31.37 of the common rule, *Subgrants*, States follow State law and procedures when awarding subgrants. Based on these regulations, Ohio selected its subrecipients without EPA involvement.

We appreciate your interest in these important matters, and are committed to providing you with the information necessary to satisfy the Committee's oversight activities to the extent possible. If you have any questions about this, please contact me, the Senior Accountable

Official for ARRA, or your staff may call Tom Dickerson of our Office of Congressional and Intergovernmental Relations at (202) 564-3638.

Sincerely,

Craig E. Hooks
Assistant Administrator

cc: The Honorable Elijah E. Cummings
Ranking Member

AL-11-001-5139

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 28 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Frank D. Lucas
Chairman
Committee on Agriculture
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas:

Thank you for the opportunity to respond to your September 8, 2011 letter and the questions for the record following the March 10, 2011, hearing on the impact of EPA regulation on agriculture. The attached document has responses for more than 80 percent of the questions. I am sending this set of approved responses rather than delay the entire package for the small number of responses still outstanding. The remaining responses are nearing approval and will be forwarded to you as soon as possible. I hope that this information is useful to you and the members of the committee.

If you have any further questions, please contact me or your staff may call Sven-Erik Kaiser in my office at (202) 566-2753.

Sincerely,

Arvin Ganesan
Associate Administrator

Attachment

Finally, you may be interested to know that the EPA is considering narrowing the scope of the notice so that it focuses solely on safety- and composition-related terms, which would reduce the number of potentially affected products by roughly two-thirds (66%). For example, the term "pro" and other efficacy-related terms would be removed from the PR Notice.

Schmidt 8. In his response to the letter from my colleagues and I, Assistant Administrator Owens states that "EPA believes that only a very small number of products will be affected by the final PR Notice," and "EPA believes that very few registrants, if any, would actually need to change their product brand names and that no significant adverse impacts should occur in the marketplace." However, an industry estimate suggests that the proposal could impact more than 5,000 currently registered pesticide products and result in a potential loss of approximately $2.5 billion in brand equity. What analysis did EPA conduct to support the conclusion that only a very small number of products will be affected? Can you explain the discrepancy between EPA's prediction of the proposal's affect and that of the industry?

Answer: In evaluating the public comments received on the draft PR Notice, the EPA has counted the products bearing brand names for federally registered pesticide products that contain the 21 terms listed in the draft notice as potentially false or misleading. The EPA has found a total of 1,322 federally registered product brand names (not including distributor products) containing those listed terms. As mentioned in the previous answer, the EPA is currently contemplating narrowing the scope of the notice so that it focuses solely on safety- and composition-related terms, which would reduce by about two-thirds (66%) the number of potentially affected products. Moreover, the draft guidance neither bans product names containing the example terms, nor does it require brand names to be revised. Rather, it clarifies that product names containing certain terms could potentially be false or misleading and provides options available to registrants for addressing such issues with the agency.

Schmidt 9. What type of economic analysis has EPA done on the economic impacts to pesticide manufacturers, garden centers, retail stores and other businesses that sell pesticide products?

Answer: The Agency is not required to conduct, and has not prepared, a formal economic analysis of proposed policies such as this. Nonetheless, the EPA works with pesticide companies and others on PR notices and takes into account the economic impacts. As mentioned in the previous two answers, the EPA is considering narrowing the scope of the notice, which would decrease the number of products that might be affected by about two thirds (66 percent). Therefore, the EPA estimates that only a very small percentage of all pesticide product brand names for current federally registered products would be likely to take any action in response to the PR Notice. Further, the PR Notice offers registrants simple and workable alternatives to changing or removing names such as by using disclaimers, qualifying statements, changing font type and size, and other methods short of removal or changes of trademarked names.

Schmidt 10. Can EPA provide the Committee with assurances that it will refrain from requiring registrants to change existing product brand names through the registration process until a formal policy is finalized?

House Committee on Agriculture
"The Impact of EPA Regulation on Agriculture"
Questions for the Record
March 10, 2011
Set 1

Chairman Frank D. Lucas, Oklahoma

Lucas 4. Can you comment on the use of synthetic gypsum to protect the Chesapeake Bay from nutrient runoff funded by the USDA Conservation Innovation Grants Program and the projects and studies underway and planned in the Great Lakes Region for the same effect.

Answer: We support the use of this technology as one approach for reducing nutrient runoff from agricultural operations through soil amendments that increase phosphorus adsorption capacity of farmland soils and buffer treatment to adsorb phosphorus before field runoff enters the streams and the Chesapeake Bay. Note that this is only one of many approaches that farmers can take to reduce nutrient losses from their operations. We have highlighted this approach along with other cost-effective, proven practices for reducing nutrients from agricultural operations in the *Guidance for Federal Land Management in the Chesapeake Bay Watershed* (http://www.epa.gov/nps/chesbay502/). Although this document was developed for federal lands, it acknowledges that a majority of land in the Chesapeake Bay watershed is nonfederal land, and also recognizes that the same set of tools and practices are appropriate for both federal and nonfederal land managers to restore and protect the Chesapeake Bay.

Representative Timothy V. Johnson, Illinois

Johnson 1. Ms. Jackson, one of the greatest challenges in rural America right now is addressing urgent water and wastewater needs for small rural communities. At the same time, the EPA continues to add layers of stringent regulations on these communities, requiring billions of dollars in new investments throughout each state. When developing a TMDL does the EPA consider the impact the implementation of the TMDL may have on water and sewer rates, especially across small rural communities? What remedies do you offer if the community is unable to finance changes to their system or build a new system?

Answer: The EPA recognizes the particular needs faced by rural communities in maintaining their water and wastewater infrastructure, and the EPA seeks to ensure that its programs are implemented in ways that recognize these specific challenges. In the context of a total maximum daily load (TMDL), most TMDLs are completed by the states, and this is the EPA's preference. TMDLs are approved by the EPA, and to receive approval, they must identify pollutant reductions adequate to meet water quality standards, including a margin of safety. This evaluation does not specifically consider costs. However, the EPA encourages states to take into consideration implementation issues, such as the cost of implementation, when they develop TMDLs, although implementation plans for TMDLs are not required by federal law. The TMDL development process also provides opportunities for stakeholder input on how the TMDL would be implemented. States may also have the opportunity, should they wish to do so consistent with the Clean Water Act, to adopt temporary variances from their water quality standards, or they can set lower water quality goals to avoid widespread social or economic impacts. These changes would also require EPA approval.

Additionally, the Clean Water State Revolving Fund (SRF) is one mechanism available to communities for financing upgrades to publicly owned treatment works. The Clean Water SRF offers below market interest rates that can make financing treatment plant upgrades more affordable for many communities. In addition, the FY2010 and FY 2011 appropriations allowed the SRF programs to use a portion of their capitalization grant to provide additional subsidy in the form of principal forgiveness, negative interest loans, and grants. States are encouraged to use this additional subsidy to provide financing to rural communities that could not otherwise afford a loan.

Representative Martha Roby, Alabama

Roby 1. First, I like to ask you about the EPA guidance document that would broaden the reach of the Clean Water Act. Many stakeholders in Alabama are concerned with how EPA is going to redefine "waters of the U.S" and how this will impact agriculture and the jurisdiction USDA and NRCS has through a MOU on wetland/stream issues? Also, can you please explain why this determination is being done through an internal guidance document as opposed to a formal rulemaking that would provide for public comment? It seems that a change to the definition of water in the U.S. will have far reaching effects and should be an open and transparent process.

Answer: The EPA and the U.S. Army Corps of Engineers (Corps) have drafted guidance that clarifies those waters over which the agencies will assert jurisdiction consistent with the CWA, implementing regulations, and Supreme Court interpretations. The draft guidance cannot and does not alter existing requirement of the law, it merely explains how the agencies think existing law should be applied in general, and emphasizes that it may not be applicable in particular cases. The scope of waters that would be protected under the interpretations in the draft guidance would remain significantly narrower than under the agencies' interpretations prior to the Supreme Court's decisions in *SWANCC* and *Rapanos*. All exemptions for agriculture in the CWA and regulations would be completely unchanged by the draft guidance. Also, the draft guidance should have no effect on U.S. Department of Agriculture and the Natural Resources Conservation Service agreements, including those undertaken under the auspices of the Food Security Act. The EPA and the Corps released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public. The agencies also expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States."

Roby 3. In response to questions about treating milk as oil under the SPCC regulations, you have repeatedly stated that the EPA does not intend to regulate milk. I suppose you recognize that these questions would not keep coming up had the EPA not withdrawn the proposed exemption issued by your predecessor in January of 2009. It is now 26 months later and the EPA has yet to issue a final rule exempting milk from the SPCC regulations. What are you planning to change in the proposed exemption that has taken you over 2 years to draft?

Answer: On April 12, 2011, the EPA issued its final rule exempting milk and milk product containers from the Oil Spill Prevention, Control, and Countermeasure (SPCC) rule. The final

rule was published in the Federal Register on April 18, 2011 and became effective on June 17, 2011.

Roby 4. Does the EPA plan to regulate other low capacity on-farm storage? What kind of guidance and implementation time-frames will you consider for on-farm storage?

Answer: The Oil Spill Prevention, Control, and Countermeasure (SPCC) rule is not directed toward low capacity oil storage. It applies to farms that store more than 1,320 US gallons in total of all aboveground containers or more than 42,000 gallons in completely buried containers.

Regarding the implementation time frames, the SPCC program requires the preparation and implementation of an SPCC Plan. Farms in operation on or before August 16, 2002, must maintain or amend their existing Plan by November 10, 2011. Any farm that started operation after August 16, 2002, but before November 10, 2011, must prepare and use a Plan on or before November 10, 2011. On October 18, 2011, the EPA amended the date by which farms must prepare or amend and implement their SPCC Plans, to May 10, 2013. If the EPA receives no adverse comment by November 2, 2011, then the rule will become effective on November 7, 2011. Assistance for farms is available through the EPA regional offices and at: http://www.epa.gov/emergencies/content/spcc/spcc_ag.htm.

Roby 5. I am extremely concerned over the proposed Boiler MACT rule to reduce pollution from industrial boilers. In Alabama, we have over 61 boilers with 51 of them in the wood products industry. I have heard from constituents that if it goes into effect that it would result in a loss of 17,000 jobs in mills plus nearly 55,000 jobs in the surrounding communities. New Air Regulations could total about $4 billion annually, which is over 4 times the entire industries profit for 2008. I do appreciate the response in February that your office gave me and my fellow freshman colleagues who wrote to you in the beginning of this Congress on this issue. In that letter you mention that you will be accepting more comments on the rule – Could you discuss what we should expect from the Agency in the next few months in how they will be collecting and reviewing these additional comments and when we expect you to take the next step on the final ruling?

Answer: Based on public comment and additional data provided during the comment period, the EPA made significant changes to the rules. The rules still achieve significant public health protections through reductions in toxic air emissions, including mercury and soot, but the cost of implementation was cut by about 50 percent from a version of the proposals issued last year. One of the changes made in the final rule was to combine coal and biomass fired boilers into a single subcategory, with the effect that owners and operators of biomass boilers will be able to comply more easily and at lower cost than was envisioned in the proposed rule. Also, as the result of the final rule defining nonhazardous solid waste, boilers burning clean biomass, or secondary biomass material generated through other processes that nonetheless is similar to clean biomass will not be reclassified as solid waste combustors. In addition, wood residuals were removed from the definition of non-hazardous solid waste, which provides additional fuel flexibility for biomass boilers. Finally, owners of biomass boilers may submit case by case requests for other types of materials to qualify as fuels (and, if they qualify, be permitted to be combusted by units subject to the boiler major or area source standards rather than the incinerator standards).

Many biomass boilers are located at area sources of hazardous air pollutants. Area sources are typically smaller industrial or commercial operations/facilities. Significant changes were made to the area source requirements for biomass units. Under the final rule, existing area source biomass boilers are subject to a periodic tune-up requirement rather than the emission limits that were proposed. New biomass boilers are subject to emission limits for particulate matter that are reflective of readily available, proven, cost effective technologies that will not harm the economics of new projects at area sources.

The EPA believes further public review is required because the final standards significantly differ from the proposals. Therefore, the EPA has announced that it intends to reconsider certain aspects of the final standards under the Clean Air Act process for reconsideration, which allows the agency to seek additional public review and comment to ensure full transparency. This process will enable us to conduct further analysis of issues presented during and after the public comment period for the recently adopted rule, including any further information that the public and affected source owners choose to provide to the EPA. As part of the reconsideration process, the EPA will issue a stay postponing the effective date of the standards for major source boilers and commercial and industrial solid waste incinerators. EPA also announced that the agency would accept additional data and information regarding potential reconsideration of these standards until July 15, 2011. We intend to issue a proposed reconsideration decision by the end of October 2011 and to finalize a decision by the end of April 2012. This schedule will allow the agency to base the final standards on the best available data and provides the public with ample opportunity to submit additional information and input.

Representative Jean Schmidt, Ohio

Schmidt 1. In your response to Chairman Lucas regarding biological opinions under the endangered species act, could you clarify for us what your plans are regarding external review?

Answer: In March 2011, on behalf of the Departments of Agriculture, Commerce, and Interior, the EPA requested that the National Academy of Sciences (NAS) convene a committee of independent experts to review scientific and technical issues that have arisen as a result of collective responsibilities under the Endangered Species Act (ESA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The recent experience of completing consultations under the ESA for FIFRA related actions affecting Pacific salmon has illustrated a number of scientific issues. The scientific and technical topics on which we seek advice pertain to the approaches utilized by the EPA, the Fish and Wildlife Service of the Department of Interior, and the National Marine Fisheries Service of the Department of Commerce's National Oceanic and Atmospheric Administration in assessing the effects of proposed FIFRA actions on endangered species and their habitats. These topics include the identification of best available scientific data and information; consideration of sub-lethal, indirect and cumulative effects; the effects of chemical mixtures and inert ingredients; the use of models to assist in analyzing the effects of pesticide use; incorporating uncertainties into the evaluations effectively; and the use of geospatial information and datasets that can be employed by the departments and agencies in the course of these assessments. Two Biological Opinions developed by the National Marine Fisheries Service evaluating the impacts of six pesticides (carbaryl, carbofuran, chlorpyrifos, diazinon, malathion, and methomyl) on Pacific salmon will serve as examples to illustrate the

scientific complexity of these issues. A concerted, closely coordinated effort to address these issues openly and actively will assist in the proper execution of the statutory responsibilities under the ESA, FIFRA and other applicable laws.

The Executive Branch is formulating the specific charge to the NAS panel. Based upon preliminary discussions with the NAS, we believe that the external review could be completed in approximately 18 months, once the panel is convened. The first meeting of the NAS panel is scheduled for November 3, 2011.

Schmidt 2. Last week, the EPA filed for an extension of the court order in the case NCC v. EPA to give additional time to complete consultations under the Endangered Species Act. Is the EPA guaranteed to receive the extension you requested?

Answer: On March 28, 2011, the United States Court of Appeals for the Sixth Circuit granted the EPA's 2nd Motion to Stay the Mandate until October 31, 2011 in the *National Cotton Council of America v. EPA* case.

Schmidt 3. If an extension is not granted, would EPA and the States be able to finalize a Pesticide General Permit by April 9th?

Answer: As discussed in the response above, on March 28, 2011, the United States Court of Appeals for the Sixth Circuit granted the EPA's 2nd Motion to Stay the Mandate until October 31, 2011 in the *National Cotton Council of America v. EPA* case.

Schmidt 4. In the absence of a Pesticide General Permit, could pesticide applicators be subject to citizen suits under the Clean Water Act for failure to obtain an NPDES permit?

Answer: As indicated in the responses above, pesticide applicators are not required to obtain an NPDES permit prior to October 31, 2011. After that date, an operator who does not have a permit and who discharges could be subject to enforcement under the Clean Water Act, including enforcement under the citizen suit provisions, where applicable.

Schmidt 5. I want to turn attention to an issue pertaining to environmental justice and an issue that is very important to me and southern Ohio, bed bugs. Administrator Jackson, the EPA held a National Bed Bug summit in April of 2009 and again in February of 2011 with the goal of reviewing the current bed bug problem and identifying actions to address the problem. While I agree with the intent of the summit and some of the proposals, it seems as though the EPA is almost exclusively focused on outreach and prevention. Outreach and prevention are worthy and laudable goals, but it does nothing for people who actually have bed bug infestations, especially those living on fixed and lower incomes. Do you think that proper consideration was given to Section 18 exemption requests from states like Ohio for pesticide permits to eradicate this pest?

Answer: The EPA's approach, as supported by CDC, DoD, HUD, NIH, and USDA, is not focused solely on outreach and prevention, but rather these efforts are part of a more comprehensive and multifaceted strategy that includes a variety of educational, non-chemical, and chemical approaches for bed bug management and control. Many involved in addressing

bed bug infestations are now recognizing that no chemical is a silver bullet and that effectively managing bed bugs requires a comprehensive, collaborative approach.

The EPA's role is to carry out the Congressional mandate in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure that pesticides are (1) safe and (2) effective. We carry out that responsibility through rigorous scientific screening of pesticides and imposing limits on the use of registered pesticides to ensure that they do not harm people or the environment when used according to the label.

The EPA's assessment of Ohio's request for an emergency exemption allowing use of propoxpur for bedbug infestation suggests the likely exposures to propoxpur are not adequately protective of the public. Propoxur, along with other members of its chemical class, is known to cause nervous system effects. The agency's health review for its use on bed bugs suggests that children entering and using rooms that have been treated may be at risk of experiencing nervous system effects. Inhalation and hand-to-mouth exposure routes pose the most concern for children. A safety evaluation must support all emergency use patterns, and the current risk assessment does not support a general approval, as had been sought in Ohio's section 18 request.

Schmidt 6. Has the EPA reached a final decision on Ohio's Section 18 request? If not, what mitigation measures is EPA presently considering? If EPA's decision to refuse the Section 18 request is final, is the Agency considering an alternative approach that Ohio and the other should pursue?

Answer: The EPA is open to working with Ohio and others to determine whether propoxur can be used in some capacity for the control of bed bugs. As you are aware, the EPA's review found the requested use presents an unacceptable risk because children exposed to propoxur in treated rooms may experience nervous system effects (cholinesterase suppression). Inhalation and hand-to-mouth exposure routes pose the most concern for children. In addition, during the propoxur product reregistration process (2007 to 2009), all indoor residential spray uses were deleted from product labels due to risks to children.

The EPA has communicated these results to the officials in Ohio. The EPA has offered Ohio the possibility of allowing the use of propoxur in locations where children would not be present, such as senior centers or other managed facilities with the ability to protect children from exposure. At this time, Ohio state officials have not proposed to modify their propoxur request in that manner.

The EPA has also been in discussions with Ohio, and others, about the possibility of conducting additional toxicity testing that could assist the EPA in refining the risk assessment for propoxur.

Schmidt 7. In December, several of my colleagues and I sent you a letter expressing our concerns about EPA's draft Pesticide Registration Notice (PR Notice) 2010-X entitled False or Misleading Pesticide Product Brand Names. The proposal would require registrants of consumer pesticide products to change trademarked brand names if they contain words that EPA now considers to be misleading such as "pro" or "green" even though the agency has previously

approved these names. These products have been thoroughly evaluated through EPA's rigorous pesticide registration process and many of these products have been on the market for decades. What evidence does EPA have to suggest that consumers are confused by pesticide product brand names? Many of the potentially affected products are decades old and familiar to consumers.

Answer: The EPA is aware of registrants' concerns about the draft PR Notice 2010-X concerning false or misleading pesticide product brand names. As background, for a registrant to lawfully sell and distribute a pesticide in the United States, the product cannot be "misbranded" as defined in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) [see FIFRA § 12(a)(1)(E)]. FIFRA defines "misbranded," in part, as having labeling that "bears any statement, design, or graphic representation relative thereto or to its ingredients which is false or misleading in any particular" [see FIFRA § 2(q)(1)(A)]. Therefore, if a brand name or product name that appears on a product's labeling is false or misleading, it would be a violation of FIFRA to sell or distribute the product. In addition, the EPA could not grant a registration to a product that would be misbranded [see FIFRA § 3(c)(5)(B)].

The draft PR Notice 2010-X does not require registrants to change pesticide product brand names; rather, it provides examples of brand names that may be considered to be false or misleading and describes a process for ensuring that brand names are not false or misleading by making changes such as replacing them or including qualifiers or disclaimers. Even though the PR Notice is still in draft, the FIFRA requirements apply to all pesticides, and when making decisions on registration applications or amendments, the EPA must determine whether labeling is false or misleading.

Regarding your question about consumers, the EPA does not make decisions about the acceptability of pesticide product brand names solely based on complaints from consumers. The basis for evaluating a product's brand name is initially the EPA's judgment as to whether that name appears to be "false or misleading in any particular" along with any evidence the EPA may possess indicating a name is false or misleading, consistent with the statute. The agency reviews a pesticide product's labeling and informs applicants or registrants if the agency finds specific statements, claims, product brand names, logos, pictures or other aspects of the labeling to be potentially false or misleading. For example, a product name containing the term "green" could mislead the consumer into believing that a product is totally safe for the environment and thereby cause consumers to ignore the safety warnings and precautions on the label.

When labeling is potentially false or misleading, the EPA may work with the applicant or registrant to modify the labeling so that it is not false or misleading before the labeling is approved. Occasionally, some applicants, registrants and distributors have considered or adopted product brand names (or placed company names or trademarks within or in close proximity to product brand names) that run counter to agency regulations and FIFRA concerning false or misleading claims. It is for this reason that the EPA believes that guidance issued in the form of a PR Notice is needed to clarify its current interpretation of what product names may be false or misleading. Again, the PR Notice does not require any brand name to be changed, instead it provides guidance to registrants on what terms may be false or misleading as well as options for modifying labeling so that it is not false or misleading.

Finally, you may be interested to know that the EPA is considering narrowing the scope of the notice so that it focuses solely on safety- and composition-related terms, which would reduce the number of potentially affected products by roughly two-thirds (66%). For example, the term "pro" and other efficacy-related terms would be removed from the PR Notice.

Schmidt 8. In his response to the letter from my colleagues and I, Assistant Administrator Owens states that "EPA believes that only a very small number of products will be affected by the final PR Notice," and "EPA believes that very few registrants, if any, would actually need to change their product brand names and that no significant adverse impacts should occur in the marketplace." However, an industry estimate suggests that the proposal could impact more than 5,000 currently registered pesticide products and result in a potential loss of approximately $2.5 billion in brand equity. What analysis did EPA conduct to support the conclusion that only a very small number of products will be affected? Can you explain the discrepancy between EPA's prediction of the proposal's affect and that of the industry?

Answer: In evaluating the public comments received on the draft PR Notice, the EPA has counted the products bearing brand names for federally registered pesticide products that contain the 21 terms listed in the draft notice as potentially false or misleading. The EPA has found a total of 1,322 federally registered product brand names (not including distributor products) containing those listed terms. As mentioned in the previous answer, the EPA is currently contemplating narrowing the scope of the notice so that it focuses solely on safety- and composition-related terms, which would reduce by about two-thirds (66%) the number of potentially affected products. Moreover, the draft guidance neither bans product names containing the example terms, nor does it require brand names to be revised. Rather, it clarifies that product names containing certain terms could potentially be false or misleading and provides options available to registrants for addressing such issues with the agency.

Schmidt 9. What type of economic analysis has EPA done on the economic impacts to pesticide manufacturers, garden centers, retail stores and other businesses that sell pesticide products?

Answer: The Agency is not required to conduct, and has not prepared, a formal economic analysis of proposed policies such as this. Nonetheless, the EPA works with pesticide companies and others on PR notices and takes into account the economic impacts. As mentioned in the previous two answers, the EPA is considering narrowing the scope of the notice, which would decrease the number of products that might be affected by about two thirds (66 percent). Therefore, the EPA estimates that only a very small percentage of all pesticide product brand names for current federally registered products would be likely to take any action in response to the PR Notice. Further, the PR Notice offers registrants simple and workable alternatives to changing or removing names such as by using disclaimers, qualifying statements, changing font type and size, and other methods short of removal or changes of trademarked names.

Schmidt 10. Can EPA provide the Committee with assurances that it will refrain from requiring registrants to change existing product brand names through the registration process until a formal policy is finalized?

Answer: The EPA agrees that the draft PR Notice should not be implemented until we have duly considered all public comments received and have issued a final and effective PR Notice. However, in the absence of a final PR Notice, the EPA must continue to respond to potentially false or misleading terms in product brand names in a manner that is consistent with the law.

Schmidt 11. Administrator Jackson, on January 7th your Agency declared that the purposeful introduction of fluoride, at significant levels, into drinking water is a critical public health practice that needs to continue. As you know, the Centers for Disease Control have called community water fluoridation one of the "ten greatest public health achievements of the 20th century". However, 3 days later, your agency proposed to prohibit the use of a vital food protection product – a product necessary to protect the US food supply - because it results in a small amount of fluoride to be introduced to the diet of some individuals.

Administrator Jackson – your agency is saying "Because we're worried about your health....we need to put it in your drinking water...BUT, because we're worried about your health....we need to take it out of your food."

Don't you agree that this is approach to public health, protection of the food supply and the environment is absurd? Wouldn't you agree that there HAS to be a better solution than this?

Answer: The EPA, the Centers for Disease Control and Protection (CDC), and the U.S. Food and Drug Administration (FDA) worked closely to reach a shared understanding of the latest science on fluoride, in order to ensure a consistent, comprehensive approach. The agencies have concluded that the amount of fluoride to which people in the United States are exposed has increased over the last several decades since the introduction of drinking water fluoridation and consumer dental products (such as fluoride toothpaste and mouth rinses). This has led to a large decline in the prevalence of tooth decay, but has also been accompanied by a modest increase in the prevalence of dental fluorosis, a condition caused by fluoride over exposure that can cause dental effects ranging from barely visible lacey white markings, to more severe staining or pitting of the tooth's enamel. The proper levels of fluoride provide important benefits to dental health, and the majority of the United States population is not exposed to excessive levels. However, fluoride exposure is too high for some children, particularly those who live in areas with high levels of naturally occurring fluoride in drinking water.

The EPA is currently examining the fluoride drinking water standard and considering whether to lower the maximum amount of fluoride allowed in drinking water, which is set to prevent adverse health effects. In addition, the EPA is proposing to withdraw the fluoride tolerances for the fumigant sulfuryl fluoride because Section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA) prohibits the EPA from establishing tolerances for pesticides if aggregate exposure (exposure from all non-occupational sources, including drinking water and dental products) is not safe. Based on the recommendation of the National Academies of Science, as well as the EPA risk assessments, the EPA has determined that, in areas where drinking water contains naturally high fluoride levels, aggregate exposures to fluoride for infants and children under the age of seven years old can exceed a level that can cause severe dental fluorosis. The EPA recognizes that in most such cases, pesticide residues would not be a primary source of exposure and removing such residues would generally not have a significant impact on risk or public

health. EPA also recognizes the significant benefits that several uses of sulfuryl fluoride provide, but considerations such as these are not relevant under FFDCA Section 408 which requires the EPA to base its tolerance decisions on risk alone, even when the incremental risk is small. As explained in the Federal Register notice announcing its proposal in response to objections to the sulfuryl fluoride tolerances, EPA thinks that this action is required by Section 408 of the FFDCA. The Federal Register notice containing EPA's proposal discusses the possible adverse impacts on public health and other consequences from a final decision to revoke the sulfuryl fluoride tolerances.

The EPA's proposed decision on sulfuryl fluoride was published in the Federal Register on January 19, 2011. The Agency accepted comments through July 5, 2011, and anticipates issuing a final decision in 2012. The EPA has proposed a three year phase out for most sulfuryl fluoride uses in order to provide time for users to transition to alternative treatments; the phase out time would not begin until 60 days after the EPA publishes the final order in the Federal Register, likely in 2012.

Representative Dennis A. Cardoza, California

Cardoza 1. Administrator Jackson, the EPA recently announced an advance notice of proposed rulemaking seeking public input on the effectiveness of current water quality programs influencing the health of the San Francisco Bay Delta Estuary. The ANPR solicits comment on topics, such as potential site-specific water quality standards and site-specific changes to pesticide regulation. Can you explain the EPA's intent with this recent announcement? How do you intend to coordinate and work within the current BDCP process without causing more harm than good?

Answer: The EPA committed to complete this advance notice of proposed rulemaking (ANPR) and public solicitation process in the Interim Federal Action Plan (IFAP) for the California Bay Delta Estuary developed in 2009 by six federal agencies. The IFAP describes various actions federal agencies committed to undertake, with the State of California, to investigate and mitigate the impacts of all stressors on the imperiled native species and the Bay-Delta Estuary aquatic ecosystem; to encourage smarter water use; to help deliver drought relief services; and to ensure integrated flood risk management. Water quality in the Bay Delta Estuary and its tributaries is impaired, contributing to the current ecological and water supply crisis. Specifically, the EPA's role in this initiative is to "assess the effectiveness of the current regulatory mechanisms designed to protect water quality in the Delta and its tributaries." This ANPR is the start of this assessment.

The comment period for the ANPR closed on April 25, 2011. The EPA will review the public responses to the ANPR, along with the significant scientific information developed about Bay Delta Estuary aquatic resources. We will synthesize all available information and develop a strategic proposal on how to use the EPA's authorities and resources to achieve water quality and aquatic resource protection goals in the Bay Delta. We will collaborate with the state and regional water boards, as well as with other agencies and stakeholders, to assure that our collective efforts are effective and efficient.

At the same time, the Bay Delta Conservation Plan (BDCP) is being developed as a habitat conservation plan under the federal Endangered Species Act and the state Natural Community

Conservation Plan Act and is targeted to address primarily the impacts of the state and federal water export facilities on endangered and threatened species. The BDCP is expected to include proposals for changing how water is diverted and conveyed through the Bay Delta Estuary to the state and federal water export pumping facilities in the south Delta. The EPA's responsibilities under the Clean Water Act to protect designated uses of waterbodies, that may include estuarine habitat, fish migration, and threatened and endangered species, overlap with ESA requirements being addressed in the BDCP. Some actions taken pursuant to the BDCP will need to comply with both the ESA and Clean Water Act. To that end, the EPA will ensure that any action it might take as a result of this ANPR will be closely coordinated with other federal and state actions related to the BDCP, any biological opinions on water operations affecting the Bay Delta Estuary, and any other actions requiring ESA compliance.

Cardoza 2. Administrator Jackson, EPA recently proposed to withdraw food tolerances of sulfuryl fluoride, a product critical to the protection of U.S. agriculture and especially specialty crops in California. This move is puzzling to me because it will negatively impact public health by increasing the potential for contamination and diminish producers' ability to export goods to foreign markets. Why is EPA issuing this proposal now? Can you tell me who are the actual beneficiaries of this proposed EPA action? And why is the Agency taking such an action given the importance of this product to agriculture and public safety?

Answer: As explained in the Federal Register notice announcing its proposal in response to objections to the sulfuryl fluoride tolerances, EPA thinks that this action is required by Section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA). The Federal register notice containing EPA's proposal discusses the possible adverse impacts on public health and other consequences from a final decision to revoke the sulfuryl fluoride tolerances.
The EPA, the Centers for Disease Control and Protection (CDC), and the U.S. Food and Drug Administration (FDA) worked closely to reach a shared understanding of the latest science on fluoride, in order to ensure a consistent, comprehensive approach. The agencies have concluded that the amount of fluoride to which people in the United States are exposed has increased over the last several decades since the introduction of drinking water fluoridation and consumer dental products (such as fluoride toothpaste and mouth rinses). The EPA's fluoride risk assessment showed that children – particularly those living in those areas with naturally occurring high levels of fluoride in the drinking water supply – are exposed to fluoride levels that can cause severe dental fluorosis. Withdrawal of the sulfuryl fluoride tolerances will reduce these children's level of fluoride exposure. The EPA is also currently examining the fluoride drinking water standard and considering whether to lower the maximum amount of fluoride allowed in drinking water.

The EPA is proposing this action on sulfuryl fluoride because the governing statutory provision, Section 408 of the FFDCA, bars the EPA from establishing tolerances for pesticides if aggregate exposure (exposure from all nonoccupational sources, including drinking water and dental products) is not safe. Based on the recommendation of the National Academies of Science as well as the EPA risk assessments, the EPA has determined that aggregate exposure to fluoride exceeds levels that can cause severe dental fluorosis in areas where drinking water contains naturally high fluoride levels. The EPA recognizes the significant benefits that several uses of sulfuryl fluoride provide and also the key role the availability of sulfuryl fluoride serves in

helping the EPA meet its obligations under the Montreal Protocol to reduce the use of the stratospheric depleting pesticide, methyl bromide. Nonetheless, considerations such as these are not relevant under FFDCA Section 408 which requires the EPA to base its tolerance decisions on risk alone. EPA believes it has no discretion in this area; we are required by Section 408 to remove tolerances when aggregate exposure exceeds the safe level, even if only by a small amount for highly exposed populations, and even where the exposure from pesticide residues is insignificant compared with other sources of exposure, as in the case of fluoride.

The EPA's proposed decision on sulfuryl fluoride was published in the Federal Register on January 19, 2011. The agency accepted comments through July 5, 2011, and anticipates issuing a final decision in 2012. The EPA has proposed a three year phase out for most sulfuryl fluoride uses in order to provide time for users to transition to alternative treatments; the phase out time would not begin until 60 days after the EPA publishes the final order in the Federal Register, likely in 2012.

Cardoza 3. Every year the USDA and EPA work in conjunction to release the Pesticide Data Program report. This report is an important tool for EPA in setting tolerance levels for pesticide residues for various commodities. The report demonstrates a robust reporting process and year after year shows that the vast majority of fruits and vegetables fall overwhelmingly below the tolerances set by EPA. Yet, every year there are groups which misconstrue this data to suggest certain conventionally grown commodities are unsafe for consumption. Can your office begin defending both the robust process which generates this report and the findings which demonstrate that safety of the food supply?

Answer: The U.S. Department of Agriculture's (USDA) Pesticide Data Program (PDP) provides high quality, indispensable pesticide monitoring data that is invaluable to the EPA in producing realistic pesticide dietary exposure assessments as part of its effort to implement the 1996 Food Quality Protection Act. The EPA works with USDA to ensure the information released through the PDP program is accurately described to the public.

PDP monitoring activities are a federal-state partnership. Samples of fruit, vegetables, and other commodities are collected from 10 participating states from all regions of the country representing 50 percent of the U.S. population. Samples are apportioned according to each state's population and the commodities selected are chosen, in part, for their significance in the diet. Specific emphasis is placed on sampling fruits and vegetables commonly consumed by children. The samples are collected close to the point of consumption - at terminal markets and large chain store distribution centers - immediately prior to distribution to supermarkets and grocery stores. Samples are collected based on a sampling design method that ensures that monitoring data are nationally representative of the U.S. food supply. They represent food that is typically available to the consumer for purchase throughout the year to provide the best available realistic estimate of exposure to pesticide residues in foods.

The data collected under this program is ideal in many respects for use in the EPA's exposure assessment for pesticides: samples are collected as close to the point of consumption as possible (while still retaining the identity of product origin) and sampling is based on statistically reliable protocols. Over the last 15 years, PDP has collected tens of thousands of samples of 85 different

commodities, analyzing for over 440 pesticides. During this time, only a small percentage of these samples found 1) pesticide concentrations above the legal limit allowed (referred to as a tolerance) or 2) pesticide residue on commodities that do not have a tolerance established for that chemical (while the presence of such residue may be illegal, it is not necessarily unsafe). The EPA routinely uses USDA's PDP data as a component of its risk assessments to ensure that risk estimates for the U.S. population and various subgroups are safe – that is, there a reasonable certainty of no harm.

Representative Reid J. Ribble, Wisconsin
Ribble 1. I appreciate that EPA intends to finalize an exemption for dairy under the Spill Prevention, Control, and Countermeasure rule. However, I have heard increasing concern from Wisconsin farmers about regulatory uncertainty because the Agency has yet to do so. When does EPA plan to finalize this exemption? This process is a cause for concern about EPA's overall methodology, seeing as milk is already regulated for quality and safety.

Answer: On April 12, 2011, the EPA issued its final rule exempting milk and milk product containers from the Oil Spill Prevention, Control, and Countermeasure (SPCC) rule. The final rule was published in the Federal Register on April 18, 2011 and became effective on June 17, 2011.

Representative Mike McIntyre, North Carolina
McIntyre 3. Administrator, there have been guidance documents seeking clarification of both the *Solid Waste Agency of Northern Cook County (SWANCC)* and *Rapanos* court decisions, but the uncertainties about the federal jurisdiction over wetlands and other waters remains highly controversial. The new draft guidance document was recently released to Inside EPA.

- What are the differences between this guidance and the ones previously released? What stage in the process is the document?
- In North Carolina, many farmers are worried that many new water bodies are going to fall under EPA and Army Corps regulation and require Federal permits. Under the draft guidance currently at OMB, how broadly do you expect the impacts to be on agriculture? Does the EPA envision regulating farm ponds and other water bodies located on farms?

Answer: The EPA and the U.S. Army Corps of Engineers (Corps) have drafted guidance that clarifies those waters over which the agencies will assert jurisdiction consistent with the Clean Water Act (CWA), implementing regulations, and Supreme Court interpretations. The draft guidance cannot and does not alter existing requirements of the law; it merely explains how the agencies think existing law should be applied in general, and emphasizes that it may not be applicable in particular cases. The agencies have worked carefully to assure that the draft guidance is consistent with the law and would not impact any of the existing statutory or regulatory exemptions for the nation's farmers. The agencies understand the important role played by farmers in conserving and protecting clean water and the environment. The EPA and the Corps released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public. The agencies also expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States," and to provide the public with an opportunity to participate in

decisions regarding changes to the agencies' regulations. All exemptions for agriculture in the CWA and its implementing regulations would remain unchanged by the guidance, including the EPA's longstanding interpretation of 404(f)(1)(c) exempting farm ponds from CWA section 404 permitting requirements.

Representative Tim Huelskamp, Kansas
Huelskamp 1. In Parsons, KS, there is an ammunition depot that was closed during the latest round of the BRAC (Base Realignments and Closures) process in 2005. While the Army is attempting to close the base and turn it over to a redevelopment authority organized by the local community, you have attempted to require the Army and the community to make environmental improvements to the facility above and beyond those that are statutorily mandated. From where does the EPA believe their statutory authority governing these particular demands come? Further, I request the EPA provide documentation of this authority.

Answer: EPA believes that its authority to address environmental conditions at the Kansas Army Ammunition Site (KSAAP) site comes primarily from the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). A RCRA permit was issued for the KSAAP site in 1989, which pursuant to requirements of RCRA section 3004(u) included a provision for "corrective action" – the requirement to clean up releases of both hazardous wastes and hazardous constituents.

The Army is expected to finalize its transfer to the developer in the November/December 2011 timeframe. EPA and the state initiated the 30 day public notification process on September 28, 2011, to modify the existing RCRA corrective action permit that will ultimately facilitate the transfer of the KSAAP facility to the developer and the operating contractor after the land transfer occurs. The details of remediation requirements are being negotiated between EPA, DOD, the state, and the developer.

Representative Jeff Fortenberry, Nebraska
Fortenberry 1. Does the EPA plan to regulate low capacity on-farm fuel storage?

Answer: The Oil Spill Prevention, Control, and Countermeasure (SPCC) rule is not directed toward low capacity oil storage. It applies to farms that store more than 1,320 US gallons in total of all aboveground containers or more than 42,000 gallons in completely buried containers.

Fortenberry 2. Does the EPA plan to regulate livestock emissions?

Answer: Under the Mandatory Reporting of Greenhouse Gases (GHG) rule, certain livestock facilities with manure management systems with emissions equal to or greater than 25,000 metric tons of carbon dioxide equivalent (CO2e) per year from a manure management system are required to report. No other GHG emission sources associated with agriculture are covered. However, the EPA is not currently implementing this part of the rule (subpart JJ) due to a Congressional restriction prohibiting the expenditure of funds in fiscal year 2011 for this purpose.

Representative Randy Hultgren, Illinois

Hultgren 1. If EPA and the Corps were to adopt the Draft 2010 Clean Water Protection Guidance as a final document, is there any water body or wetland that lies within the same watershed as a navigable or interstate water that would not have a "significant nexus" to that navigable or interstate water?

Under the Guidance, a "significant nexus" is sufficient to establish jurisdiction, so doesn't that mean that EPA or the Corps could assert jurisdiction over any water body or wetland?

Answer: The agencies do not believe that all water bodies and wetlands would be determined to be jurisdictional under the draft guidance. For example, most water bodies and wetlands historically regulated under the "other waters" provision of our regulations would not be found jurisdictional under the draft guidance. As stated in the guidance, while each situation must be evaluated on a case-by-case basis, the agencies believe that most streams that flow into a traditional navigable or interstate water, as well as their neighboring wetlands, would be found to have a significant nexus to such downstream waters. We believe this is fully consistent with the *SWANCC* and *Rapanos* decisions and generally reflects the agencies' current interpretation of the scope of Clean Water Act jurisdiction. As a result, the agencies do not believe that the guidance, if finalized, would result in a significant change in Clean Water Act jurisdiction.

The agencies released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public.

Hultgren 2. The draft guidance provides no exceptions that are not in the statute or in existing regulations. Isn't it true that under the draft guidance EPA and the Corps could regulate almost any waters body or wetland on a case-by-case basis, even if the guidance says they are "generally not jurisdictional?"

These water bodies include ditches constructed wholly in dry land, artificial lakes and ponds used for stock watering or irrigation, rice fields, even water filled depressions from construction activity. Nothing in the guidance stops EPA or the Corps from arguing that a "significant nexus" exists between those water bodies and downstream navigable or interstate waters.

Answer: No. Past guidance issued by the agencies in 2008 also identified specific types of water as "generally not jurisdictional" such as swales or erosional features and upland ditches. Since that guidance was issued, the agencies have asserted jurisdiction over few, if any, of these waters. The draft guidance will not change this position.

Hultgren 3. In the *SWANCC* case, the court addressed an old quarry that was proposed to be filled in as a landfill. The Corps asserted jurisdiction because the quarry was used by migratory birds. The Supreme Court said no. Under the draft guidance, couldn't EPA and the Corps assert jurisdiction over that quarry because it holds water and lies within in a watershed, even though it is isolated?

Answer: No, the guidance will not result in jurisdiction over the waters at issue in *SWANCC*.

Hultgren 4. Why are EPA and the Corps trying to change the policies of their agencies through a guidance document? The courts have said that an agency cannot do that without going through notice and comment rulemaking.

Answer: Guidance was previously issued by the agencies on this important issue in 2008. The agencies believe that farmers, homeowners, businesses, and others deserve additional transparency, consistency, and predictability in the process for identifying which waters are, or are not, subject to the requirements of the Clean Water Act. We do not believe that the 2008 guidance provides the necessary clarity and are therefore working to develop replacement guidance. The EPA and the U.S. Army Corps of Engineers (Corps) released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public. The agencies also expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States."

Hultgren 5. Why is EPA taking a single opinion and making it the law of the land? Courts have said that you can't turn a dissent into a majority opinion by combining it with a concurring opinion to argue that the position of the dissent and the concurrence constitute the opinion of the court – but isn't that what EPA and the Corps is proposing to do in the draft guidance?

Answer: It is the position of the United States that in the wake of *Rapanos*, Clean Water Act (CWA) jurisdiction may be established using the standard set forth in either the plurality or Justice Kennedy's opinion. The U.S. established this position in the previous administration. This position is consistent with Supreme Court case law governing interpretation of the opinions of a divided court. Indeed, the four dissenting Justices in *Rapanos*, who would have affirmed the court of appeals' application of the Corps's regulations, stated explicitly that either the plurality test authored by Justice Scalia or the significant nexus test authored by Justice Kennedy could be used to determine CWA jurisdiction because they would uphold jurisdiction under either test.

Hultgren 6. The draft guidance goes far beyond even Justice Kennedy's opinion in the *Rapanos* case. In *Rapanos*, Justice Kennedy suggested that in some cases Justice Scalia's test would be broader than Justice Kennedy's "significant nexus" test. Justice Kennedy said that a surface water connection may not constitute a significant nexus if it was small and remote. In contrast, the draft guidance takes a very broad view of what is a tributary (and includes ephemeral streams) and then presumes that anything that can be considered a tributary has a significant nexus even if it has a small or no impact on downstream waters.

The draft guidance also says it does not matter how remote the waterbody is.

So, even if it is valid for EPA and the Corps to rely on the Justice Kennedy's significant nexus test, how can it go beyond it and assume jurisdiction over remote water bodies that have little or no impact on downstream waters?

Answer: The agencies do not believe that all water bodies and wetlands would be determined to be jurisdictional under the draft guidance. For example, most water bodies and wetlands historically regulated under the "other waters" provision of our regulations would not be found jurisdictional under the draft guidance. As stated in the guidance, while each situation must be evaluated on a case-by-case basis, the agencies believe that most streams that flow into a traditional navigable or interstate water, as well as their neighboring wetlands, would likely be found to have a significant nexus to such downstream waters. We believe this is fully consistent with the *SWANCC* and *Rapanos* decisions and generally reflects the agencies' current interpretation of the scope of Clean Water Act jurisdiction. As a result, the agencies do not believe the guidance, if finalized, would result in a significant change in Clean Water Act jurisdiction.

Ranking Member Collin Peterson, Minnesota

Peterson 1. According to OPM's website, the "Intergovernmental Personnel Act Mobility Program provides for the temporary assignment of personnel between the Federal Government and state and local governments, colleges and universities, Indian tribal governments, federally funded research and development centers, and other eligible organizations." The Committee became aware of a situation where EPA had entered into an Interpersonnel Agreement with a nonprofit, and the shared employee was lobbying on Capitol Hill for a piece of legislation involving EPA. How many IPA's are currently active? Is it possible to determine where EPA employees are currently working?

Answer: As of August 18, 2011, the EPA has 23 employees serving under the Intergovernmental Personnel Act mobility program. They serve at the following organizations:

Mississippi Department of Marine Resources
The Nature Conservancy
The Environmental Council of the States
Navajo Nation EPA Superfund Program
The Oregon Extension of Eastern University
California Environmental Protection Agency
Environmental Law Institute
World Resources Institute
Florida Department of Environmental Protection
Puget Sound Partnership (2)
DePaul University
National Wildlife Federation
Lincoln University Graduate Center
Pennsylvania Department of Environmental Protection
Commonwealth of Puerto Rico – Environmental Quality Board (2)
Florida Department of Agriculture and Consumer Services
City of New Haven Office of Sustainability
North Carolina Agricultural and Technical State University
The Clean Air Institute
Navajo Nation Department of Justice
Western States Water Council

Peterson 2. Recent court decisions have concluded that EPA's assertion that it has authority under FIFRA to bring a misbranding or other enforcement action prior to completing administrative procedures under FIFRA Section 6 based on the failure of the chemistry or compound to satisfy the requirements of risk mitigation decisions is arbitrary, capricious, an abuse of discretion, and contrary to law. Please provide committee with an expected timeline for completing the administrative procedures required under FIFRA section 6 for registrants with chemistries or compounds under risk mitigation review.

Answer: In May 2008, the EPA issued its Risk Mitigation Decision for Ten Rodenticides (RMD), specifying rodenticide product changes that must be made to allow for continued use that does not present unreasonable adverse effects to human health or the environment. On June 7, 2011, the EPA finalized the RMD, moving to ban the sale to residential consumers of the most toxic rat and mouse poisons, as well as most loose bait and pellet products. The agency is also requiring that all newly registered rat and mouse poisons marketed to residential consumers be enclosed in bait stations that will render the pesticide inaccessible to children and pets. The EPA intends to initiate cancellation proceedings under FIFRA against certain noncompliant products.

Peterson 3: We appreciate EPA working with the livestock industry to collect information about current emissions on today's animal feeding operations. It was our understanding that the methodology for collecting the information was approved by EPA is that correct? Is there a timeline for analyzing this information? How are you engaging the scientific community to analyze and digest the information collected by the livestock industry? How will EPA go about using this information down the road?

Answer: The monitoring methodologies used in the National Air Emissions Monitoring Study were identified and selected by a broad group of stakeholders that included representatives from the EPA, the U.S. Department of Agriculture, the animal feeding operation (AFO) industry, state and local air agencies, and environmental groups. All stakeholders had a part in the development process, and the EPA approved the final methodologies. On January 19, 2011, the EPA issued a Call for Information seeking additional peer reviewed monitoring data on AFO emissions, along with information on how animals and waste are managed at specific sites. The deadline for submitting these data to the agency was March 7, 2011.

The analysis of the data will be conducted by the EPA, with the assistance of their contractor, ERG, in a stepwise manner beginning with the broiler industry, followed by the swine and egg layers, and finishing with the dairy. As the analyses for each industry are developed, the drafts will be released on a rolling basis. Methodologies for the other species are scheduled to be completed and finalized by June 2012.

All stakeholders, including interested members of the scientific community, will be provided with an opportunity to review and comment on the draft methodologies. The EPA will announce the availability of the draft methodologies for review in the Federal Register. In addition to the Federal Register notice, the EPA will inform representatives of the major AFO trade organizations and other stakeholders that the draft methodologies are available for review and comment. Additionally, the EPA plans to hold informational webinars, informal meetings, and

outreach sessions with all interested stakeholders to discuss the data, processes, and information gathered from the study. Other information submitted to the agency will also be included for review.

The EPA has made the National Air Emissions Monitoring Study reports and associated data available to all stakeholders at www.epa.gov/airquality/agmonitoring/.

The agency will be using the data and information collected from the study, as well as other submitted data, to develop better tools for estimating AFO emissions.

Peterson 4. EPA recently released its latest draft report on biofuels and the environment. There seem to be inconsistencies in this report, as compared to outcomes from the RFS rulemaking. To what extent did the drafters of this report collaborate with USDA and other Federal agencies, and with other departments within EPA?

The draft report focuses on the potential negative environmental impacts of biofuels, but makes only the briefest comparison to the impacts from continued reliance on petroleum-derived baseline fuels. Will the final report attempt to correct this omission and go into further detail on both the potentially positive effects of biofuels on the environment, as well as the comparison to the environmental impacts of increasing dependence on marginal sources of foreign oil?

Answer: The EPA does not believe there are inconsistencies with this report to Congress and the Renewable Fuel Standard (RFS) rulemaking. The basis for the Report to Congress was the RFS2 Regulatory Impact Analysis. This first Report to Congress reviews impacts and mitigation tools across the entire biofuel supply chain from feedstock production and logistics to biofuel production, distribution, and use with an emphasis on six different feedstocks and two biofuels. The two feedstocks most predominantly used currently are corn starch to produce ethanol and soybeans to produce biodiesel. Four other feedstocks (corn stover, perennial grasses, woody biomass, and algae) have been reviewed for purposes of comparative evaluation. These represent the range of feedstocks currently under development. The two biofuels considered are ethanol (both conventional and cellulosic) and biomass-based diesel, because they are the most commercially viable in 2010 and are projected to be the most commercially available by 2022.

In preparing the draft report, the EPA assembled a large team of scientists from across the agency's research laboratories and program offices, including close cooperation with the Office of Air and Radiation. In addition, the EPA received input from U.S. Department of Agriculture (USDA) and Department of Energy (DOE) staff scientists and held a series of briefings with each of these agencies to apprise their leadership of the approach and scope of the report. Before a draft was released for public comment, it was reviewed by each of these agencies and the Office of Management and Budget (OMB).

Regarding the consideration of environmental impacts of biofuels, section 204 of the Energy Independence and Security Act (EISA) calls for the EPA to report to Congress on the environmental and resource conservation impacts of increased biofuel production and use, including air and water quality, soil quality and conservation, water availability, ecosystem

health and biodiversity, invasive species, and international impacts. This report is the first of the triennial reports to Congress required under EISA.

The EPA has done an extensive review and analysis of the published peer reviewed scientific literature relevant to the environmental and resource conservation impacts of increased biofuel production and use. The published literature on comparing the environmental impact of biofuels with petroleum based fuels is quite limited and would have required the authors to draw conclusions not supported by the literature to address this important issue. It is anticipated that the next report to Congress, due in 2013, will likely include analyses that compare biofuel production with production of petroleum based fuels.

Peterson 5. There is much criticism about the EPA's Florida proposal and this involves disputes about the underlying data, potential costs of complying with numeric standards when they are incorporated into discharge permit limitations, and disputes over the administrative flexibility. Also, some fear EPA's action in Florida will be a precedent for actions elsewhere. Are you aware of the EPA Region 5 letter to Illinois EPA on numeric nutrient standards? Do you intend to take the same actions in the states served by Region 5 that you have taken in Florida?

Answer: Nitrogen and phosphorus pollution is a widespread, serious, and growing problem. This pollution threatens our waters used for drinking, fishing, swimming and other recreational purposes. It can hurt the tourism industry, reduce home and property values, and impact public health. To help states address this pollution, on March 16, 2011, the EPA sent a memo to its regional offices that builds on our commitment to strengthen partnerships with states and promote collaboration with stakeholders on this issue. The agency will use this memorandum as the basis for discussions with interested and willing states about how to move forward on tackling this issue, recognizing that there is no one-size-fits-all solution. The agency strongly believes states should address phosphorus and nitrogen pollution through standards they develop and supports these critical state efforts. At this time, the EPA is not working on any federal standards for phosphorus and nitrogen for any states other than ongoing efforts in Florida, but we are ready to provide support and technical assistant as states work to tackle this serious water pollution problem.

Peterson 6. We have been made aware of a memo dated March 16th which echoes the January 21st letter sent by Region V to Illinois EPA. The memo encourages Regional Administrators to work with states on reducing nitrogen and phosphorus loadings. Can you elaborate on what is meant by the sentence *"EPA will support states that follow the framework but, at the same time, will retain all its authorities under the Clean Water Act."*?

Answer: The EPA has oversight responsibility for many state activities under the Clean Water Act (CWA) including, for example, state adoption of water quality standards and state implementation of the National Pollutant Discharge Elimination System (NPDES) permit program where that program is delegated to a state. As the memorandum notes, the EPA encourages states to follow the recommended elements in the EPA's framework for state nutrient reductions and develop effective programs for reducing nitrogen and phosphorus loads in the near-term while they continue to develop state numeric water quality standards for nitrogen and phosphorus. As the memorandum notes, it is intended to stimulate a conversation. States retain

broad discretion to design programs that meet their specific needs in addressing nutrient pollution, and these programs do not have to adopt the recommendations in the memorandum. We look forward to working with states to assure effective protection of public health and water quality, consistent with the best-available science and the requirements of the CWA. We also recognize under the Clean Water Act that the EPA is accountable for effective implementation of the law.

Peterson 7. Have your staffing numbers been going up or down over the last 5 years? And how do the FTE levels compare in your program staff versus the enforcement and compliance staff over that same period?

Answer:

See chart on next page.

Programmatic NPMs and OECA FTE Utilization Trends

FY 2006 - FY 2010

Office of Air & Radiation	1,830.2	1,807.6	1,807.5	1,843.3	1,852.9	22.2
Office of Water	2,131.9	2,097.6	2,088.9	2,124.7	2,207.0	75.1
Office of Chemical Safety and Pollution Prevention*	1,445.8	1,394.1	1,369.1	1,381.2	1,376.6	(69.2)
Office of Solid Waste & Emergency Response	2,719.2	2,664.7	2,678.7	2,684.9	2,738.5	19.3
Office of Research And Development	1,936.9	1,924.8	1,899.1	1,916.7	1,903.1	(33.8)
Office of International Affairs**	91.7	81.2	75.3	78.4	124.6	32.9
Programmatic NPM Total	**10,155.7**	**9,970.0**	**9,918.6**	**10,029.2**	**10,202.7**	**47**
Year-to-Year Delta		(186.2)	(51.4)	110.6	173.5	
Year-to-Year % Change		-1.83%	-0.52%	1.12%	1.73%	

AA Enforcement	**3,316.2**	**3,293.7**	**3,264.9**	**3,260.0**	**3,284.5**	**(31.7)**
Year-to-Year Delta		(22.5)	(28.8)	(4.9)	24.5	
Year-to-Year % Change		-0.68%	-0.87%	-0.15%	0.75%	

NOTE: Data excludes enabling and support offices including: OARM, OCFO, OEI, OA, OIG, OGC. Utilization in support offices declined by 0.24%.

***The utilization of FIFRA fees has declined over the years, but is largely offset by an increase in PRIA fees FTE. Reduction is in line with restructured fe**

****Increases in the Office of International Affairs in FY 2010 are due to the transfer of the Office of Tribal Affairs from the Office of Water to the Office of**

Peterson 8. There have been guidance documents seeking clarification of both the *SWANCC* and *Rapanos* court decisions, but the uncertainties about the federal jurisdiction over wetlands and other waters remains in limbo and highly controversial. A new guidance document was recently released to *Inside EPA*. What are the similarities/differences of this guidance related to the ones previously released? What stage in the process is the document?

Answer: The EPA and the U.S. Army Corps of Engineers (Corps) have drafted guidance that clarifies those waters over which the agencies will assert jurisdiction consistent with the Clean Water Act (CWA), implementing regulations, and Supreme Court interpretations. The draft guidance cannot and does not alter existing requirements of the law; it merely explains how the agencies think existing law should be applied in general, and emphasizes that it may not be applicable in particular cases. The scope of waters that would be protected under the interpretations in the draft guidance would remain significantly narrower than under the agencies' interpretations prior to the Supreme Court's decisions in *SWANCC* and *Rapanos*. All exemptions for agriculture in the CWA and regulations would be completely unchanged by the draft guidance. Also, the draft guidance should have no effect on USDA and NRCS agreements, including those undertaken under the auspices of the Food Security Act. The EPA and the Corps released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public. The agencies also expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States."

Peterson 9. Can you explain how and/or what other Clean Air Act (CAA) authorities are triggered because of the emission standards for light duty trucks? For example, how did this trigger permitting provisions under Title V and the New Source Review?

Answer: The EPA promulgated the emissions standards for light duty vehicles under Clean Air Act (CAA) section 202(a). "Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule," 75 Fed. Reg. 25,324 (May 7, 2010) (Vehicle Rule). The standards applied to cars and light trucks for model years 2012-2016, and were applicable to greenhouse gases (GHG).

The promulgation of the Vehicle Rule triggered the application of the New Source Review Prevention of Significant Deterioration (PSD) permitting program and Title V permitting program. The PSD program is found in Title I, Part C of the CAA, and those provisions apply to any "major emitting facility," defined as a stationary source that emits or has the potential to emit 100 or 250 tons per year (depending on the type of source) of "any air pollutant." CAA section 169(1) (emphasis added). Such a facility may not initiate construction or major modification of its facility in such an area without first obtaining a PSD permit. See CAA sections 165(a), 169(1), 169(2)(C). For the last thirty years, the EPA has interpreted these provisions to require that PSD permits address "any air pollutant" that is "subject to regulation under the CAA" (except for a "criteria" pollutant for which an area has been designated non-attainment under an applicable National Ambient Air Quality Standard).

The applicability provisions for the Title V permit program are found in CAA sections 502(a), 501(2)(B), and 302(j). These provisions provide that it is unlawful for any person to operate a "major source" without a title V permit and define a "major source" to include "any major stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant." Taken together and in accordance with long standing EPA interpretation, these provisions provide that stationary sources are subject to Title V if they emit air pollutants that are subject to EPA regulation.

Thus, both PSD and Title V permitting requirements are triggered when pollutants become subject to EPA regulation. The Vehicle Rule made GHGs subject to EPA regulation for the first time, thus triggering the application of both PSD and Title V to GHG emissions from stationary sources. In a separate action, "Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs," 75 Fed. Reg. 17,004 (April 2, 2010), the EPA determined that GHGs would become "subject to regulation under the Act," within the meaning of the CAA and the agency's longstanding PSD regulations and Title V interpretation, as of January 2, 2011, when the first new motor vehicles subject to the Vehicle Rule would enter the market. Likewise, the EPA explained that on the same date greenhouse gas emitting sources would become subject to the Title V permitting program.

Peterson 12. EPA has been sued by a number of parties who argue that the Tailoring Rule is illegal. What is the status of these lawsuits? What is your best estimate as to when we will have a final outcome to these lawsuits? If the Tailoring Rule is struck down in court, how will you change your approach to regulating greenhouse gas emissions from stationary sources?

Answer: The lawsuits have been brought in the United States Court of Appeals for the District of Columbia Circuit, and have been consolidated. The parties are in the process of filing their briefs on the merits. According to the briefing schedule set by the Court, merits briefing will be completed on December 14, 2011. Although the Court has not set a date for the oral argument, we expect that the Court will set the date for early in 2012. If it does so, then the EPA would expect, consistent with the Court's past practice, a decision in the summer or fall of 2012. For the reasons that the EPA explained at length in the Tailoring Rule preamble and in our successful defense of the rule against the motions for stay, we believe we have a solid legal basis for the rule.

Peterson 13. Since the publication of the greenhouse gas "Tailoring Rule" in June 2010, has EPA been petitioned to lower the threshold level of air pollutants that requires a Title V permit? If so, how is EPA responding to any such petition?

Answer: The EPA has not received any petitions to lower the threshold level of air pollutants that requires a Title V permit.

Peterson 14. Recent court decisions have concluded that EPA's assertion that it has authority under FIFRA to bring a misbranding or other enforcement action based upon the failure of a chemistry or compound to satisfy certain risk mitigation decisions is arbitrary, capricious, an abuse of discretion, and contrary to law. Given these court decisions, please provide the

Committee with timeline of the steps EPA intends to undertake to complete the administrative procedures required by FIFRA Section 6 for chemistries or compounds that have failed to satisfy the risk mitigation decision process.

Answer: Repeated question. Please see response to Peterson 2.

Peterson 15. EPA staff has indicated that it is considering revising its approach to making a "public interest" finding for USDA's IR-4 Project applications under the Pesticide Registration Improvement Reauthorization Act (PRIA2). IR-4 sets it research priorities in an open public setting with significant input from the affected agricultural sector and uses government funds to develop data accordingly. How would the new approach for a "public interest" finding affect IR-4 applications?

Please describe any financial impacts that may result from a change under the new approach for a "public interest" finding as it relates to IR-4 applications? Would such a change potentially increase the costs for IR-4 applications and thereby serve to reduce IR-4's applications for new pesticide uses on specialty crops/minor uses? Has EPA examined how this action might impacts on certain crops, the significant new costs to IR-4 in and the unintended consequences to some federal government priorities associated with such a change? Has EPA discussed this issue with USDA and, if so, does USDA support the approach being considered? In view of the vital and important role that IR-4 serves, does the Agency believe that it needs additional clarification from Congress regarding why IR-4 applications are in the public interest and therefore should continue to be exempt from PRIA fees?"

Answer: Earlier this year, the EPA developed and made available for discussion a draft proposal to explain how the Agency would make the "public interest" finding under the Pesticide Registration Improvement Renewal Act (PRIA 2) [FIFRA Section 33(b)(7)(E)]. This provision states that "the Administrator shall exempt an application from the registration service fee if the Administrator determines that - (i) the application is solely associated with a tolerance petition submitted in connection with the Inter-Regional Project Number 4 (IR-4) . . . ; and, (ii) the exemption is in the public interest." The Agency's draft proposal reflects the experience that the EPA has gained in making case by case decisions over the last few years, and captures the criteria the EPA has developed through this experience.

The EPA does not expect the articulation of the criteria to change significantly how it would process IR-4 submissions. Because the draft document is based on past experience, if it were adopted, existing policies and practices would continue and would not change. Currently, IR-4 applications remain the same. The draft document would not lead to additional application requirements, and, therefore, the costs for IR-4 applications would not increase and there would be no financial impacts to IR-4.

More generally, the types of applications that the EPA has found to be in the public interest in the past would continue to be in the public interest. Growers should see no difference and will continue to receive the same benefits from the IR-4 program. A common understanding of the approach will benefit and increase the efficiency of the collaboration between IR-4, the U.S. Department of Agriculture, the EPA, and the agricultural community.

Peterson 16. Can you please provide the Committee with copies of all documents that meet all the following criteria?

1) A settlement agreement entered into by the EPA;
2) In response to any civil action, administrative adjudication or petition for review brought against the EPA or the Administrator of EPA;
3) During the period of January 1, 2006 through March 10, 2011.

Answer: The EPA will need more time to respond to this request. The EPA plans to treat this request, together with question 17 below, as it would a letter to the agency and will respond in writing to the request and question 17 in a separate communication.

Peterson 17. At the hearing, in response to a question about whether EPA's settlement agreements are made public, Administrator Jackson stated, "...most of our settlements are required by law to go through public comment."

- Since 2006, which proposed settlement agreements, other than those related to cases in which EPA took enforcement action against an individual or entity, were published in the *Federal Register* for public comment?
- If some, but not all, settlement agreements are published for public comment, explain how EPA and the Department of Justice determine which to open for public comment. Have the criteria for these determinations changed since January 1, 2006, and, if so, how? Please distinguish between civil actions or petitions for review brought against the agency from civil or criminal enforcement actions taken by the agency against an individual or entity.
- Please explain in detail, how, since January 1, 2006, EPA has amended settlement agreements, other than those related to cases in which EPA took enforcement action against an individual or entity, after such agreements have been open for public comment.

Answer: This question is related to the document request in question 16 and the EPA will need further time to respond. The EPA will respond to the document request under question 16 and to this question in a separate communication, as explained above.

Peterson 18. The following questions relate to the settlement agreement that EPA signed with the Waterkeeper Alliance, Natural Resources Defense Council, Inc., and Sierra Club on May 25, 2010.

1. When was the proposed settlement agreement published for public comment?

   Answer: The settlement agreement was not published in proposed form for public comment. The Clean Water Act, unlike the Clean Air Act, does not require settlement agreements entered into under the statute to be published for public comment before being finalized. Under the settlement agreement, the EPA committed to propose collecting certain identifying information from concentrated animal feeding operations (CAFOs), or if the agency does not propose collecting this information, to explain why it is not proposing to do so. The agency will publish that proposal for public notice and

comment and will seek stakeholder input on it before taking any final action. The EPA did not commit in the settlement agreement to take any specific final action. The specific provisions of the settlement agreement addressed a proposed rule only.

2. Is the final settlement agreement posted on either EPA's or the Department of Justice's website?

   Answer: The final settlement agreement is publicly available. With some exceptions, neither the Environment and Natural Resources Division of the Department of Justice nor the EPA generally posts final settlement agreements in petition for review cases on its website. The EPA will post on its website any guidance or proposals which it undertakes to issue pursuant to such a settlement agreement.

3. EPA has stated that its determinations on whether or not to settle with a petitioner are based on case-by-case determinations of legal risk and the requirements of the law. Please explain in detail why EPA determined that it was necessary to settle with the environmental petitioners (Waterkeeper Alliance, Natural Resources Defense Council, Inc., and Sierra Club).

   Answer: The environmental petitioners filed petitions for review raising two challenges to the EPA's final rule entitled "Revised National Pollutant Discharge Elimination System Permit (NPDES) Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations (CAFOs) in Response to the Waterkeeper Decision." 73 Fed. Reg. 70,418 (Nov. 20, 2008). First, they challenged the EPA's failure to require CAFOs that are known to discharge to apply for NPDES permits. Second, they challenged the EPA's analysis of "best conventional pollutant control technology" for fecal coliform. After weighing the legal risks of litigating these issues, the EPA, with the Department of Justice's concurrence, determined that settling this case was the most effective way of resolving the controversy in furtherance of the goals of the Clean Water Act.

4. Why were the agricultural petitioners (National Pork Producers Council, National Chicken Council, and American Farm Bureau Federation) not included in the settlement negotiations? Did the Department of Justice or EPA make the decision not to include the agricultural petitioners in the settlement negotiations?

   Answer: The EPA prefers, where possible, to reach agreement with all stakeholders to avoid further litigation. In this case, the EPA had conversations with the agricultural petitioners in an effort to reach settlement but was unable to reach agreement with them. The EPA and the Department of Justice generally include only the party or parties with which they are settling in settlement negotiations.

5. Since the settlement agreement was reached with the environmental petitioners, has EPA conducted settlement negotiations with the agricultural petitioners?

Answer: No. Prior to reaching a settlement with the environmental petitioners, the EPA had conversations with the agricultural petitioners in an effort to reach settlement. However, as indicated above, the EPA and the agricultural petitioners were unable to reach settlement.

6. In negotiating and entering into this settlement agreement, what considerations did EPA make regarding the increased regulatory burden that would be placed on the owners or operators of concentrated animal feeding operations (CAFOs)?

   Answer: The EPA did not commit in the settlement agreement to take any final actions that would affect CAFOs. The EPA committed to propose collecting certain identifying information from CAFOs, or if the agency does not propose collecting this information, to explain why it is not proposing to do so. The EPA's proposal will be subject to public notice and comment before the agency takes any final action on it. Further, the agency believes that reaching out to agricultural stakeholders to discuss their views on such a collection would be an essential part of its decision making process. Minimizing any burden on the regulated community is a priority for the EPA and the agency will welcome CAFO owners and operators' views as to how best to achieve that goal.

7. EPA will soon be publishing a proposed rule to effectuate the policy changes that EPA agreed to implement in the settlement agreement. If there is a public comment period for the proposed rule, does EPA have the flexibility to make substantive changes to the proposed rule following the comment period, or is EPA legally bound to adhere to the settlement agreement? If EPA were to make substantive changes to the proposed rule, what legal effect would such changes have on the settlement agreement?

   Answer: The settlement agreement does not bind the EPA to any specific final action. It requires the EPA to propose collecting certain identifying information from concentrated animal feeding operations (CAFOs), or, if the agency does not propose to collect that information, to explain why it is not proposing to do so. The EPA will solicit public comment on the proposal. After considering comments, the EPA has the flexibility to make substantive changes to the proposed rule and will have the option to determine, in its final action, how much, if any, of the information it will collect. Further, the settlement agreement specifically states that it does not in any way limit the EPA's discretion under the Clean Water Act or general principles of administrative law.

8. The settlement agreement requires EPA to collect detailed information from CAFO owners or operators. The information will be made public unless there is a showing that the information is a confidential trade secret, pursuant to 33 U.S.C. §1318(b). What does EPA consider to be a confidential trade secret? For instance, would owner/operator names, locations, numbers of animals, whether a CAFO has a nutrient management plan, or whether a CAFO has applied for an NPDES permit be made public?

   Answer: As stated above, the settlement agreement does not require the EPA to collect any information. It requires the EPA to propose collecting certain information, or, if the agency does not propose to collect that information, to explain why it is not proposing to

do so. The EPA will solicit public comment on the proposal before taking final action. The EPA did not commit in the settlement agreement to the content of its final action.

If the EPA decides, in a final rule, to collect information from concentrated animal feeding operations (CAFOs), it would collect that information pursuant to section 308 of the Clean Water Act, the Act's information-gathering authority. Section 308 requires the EPA to make public any information the EPA collects under the rule unless that information is confidential business information (CBI). CBI is defined and discussed in the EPA's regulations codified at 40 C.F.R. part 2, subpart B For any information collection requirement that EPA finalized, CAFOs would be given the opportunity to identify what information they believe qualifies as CBI. EPA would treat any such claimed CBI in accordance with its regulations, which generally require that the submitter of the information have the opportunity to substantiate their claim. EPA would then determine whether the claimed information meets the definition of CBI, and not release the information if it did.

9. How does EPA plan to use the information that it collects?

   Answer: If the EPA were, in a final action, to determine to collect any information from concentrated animal feeding operations (CAFOs), the EPA would use the information to further its statutory duties to restore and maintain the quality of this nation's waters. In support of these responsibilities, the EPA develops and enforces regulations, assesses the effectiveness of its programs, awards grants, researches environmental issues, sponsors partnerships, educates the public, and publishes information. A basic inventory of CAFOs, which is generally what the settlement agreement addresses, could be useful for any of these purposes.

10. On March 16, the U.S. Court of Appeals for the 5th Circuit ruled that EPA could not mandate that a CAFO that "proposes" to discharge obtain a National Pollutant Discharge Elimination System permit. How will this ruling impact the settlement agreement and the expected proposed rule?

    Answer: The Court of Appeals' decision in *National Pork Producers Council et al., v. EPA* does not address EPA's authority to collect information pursuant to section 308 of the Clean Water Act. The decision therefore would not affect the EPA's data collection proposal.

Peterson 19. When EPA is negotiating a settlement, and it becomes clear that the agency will propose a rule as a result of the settlement, does EPA conduct an economic analysis of the impact of the impending regulation during settlement negotiations? If not, does EPA conduct an economic analysis of the impact during the rulemaking process? If the economic analysis shows problems with the proposed rule, does EPA have the authority to change the rule, or would that negate the settlement agreement?

Answer: Where the EPA agrees under a settlement to propose a rule, it does not conduct an economic analysis. Whether the EPA conducts economic analysis of the impact of any given

proposed rule depends on the nature of the rule in question. The EPA does not commit in settlement agreements to final, substantive outcomes of rulemaking and retains adequate discretion under its settlement agreements to address the results of any economic analysis undertaken in connection with a proposed rule. For this particular proposal related to the settlement agreement described above, the EPA is required to determine information collection costs pursuant to the Paperwork Reduction Act. EPA expects that the costs of collecting the basic inventory information addressed in the settlement agreement would generally be low and unlikely to pose a significant regulatory burden.

AC-11-001-5139

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 30 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Frank D. Lucas
Chairman
Committee on Agriculture
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas:

I am completing the response to your September 8, 2011 letter and the questions for the record following the March 10, 2011, hearing on the impact of EPA regulation on agriculture. On October 28, 2011 I responded to your letter with responses for a large portion of the questions. The attached document has responses for the remaining questions. Thank you for your patience and again, I hope that this information is useful to you and the members of the committee.

If you have any further questions, please contact me or your staff may call Sven-Erik Kaiser in my office at (202) 566-2753.

Sincerely,

Arvin Ganesan
Associate Administrator

Attachment

House Committee on Agriculture
"The Impact of EPA Regulation on Agriculture"
Questions for the Record
March 10, 2011

SET 2

Chairman Frank D. Lucas, Oklahoma

Lucas 1. Are you aware that synthetic gypsum from power plants is not "coal ash" at all – but rather a byproduct of flue gas desulfurization (FGD) during the "scrubbing" process? If it's not coal ash, why are you including it in the regulations you are developing?

Answer: The EPA's proposed rule addresses the management of coal combustion residuals (CCRs) from electric utilities. CCRs and "coal ash" are broad terms that refer to a range of residuals produced from the combustion of coal, including fly ash, bottom ash, slag, and flue gas emission control wastes. We are aware of the processes used to produce synthetic gypsum from FGD materials, and are carefully considering the comments regarding whether synthetic gypsum derived from coal combustion residuals warrants regulation.

Lucas 2. The people who use synthetic gypsum for agriculture now face a huge regulatory uncertainty because of the coal ash rulemaking. When do you plan to complete this rule? As you work to determine if this material should be classified as a "hazardous waste", how should we address parties who are interested in recycling it, but are stuck in limbo?

Answer: The agency is in the process of reviewing and addressing more than 450,000 comments received on the proposed coal ash rule. In addition, the EPA and the U.S. Department of Agriculture (USDA) are conducting a joint study on the use of flue gas desulfurization (FGD) gypsum in agriculture. In the preamble of the proposed rule, the EPA indicated that study should be completed at the end of 2012.

Users of coal combustion residuals (CCR) in agriculture are encouraged to review the basic guidance provided in the interim report (Agricultural Uses for Flue Gas Desulfurization (FGD) Gypsum, March 2008, EPA530-F08-009[1]) pending completion of the study. The report references several resources for responding to questions including: the EPA's Industrial Waste Management Evaluation Model (IWEM) and the chapter on land application (Chapter 7) in the associated *Guide for Industrial Waste Management* http://www.epa.gov/epawaste/nonhaz/industrial/guide/index.htm, the State's department of

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1 http://nepis.epa.gov/Exe/ZyNET.exe/P1001II9.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000004%5CP1001II9.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

environmental protection, department of agriculture, and agricultural extension service, and the USDA Natural Resources Conservation Service.

Lucas 3. Are there ways that the EPA might encourage flue gas desulfurization (FGD) gypsum use in agriculture to help address water quality problems caused by degraded soils and excess nutrient loadings?

Answer: The EPA's proposed rulemaking on the management of coal combustion residuals (CCRs) acknowledges that there are significant benefits that can be derived from the use of CCRs in agricultural applications and that the EPA and the U.S. Department of Agriculture's Agricultural Research Service are engaged in field studies, expected to conclude in late 2012. The agency did request comments, information, and data on CCRs that are beneficially used in agriculture, but did not propose to regulate the beneficial use of CCRs in agricultural applications. The EPA continues to support the beneficial use of coal combustion residuals in an environmentally sound manner because of the important benefits to the economy and the environment.

Lucas 5. Ms. Jackson, you testified before the House Agriculture Committee. If I could, let me read from your statement. You said: "As I'm sure you would agree, Mr. Chairman, facts matter and we all have a responsibility to ensure that the American people have facts and the truth in front of them, particularly when fictions are pushed by special interests with an investment in the outcome. "Let me give you five examples: "One is the notion that EPA intends to regulate the emissions from cows – what is commonly referred to as a "Cow Tax." This myth was started in 2008 by a lobbyist and –quickly de-bunked by the non-partisan, independent group factcheck.org – it still lives on. The truth is – EPA is proposing to reduce greenhouse gas emissions in a responsible, careful manner and we have even exempted agricultural sources from regulation." Your statement raises several questions:

- What is the basis of your statement that EPA has "even exempted agricultural sources from regulation"? Can you cite the place in the regulation that "exempts" agricultural sources?

- Are you exempting all agricultural sources or just some?
- Have you exempted any other sectors from the regulation?

- What authority does EPA to exempt certain sectors from the greenhouse gas rule? Where in the Clean Air Act is that authority?

- The Clean Air Act explicitly states that "major sources" – which is any entity that emits or has the potential to emit more than 100 tons of a regulated pollutant per year – must obtain a Title V operating permit. Is it your testimony that EPA is exempting all agricultural sources, regardless of their level of emissions, from the greenhouse gas regulations?

- EPA's own figures state that 37,000 farms are above the threshold of a major source. How can they be exempt under the law?

- If the basis of your statement is the tailoring rule, is it not correct to say that this approach only delays – it does not exempt – certain sources?

- Do you believe you have the authority to disregard the 100 ton and 250 thresholds in the law that defines major sources for the Title V and PSD programs?

Answer: The EPA has established, by rule, a common sense approach to regulating greenhouse gas (GHG) emissions under the Clean Air Act (CAA) permitting programs. The rule, known as the "Tailoring Rule," phases in CAA permitting requirements for GHGs, with only the largest GHG emitters covered in the initial phases. In these initial phases, which are intended to last until at least 2016, the EPA does not expect that agricultural sources are large enough that they will be subject to GHG permitting under the CAA.

The Tailoring Rule does not take a sector based approach to exempting sectors from Prevention of Significant Deterioration (PSD) or Title V permitting requirements. Rather, we set emission thresholds in the Tailoring Rule that are applicable to all sectors. Sources below the thresholds have no GHG PSD or Title V permitting obligations regardless of what sector they are in. Although we did not take a sector based approach in the Tailoring Rule, our information is that some sectors have no sources above the thresholds, and thus effectively are exempted from GHG permitting obligations.

With respect to agricultural sources, the question indicates that the EPA's own figures state that 37,000 farms have GHG emissions above the statutory major source threshold. According to our best information, none of these farms have GHG emissions above the thresholds of the Tailoring Rule that would trigger GHG permitting requirements, or even above the 50,000 tpy CO2e level.

The legal basis for the phased-in approach adopted in the Tailoring Rule is set forth in the preamble to that rule. The purpose of the Tailoring Rule was to relieve the overwhelming permitting burdens that would, in the absence of the rule, fall on permitting authorities and sources. The EPA accomplished this by tailoring the applicability criteria that determine which GHG-emitting sources become subject to the PSD and Title V permitting programs. Both the PSD and Title V provisions establish clear numerical thresholds for applying the permitting requirements – in general, the Title V permitting requirements apply to sources emitting 100 tpy and PSD applies to sources emitting 100 or 250 tpy, depending on the source category. But under the Supreme Court's directive for how to interpret statutory provisions (described in the Chevron case[2]), the EPA must interpret these thresholds based on what Congress intended them to mean when applied to the case at hand (i.e., when applied to GHG-emitting sources), and not necessarily on their literal meaning. The courts have established three legal doctrines that each make clear that the EPA is authorized to interpret the permitting thresholds for GHG-emitting by adopting the phased- in approach of the Tailoring Rule, and not by adhering to those 100/250 tpy thresholds literally, at least at the present time. The legal basis for the tailoring rule rests on the legal doctrines of absurd results, administrative necessity, and one step at a time due to events.

[2] Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984).

Representative Martha Roby, Alabama

Roby 2. In your testimony you refer to the EPA's latest actions in your review of the National Ambient Air Quality Standards as required every five years under the Clean Air Act. The Second Draft Policy Assessment for Particulate Matter released on July 8, 2010 would establish the most stringent and unparalleled regulation of dust in our nation's history. If this ruling goes into effect, it appears that this would be impossible for farmers in Alabama to attain. Whether it is livestock kicking up dust, tractors going through a field or merely a car driving down a gravel road, farmers are going to be in noncompliance. And in times that Alabama faces extreme drought like a few years ago, it will only make it more impossible. What options are available to you regarding modifications to air quality standards regulations for farm dust?

Answer: I committed in an October 17, 2011 letter that the EPA will send to the Office of Management and Budget a proposal to keep the PM10 national ambient air quality standard as it is, with no change. This existing standard has been in effect since 1987. I am hopeful that this announcement ends the myth that the agency has plans to tighten regulation of farm dust.

Representative Mike McIntyre, North Carolina

McIntyre 1. Administrator Jackson, two weeks ago, the Secretary of Agriculture gave testimony before this Committee on the current state of the agriculture industry. I don't think that anyone on this Committee would disagree with me that your agency, the EPA, was the most talked about topic by Members of this Committee. Whether you realize it or not, my constituents and many American farmers are very worried and upset over the number of regulations coming out of EPA that negatively impact farmers and ranchers. Given that perception can become reality, how do you intend to improve the EPA's record in the future? What fundamental changes in EPA's relationship with the agricultural community are you willing to commit to today?

Answer: The EPA is committed to providing an effective opportunity for input from all stakeholders in shaping environmental protection strategies including input from the agricultural community. We have established a federal advisory committee, The Farm, Ranch, and Rural Communities Committee, to provide advice to the agency. My office is directly engaged in facilitating the work of the Committee which is currently deliberating the most effective approaches to protecting water quality in agriculture.

Each of our Regional Administrators has an agriculture advisor who interacts directly with the agriculture community, including state and local agricultural organizations. The EPA is currently engaged in a series of intensive listening sessions with agricultural and other stakeholders to solicit their views on the issues surrounding emissions of particulate matter. The EPA Office of Pesticide Programs also conducts an active federal advisory committee to solicit input from a wide range of stakeholders on pesticide issues, particularly those that affect agriculture.

In addition, I will continue to travel to farm communities to talk directly with farmers and will continue to join Secretary Vilsack in meeting with commodity groups and farm organizations. The EPA finds these discussions a valuable opportunity to keep agricultural stakeholders informed about agency initiatives and to get feedback from them on these issues. The agency often solicits agriculture community views on the EPA's efforts to promote environmental quality and willingly accepts invitations to meet. The EPA will continue to promote

opportunities to engage and inform all stakeholder groups, including those representing agriculture.

McIntyre 2: Administrator Jackson, with regard to the national ambient air quality standards (NAAQS) for ozone:

- What are the parts per billion the EPA is considering?
- What would be the economic impact of lowering the standard to between 60 and 70 ppb?
- How does the EPA, or how will the EPA, work with communities that it designates as in nonattainment if there is a disagreement about the designation? For instance - if there are objections about the location of air monitors or if a community is already under an existing plan to improve air quality. Will the EPA work with them in a positive and collaborative manner?

Answer: On September 2, 2011, the Administration withdrew the final rule for the reconsidered 2008 ozone National Ambient Air Quality Standards (NAAQS) from interagency review and is now proceeding with implementation of the current ozone NAAQS of 0.075 ppm (or 75 parts per billion).

When implementing a new or revised NAAQS, the EPA and states work together in a collaborative manner prior to final designations. The Clean Air Act outlines the process for initial area designations following the establishment of new or revised NAAQS (see section 107(d)). This includes: 1) the EPA guidance to states on the designation process, including the factors the EPA intends to use to evaluate appropriate boundaries for nonattainment areas; and, 2) a process for states to submit designation recommendations, which the EPA carefully considers. If the EPA intends to promulgate a designation different from a state recommendation, the EPA must notify the state at least 120 days prior to promulgating the final designation. The EPA must also provide the state an opportunity to demonstrate why the potential modification is inappropriate.

For the ozone NAAQS, the EPA recently announced that it will be proceeding with initial area designations under the 2008 standard, starting with the recommendations states made in 2009 and updating them with the most current, certified air quality data. Because the agency has these recommendations from the states and quality assured data for 2008-2010, there is nothing that state or local agencies need to do until the EPA issues any proposed changes to the states' recommendations (the "120-day letters") later this fall, though of course, states are welcome to contact the EPA to discuss specific issues at any time.

Representative Tim Huelskamp, Kansas

Huelskamp 2. Do you intend to conduct a comprehensive cost/benefit analysis prior to proposing any changes to regulations concerning farm dust? What mitigation steps would you propose to ensure compliance with dust-related air quality standards?

Answer: I committed in an October 17, 2011 letter that the EPA will send to the Office of Management and Budget a proposal to keep the PM10 national ambient air quality standard as it is, with no change. This existing standard has been in effect since 1987. I am hopeful that this announcement ends the myth that the agency has plans to tighten regulation of farm dust.

Representative Larry Kissell, North Carolina

Kissell 1. Administrator Jackson, while I am concerned with the impact of coarse particulate matter or PM 10 standards pertaining to farm equipment and rural roads, I am also troubled by the impact that the EPA's PM 2.5 standard may also have on rural America. PM 2.5 limits are currently set at 15 parts per billion (ppb), and now EPA is looking to make the PM 2.5 rule even stricter. New levels being considered are between 12 - 14 ppb - which are approaching naturally occurring background levels. For example, naturally occurring levels in rural North Carolina are at 12.8 ppb. Concerns over these new levels have prevented Charlotte Pipe from building a new green foundry in a rural area of my district. This rule could impact hundreds of other manufacturers that want to expand their capacity or build a new facility, and potentially not allow new jobs to enter rural America where they are surely needed.

Should, in the case of a new greener foundry replacing an older facility or the greener retrofitting of an old foundry be judged by the lessening of the particulate matter emitted relative to the old facility, rather than the aggregate particulate matter present in the location where the new facility is located?

Answer: The National Ambient Air Quality Standards (NAAQS) are set to protect public health and the environment. It is not the intent of the Clean Air Act (CAA) to prohibit the development of cleaner sources. If the new foundry is built at the same location as the older facility, then the greener facility likely would not increase emissions in the area, and therefore not trigger additional requirements for evaluating emissions increases. If the new foundry is built at a different location, the CAA requires that the surrounding area will still remain within acceptable air quality levels. The source will need to assess its air quality impacts and can work with the state and the EPA regional office to determine any appropriate steps to address impacts that exceed CAA levels. In North Carolina, the state is the permitting authority, and the CAA provides them the flexibility to determine what, if any, additional controls are needed in an area to ensure local air quality is protected.

Kissell 2. Agribusiness retailers form the heart of fertilizer distribution in the U.S. and provide precision application that targets nutrients where they are needed. There are 6,800 agribusiness retailers in the country, almost a third of which are small businesses.

The EPCRA statute contains several exemptions from the definition of a hazardous chemical, including "fertilizer held for sale by a retailer to the ultimate customer" (hereinafter the "fertilizer retail exemption").

After 20 years of EPA upholding this exemption, Region 6 has reversed course and began enforcement and HQ staff are asserting that it no longer applies to simple mixing of fertilizers (with no chemical reaction)?" Can you please explain to the Committee why the Agency has chosen to side-step Congressional intent as it relates to the "fertilizer retail exemption" and what further action do you plan to take as it relates to this issue?

Answer: The EPA's Region 6 has not taken any enforcement actions under section 312 of the Emergency Planning and Community Right-to-Know Act (EPCRA) for fertilizers and there has not been any policy change regarding the fertilizer exemption.

Sections 311 and 312 of EPCRA apply to owners and operators of facilities that are required to prepare or have available a material safety data sheet (MSDS) for a hazardous chemical defined under the Occupational Safety and Health Act (OSHA) Hazard Communication Standard (HCS). If the hazardous chemical is present at or above the reporting thresholds specified in 40 CFR part 370, the facility owner or operator is required to submit a material safety data sheet (MSDS) or a list that contains the hazardous chemical under section 311 of EPCRA. Under section 312 of EPCRA, if a hazardous chemical is present at or above the reporting threshold specified in 40 CFR part 370, the facility owner or operator is required to submit an emergency and hazardous chemical inventory form (Tier I or Tier II) to the State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC) and the local fire department annually by March 1. This information is made available to the public by the LEPCs so they have information on the chemicals in process or being used in their community.

Section 311 (e)(5) of EPCRA exempts from the definition of a hazardous chemical "any substance to the extent it is used in routine agricultural operations or a fertilizer held for sale by a retailer to the ultimate customer." Thus, if a retail facility sells fertilizer to a farmer, those fertilizers are exempt from reporting under Section 311 and 312 of EPCRA. However, there are examples where these retail facilities also blend various fertilizers to create a unique fertilizer. We are currently evaluating this scenario to determine how the retailer fertilizer exemption in EPCRA applies and engaging with industry to better understand the situation. The agency will keep the committee and the agricultural community informed of any results from the evaluation.

Representative Randy Hultgren, Illinois

Hultgren 7. EPA has proposed regulations for coal ash disposal that include a possible "hazardous waste" designation. One of the materials included in that category is synthetic gypsum produced by power plants that can be safely and effectively used in agricultural applications.

1. Doesn't it create a serious regulatory barrier to productively using a product when you label it a "hazardous waste" on the property of the person who makes it? If you were a farmer, would you want to place a material on your fields that the government considers hazardous waste on the property of the person who makes it?

   Answer: The EPA's proposed rulemaking on the management of coal combustion residuals (CCRs) addresses CCRs that are being disposed. The proposed rule acknowledges that there are significant benefits that can be derived from the use of CCRs in agricultural applications and that the EPA and the U.S. Department of Agriculture's Agricultural Research Service are engaged in field studies, expected to conclude in late 2012. The agency did request comments, information, and data on CCRs that are beneficially used in agriculture, but did not propose to regulate the beneficial use of CCRs in agricultural applications. As for the potential stigma that hazardous waste disposal requirements could have on beneficial use, the EPA recognized that issue in the

proposal, solicited comment, and will carefully evaluate the information received prior to any final regulatory decision.

2. Are you aware that synthetic gypsum from power plants is not "coal ash" at all – but rather a byproduct of another process at the power plants? If it's not coal ash, why are you including it in the regulations you are developing?

   Answer: The EPA's proposed rule addresses the management of coal combustion residuals (CCRs) from electric utilities. CCRs and "coal ash" are broad terms that refer to a range of residuals produced from the combustion of coal, including fly ash, bottom ash, slag, and flue gas emission control wastes. We are aware of the processes used to produce synthetic gypsum from flue gas desulphurization materials, and are carefully considering the comments regarding whether synthetic gypsum derived from coal combustion residuals warrant regulation.

3. Does synthetic gypsum qualify as a "hazardous waste" based on its toxicity? Then why do you want to label it as hazardous and create all of this confusion?

   Answer: Wastes may be deemed hazardous in two possible ways: 1) because the waste is ignitable, corrosive, reactive, or exceeds certain clearly hazardous toxicity characteristics, or; 2) the EPA lists (through rulemaking and with consideration of public comment) a particular waste or category of wastes as hazardous, if it is determined that the waste poses substantial present or potential hazard to human health and the environment when managed in certain ways such as land disposal.[3] With regard to coal combustion residuals (CCRs), they are not ignitable, corrosive, or reactive, and rarely exceed the toxicity characteristic, and thus the issue in the proposed rule centers around whether the waste poses a hazard to human health and the environment when managed in certain ways such as land disposal. In a listing determination, the EPA will evaluate factors such as the toxicity and concentration of constituents in a waste, the volume of waste and how it is managed, the potential for the constituents to migrate, and damage cases resulting from exposure to and release of CCRs. The EPA will also conduct extensive risk modeling for various disposal scenarios. The EPA relied upon its analysis of these factors in drafting its proposed CCR rule and will carefully evaluate the information and comments it received in response to the proposed rule, prior to issuing any final rule regarding the classification of CCRs being disposed.

4. EPA previously supported the use of synthetic gypsum in agriculture, but cancelled the C2P2 program that provided that support. Is there a reason you did not notify your partner, the Department of Agriculture, before you terminated that program? Do you have any plans to resume active support for recycling coal ash and synthetic gypsum?

   Answer: While the EPA is engaged in the rulemaking process for coal combustion residuals, the agency has suspended active participation in the Coal Combustion Products Partnership. The EPA continues to believe that the beneficial use of residuals from coal

[3] For additional information about designating hazardous wastes, see http://www.epa.gov/osw/hazard/dsw/index.htm

combustion, when performed properly and in an environmentally safe manner, is beneficial to the environment and the EPA is not proposing to modify the existing exemption for coal ash when beneficially used. The EPA is interested in broadening the dialogue on beneficial uses and encourages all interested parties to review and provide comments and any relevant information and data on the proposed rule.

5. The people who use synthetic gypsum for agriculture now face a huge regulatory uncertainty because of the coal ash rulemaking. When do you plan to complete this rule? Do you think it is fair to tell the world that you might decide to call this material a "hazardous waste" and then let people who want to recycle it just hang there for years while you think about it?

   Answer: The agency is in the process of reviewing and addressing more than 450,000 comments received on the proposed coal ash rule. In addition, the EPA and the U.S. Department of Agriculture are conducting a joint study on the use of flue gas desulphurization (FGD) gypsum in agriculture. In the preamble of the proposed rule, the EPA indicated that study should be completed at the end of 2012. Users of CCR in agriculture are encouraged to review the basic guidance provided in the interim report (Agricultural Uses for Flue Gas Desulfurization (FGD) Gypsum, March 2008, EPA530-F08-009[4]) pending completion of the study. The report references several resources for responding to questions including: the EPA's Industrial Waste Management Evaluation Model (IWEM) and the chapter on land application (Chapter 7) in the associated *Guide for Industrial Waste Management* http://www.epa.gov/epawaste/nonhaz/industrial/guide/index.htm, the state's department of environmental protection, department of agriculture, and agricultural extension service, and the USDA Natural Resources Conservation Service.

Representative Scott R. Tipton, Colorado

Tipton 1. Many of EPA's recent regulatory activities are in areas where there is a significant component of state delegated authorities and responsibilities (NPDES permitting, soil fumigant label changes, contemplated changes to PM 10 standards, etc). State budgets aren't growing. Additional resources are difficult to come by. How will states pay for these activities? If additional resources are not available, what regulatory or enforcement activities should states NOT do in order to take on these new responsibilities?

Answer: The EPA and states share responsibility and accountability for assuring compliance with environmental laws and regulations to protect human health and the environment. Congress

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4 http://nepis.epa.gov/Exe/ZyNET.exe/P1001II9.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000004%5CP1001II9.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=p%7Cf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

envisioned cooperative implementation of its laws by the EPA and authorized or delegated states to do the majority of the day to day work to implement our environmental programs by developing standards, issuing permits, conducting inspections and taking enforcement actions. The EPA develops national standards, programs, policies and guidance, conducts inspections and takes enforcement actions in situations of national interest, and oversees state programs.

There are a number of flexibilities afforded the EPA regions and states as they plan compliance and enforcement activities. For example, the Compliance Monitoring Strategies (CMS) are important tools for targeting inspection resources on the most important sources of pollution. The CMS provide flexibilities for the EPA regions, states, and territories in establishing inspection coverage over a range of sources. Through the annual planning process, the EPA regions, states, and territories are encouraged to establish specific commitments and targets for inspection coverage across sources and to strategically target their inspection programs, and limited inspection resources, to give priority to those sectors determined to be most important in terms of adversely impacting public health and the environment.

The agency intends to meet the challenges of improving compliance while reducing burden on states. To ensure compliance across the country, in these times of tight federal and state budgets, the agency can no longer rely solely on traditional inspection and enforcement approaches to address the many regulated facilities and increasing numbers of smaller sources contributing to environmental problems.

The EPA is looking at new ways to improve compliance with agency regulations, including increased monitoring, better targeting of enforcement, the expansion of electronic reporting, and enhanced transparency by publishing greater amounts of emissions data to the internet. A key element of this approach is using technology to allow the agency to be more effective and efficient at compliance. This includes electronic reporting; monitoring pollution releases and ambient conditions in a more efficient and effective way by using modern equipment and advanced training for inspectors; continuing to provide more complete, timely and accurate information to the public, where it can be used to drive better environmental performance from regulated facilities and government; and using new approaches to compliance, such as self-certification programs, and third party reviews, to create stronger incentives for compliance.

In August 2011, the EPA issued its *Final Plan for Periodic Retrospective Reviews of Existing Regulations*[5]. The plan includes 35 priority reviews which are intended to improve the overall effectiveness of our regulatory program, including reducing burden and costs. Several of these reforms have the potential to reduce permitting, enforcement and compliance burden on states. Below is a list of priority actions that most directly address state burden:

Electronic Reporting - Item #1.1.1 in the plan: The EPA intends to replace key outdated paper reporting requirements with electronic reporting as soon as practicable. Agency reporting requirements are still largely paper based for all media programs, which is inefficient and unnecessarily resource intensive for reporting entities and states, and ineffective for compliance monitoring and assurance. Among other things, the EPA intends to conduct a targeted review to

[5] http://www.epa.gov/regdarrt/retrospective

convert key existing paper reporting requirements to electronic reporting, and develop a strategy for ensuring that new rules incorporate the most efficient electronic reporting techniques.

National primary drinking water regulations - Long Term 2 Enhanced Surface Water Treatment (LT2) - 2.1.9: The EPA intends to evaluate effective and practical approaches that may maintain, or provide greater protection of, the water treated by public water systems and stored prior to distribution to consumers. Among other things, the EPA intends to assess and analyze new data/information to evaluate whether there are new or additional ways to manage risk while assuring equivalent or improved protection, including with respect to the covering of "finished water" reservoirs (i.e., drinking water that has already been treated and is intended to be distributed directly to consumers without further treatment).

Combined Sewer Overflows (CSOs) and integrated planning for wet weather infrastructure investments – 2.1.10: The EPA intends to gather additional information on how we can better promote Green Infrastructure (GI), ensure practical and affordable remedies to CSO violations, and identify additional approaches to ensure that communities can see noticeable improvements to their water quality and reduced risks to human health through prioritizing infrastructure investments.

CAA Title V Permit programs - 2.1.14: A Title V permit lists all of the air quality related rules and requirements that apply to the particular air pollution source, and specifies how compliance will be monitored. States are required to give public notice of the draft permits and some permit revisions, and typically post permits on their websites. The EPA intends to review the Title V implementation process to determine whether changes can be made to help all permitting participants understand the program better, and to help streamline the process to make more efficient use of industry, public, and government resources.

Sanitary Sewer Overflow (SSO) and peak flow wet weather discharges – 2.2.3: The EPA intends to gather additional information about the most effective way to manage wastewater that flows through municipal sewage treatment plants during heavy rains or other wet weather periods that cause an increase in the flow of water (these are collectively known as "peak flows"). The EPA intends to evaluate options that are appropriate for addressing SSOs and peak flow wet weather discharges and determine if a regulatory approach, voluntary approach, or other approach is the best path forward.

Consumer confidence reports for primary drinking water regulations – 2.2.6: The Consumer Confidence Report is an annual water quality report that a community water system is required to provide to its customer. The EPA will consider reviewing the Consumer Confidence Report Rule to look for opportunities to improve the effectiveness of communicating drinking water information to the public, while lowering the burden on water systems.

Reporting requirements under Section 303(d) of the Clean Water Act (CWA) – 2.2.7: The EPA intends to explore ways to reduce the burden on state governments when reporting on the quality of the nation's water bodies. The requirement for states to report on the condition of their waters every two years under Section 305(b) is statutory. However, the requirement for states to identify impaired waters that need a Total Maximum Daily Load (TMDL) every two years under

Section 303(d) is regulatory. States have raised concerns that reporting this information every two years is a significant administrative burden. The EPA intends to work with the public and states to identify alternative approaches for reducing associated burden and evaluating the impact of changes under either or both CWA Sections 303(d) and 305(b).

Water quality standard (WQS) regulations – 2.2.10: Since the current WQS regulation was last revised in 1983, a number of issues have been raised by states and other stakeholders, or identified by the EPA, that could benefit from clarification and greater specificity. Among other things, the EPA intends to provide regulatory flexibility to allow states and tribes to achieve water quality improvements before resorting to a use change.

State Implementation Plan (SIP) Process - 2.2.11: EPA and states are working together to review the administrative steps states must follow when they adopt and submit SIPs. SIPs describe how areas with air quality problems will attain and maintain the National Ambient Air Quality Standards. A number of simplifying changes to the SIP development process have been implemented or are under consideration, including reducing hard copies, eliminating hearings on matters of no public interest, minimizing the number of expensive newspaper advertisements providing public notice, and determining whether and how the process for making minor plan revisions might be simplified.

Tipton 2. How much of state budgets go toward "fixing" the problem, i.e. complying with EPA regulations? You mentioned grants to states. How much does a state or community have to contribute to receive these grants or other sources of funding to assist with compliance costs?

Answer: The EPA does not collect detailed data on environmental spending for compliance in the context of overall state budgets. The Environmental Council of States (ECOS) collected data on 27 state budgets and found that an average state in their study met over 80 percent of their state environmental agency's budget with a combination of federal government support and fees, with only about 20 percent of projected budgets coming from state general revenues. This represents all activities at the state environmental agency, not just those related to enforcement of the EPA regulations.[6]

Peterson 10. Following up on the previous question, I understand that in May 2010, EPA issued a rule on thresholds for GHG emissions that define when Title V and New Source Review permits would be required. This rule, the tailoring rule, establishes a threshold of 100,000 tons per year to those required to get a permit. Is there an agriculture exemption in this rule? Why not? If the goal is not to get small farms, why not include a straight exemption? You indicated in your response to Congressman Welch during questioning that "agriculture is exempted from greenhouse gas regulation." Can you explain what you meant by that?

Answer: The purpose of the tailoring rule is to address the overwhelming burdens on permitting authorities that would otherwise occur if the existing statutory thresholds of 100 and 250 tons per year were applied to greenhouse gasses (GHGs) on January 2, 2011. Hence the final tailoring

[6] Brown, R.S., and Fishman, A. Status of State Environmental Agency Budgets, 2009-2011, ECOS. http://www.ecos.org/files/4157_file_August_2010_Green_Report.pdf

rule does not specifically exclude agricultural operations, or any industrial sector, from the New Source Review (NSR) or Title V permitting. Rather, the rule focuses on across the board thresholds and distinctions. The rule accomplishes this by establishing 100,000 tons per year (tpy) of carbon dioxide equivalent (CO2e) as a threshold for new facilities and 75,000 tpy CO2e increases for modifications at existing facilities that already emit 100,000 tpy CO2e (in addition to a threshold 75,000 CO2e for new and existing sources that are subject to NSR permitting for other pollutants). Given the thresholds that are in place for Steps 1 and 2 of the tailoring rule, farms, as well as other small businesses (e.g., restaurants, dry cleaners, etc.) are not covered at this time.

Peterson 11. With regards to the tailoring rule, exactly what happens to whom after July 1, 2011?

Answer: For Step 2 of the tailoring rule, which began on July 1, 2011, Prevention of Significant Deterioration (PSD) permitting requirements cover, for the first time, new construction projects that emit large amounts of greenhouse gas (GHG) emissions (i.e., emissions of at least 100,000 tons per year (tpy)) even if they do not exceed the permitting thresholds for any other pollutant. Modifications at existing facilities that increase GHG emissions by at least 75,000 tpy (equivalent to CO2 emissions from burning 370 railcars worth of coal) will be subject to PSD permitting requirements, even if they do not significantly increase emissions of any other pollutant. Despite this change for Step 2, permitting requirements would still only apply to large sources of emissions.

AC-11-001-5139

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 28 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Frank D. Lucas
Chairman
Committee on Agriculture
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas:

I am responding to questions for the record following the March 10, 2011, hearing on the impact of EPA regulation on agriculture. The attached document includes responses to questions from Congressman Schilling that were received after the questions that were responded to previously. I hope that this information is useful to you and the members of the committee.

If you have any further questions, please contact me or your staff may call Sven-Erik Kaiser in my office at (202) 566-2753.

Sincerely,

Arvin Ganesan
Associate Administrator

Attachment

House Committee on Agriculture
"The Impact of EPA Regulation on Agriculture"
Questions for the Record
March 10, 2011

Schilling 1. In your testimony, you note your ``profound respect" for the contribution that farmers make the whole world over. However, farmers and producers in the 17th District of Illinois feel threatened by EPA's over-regulation. How can you claim to respect the contributions of farmers when it has been suggested that your EPA may regulate everything from farm dust to milk?

Answer: The EPA is committed to providing an effective opportunity for input from all stakeholders in shaping environmental protection strategies including input from the agricultural community. We have established a federal advisory committee, The Farm, Ranch, and Rural Communities Committee, to provide advice to the agency. My office is directly engaged in facilitating the work of the Committee.

Each of our Regional Administrators has an agriculture advisor who interacts directly with the agriculture community, including state and local agricultural organizations. The EPA is currently engaged in a series of intensive listening sessions with agricultural and other stakeholders to solicit their views on the issues surrounding emissions of particulate matter. The EPA Office of Pesticide Programs also conducts an active federal advisory committee to solicit input from a wide range of stakeholders on pesticide issues, particularly those that affect agriculture.

In addition, I will continue to travel to farm communities to talk directly with farmers and will continue to join Secretary Vilsack in meeting with commodity groups and farm organizations. The EPA finds these discussions a valuable opportunity to keep agricultural stakeholders informed about agency initiatives and to get feedback from them on these issues. The agency often solicits agriculture community views on the EPA's efforts to promote environmental quality and willingly accepts invitations to meet. The EPA will continue to promote opportunities to engage and inform all stakeholder groups, including those representing agriculture.

Regarding the regulation of farm dust, I committed in an October 17, 2011 letter that the EPA will send to the Office of Management and Budget a proposal to keep the PM10 national ambient air quality standard as it is, with no change. This existing standard has been in effect since 1987. I am hopeful that this announcement ends the myth that the agency has plans to tighten regulation of farm dust.

Similarly, regarding the regulation of milk, on April 12, 2011, the EPA issued its final rule exempting milk and milk product containers from the Oil Spill Prevention, Control, and Countermeasure (SPCC) rule. The final rule was published in the Federal Register on April 18, 2011 and became effective on June 17, 2011.

Schilling 2. I have very strong concerns about the word ``navigable" being removed from the Clean Water Act. Will EPA be developing new guidance that opens up all waters of the United States to regulation? Why is EPA trying to change policies through a guidance document?

Answer: The EPA and the U.S. Army Corps of Engineers (Corps) have drafted guidance that clarifies those waters over which the agencies will assert jurisdiction consistent with the CWA, implementing regulations, and Supreme Court interpretations. The draft guidance cannot and does not alter existing requirement of the law, it merely explains how the agencies think existing law should be applied in general, and emphasizes that it may not be applicable in particular cases. The scope of waters that would be protected under the interpretations in the draft guidance would remain significantly narrower than under the agencies' interpretations prior to the Supreme Court's decisions in *SWANCC* and *Rapanos*. All exemptions for agriculture in the CWA and regulations would be completely unchanged by the draft guidance.

The EPA and the Corps released the draft guidance for public notice and comment on May 2, 2011 with a 60 day comment period; this comment period was later extended until July 31, 2011. The agencies are now reviewing the comments received and will make decisions regarding any final guidance after carefully evaluating comments provided by the public. The agencies also expect to proceed with notice and comment rulemaking to further clarify the regulatory definition of the term "waters of the United States."

Schilling 3. Atrazine was last re-registered as an herbicide in 2006 after 12 years of review and 6,000 scientific studies reaffirming the safety of the product. In October of 2010, the World Health Organization increased its guidelines for atrazine (as it pertains to drinking water) from 2 parts per billion to 100 parts per billion. What prompted you to open up the re-registration of atrazine and do you expect the 6,001st study to produce a different conclusion? I would like the record to reflect that University of Chicago Economist, Don Coursey, recently announced that banning atrazine would cost us 21,000 to 48,000 jobs from lost production in corn alone.

Answer: The EPA's current scientific evaluation of atrazine is based on our commitment to using the best available science and follows regular open and transparent processes, including our process to obtain independent, external peer review of important science issues. The agency will decide whether any steps are necessary to better protect health and the environment, based on this scientific evaluation. The EPA reregistered atrazine in 2003, which was the last major regulatory decision specifically for this herbicide. Given the substantial new scientific information generated since the 2003 reregistration decision and improved data on the documented presence of atrazine in both drinking water sources and other bodies of water collected as a condition of reregistration, the agency is reviewing the new research to ensure that our regulatory decisions regarding atrazine are based on the best available science and protect public health and the environment. Since the EPA concluded its last evaluation of atrazine in 2003, the agency has evaluated close to 150 newly published studies investigating a wide array of effects potentially relevant to human health risk assessment.

The EPA is committed to an open, transparent, and science based review process that relies on rigorous examination of the relevant scientific data. As part of this process, to be certain that the best available science is used to inform its atrazine human health risk assessment, and to ensure

transparency, the agency is seeking advice on key aspects of the science evaluation from the independent FIFRA Scientific Advisory Panel (SAP). The EPA presented its plan for the atrazine reevaluation to the SAP in November 2009, and the agency held three SAP meetings in 2010 to address new atrazine studies and related issues. An SAP meeting was held in July 2011 to obtain scientific peer review of new data that the EPA received from the epidemiological Agricultural Health Study (AHS) conducted by the National Cancer Institute at the National Institutes of Health. The EPA recently received the final report from that meeting of the SAP and plans to take the recommendations from this SAP report as well as all previous SAPs on atrazine and human health into account as it updates the state of the science for the atrazine registration review. Atrazine's registration review process is scheduled to begin in 2013.

AL-11-001-5139

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 15 2011

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

The Honorable Frank D. Lucas
Chairman
Committee on Agriculture
United States House of Representatives
Washington, D.C. 20515

Dear Chairman Lucas:

I am completing the response to the questions for the record following a hearing before the House Committee on Agriculture earlier this year. Questions from Congressman Peterson forwarded by the committee requested that the EPA provide the committee with copies of all documents meeting the following criteria:

(1) A settlement agreement entered into by the EPA;

(2) In response to any civil action, administrative adjudication or petition for review brought against the EPA or the Administrator of EPA; and

(3) During the period of January 1, 2006 through March 10, 2011.

On the enclosed CD, the EPA is providing settlement agreements and consent decrees entered during this time frame under the environmental statutes administered by the EPA. In addition, I am attaching a response to your question for the record in reference to publication of proposed settlements in the Federal Register for public comment.

Thank you for your interest in this important subject matter. I hope that you will find these responses informative. If you have further questions, please contact me or your staff may call Sven-Erik Kaiser in my office at (202) 566-2753.

Sincerely,

Arvin Ganesan
Associate Administrator

Enclosure

Settlement Agreements and Consent Decrees Published in Federal Register for Comment Prior to Finalization
1/1/06 to 3/10/11

SA/CD Entry Date	Plaintiff/Petitioner	Defendant	Case #	Court	Adverse comment?	Modified as a result of adverse comment
02/22/2011	Sierra Club	EPA	1:10-cv-859	D. D.C.		
02/14/2011	WildEarth Guardians	EPA	6:10-cv-877	D. NM		
02/08/2011	Natural Resources Defense Council, et al.	EPA	2:10-cv-6029	N.D. CA		
01/31/2011	WildEarth Guardians	EPA	1:10-cv-01218-REB	D. CO		
01/14/2011	Sierra Club, et al.	EPA	1:10-cv-889	D. D.C.		
01/12/2011	Association of Irritated Residents	EPA	3:10-cv-3051	N.D. CA		
01/11/2011	Sierra Club, et al.	EPA	3:10-cv-1954	N.D. CA		
01/10/2011	WildEarth Guardians	EPA	1:10-cv-1672	D. CO		
12/22/2010	Natural Resources Defense Council	EPA	1:10-cv-05590-CM	S.D.N.Y.	X	
12/21/2010	American Petroleum Institute, et al.	EPA	08-1277	D.C. Circuit	X	
12/21/2010	State of New York	EPA	06-1322	D.C. Circuit	X	
12/20/2010	Center for Biological Diversity	EPA	3:10-cv-1846	N.D. CA		
12/13/2010	Comite Civico Del Valle, Inc	EPA	4:10-cv-2859	N.D. CA		
11/23/2010	Louisiana Environmental Action Network	EPA	1:09-cv-01333	D. D.C.		
09/08/2010	Sandra L. Bahr, et al.	EPA	2:09-cv-2511	D. AZ	X	
08/31/2010	Comite Civico Del Valle, Inc	EPA	10-00946	N.D. CA		
07/15/2010	American Bottom Conservancy	EPA	3:10-cv-292	S.D. IL		
07/14/2010	Sierra Club, et al.	EPA	1:10-cv-133	D. D.C.		
07/07/2010	American Chemistry Council	EPA	09-1325	D.C. Circuit	X	
07/06/2010	Sierra Club	EPA	4:09-cv-152	N.D. CA	X	Modified two of the deadlines for proposed and final actions with regard to technology and residual risk review for source categories.
06/21/2010	Navistar, Inc	EPA	09-1113	D.C. Circuit		

SA/CD Entry Date	Plaintiff/Petitioner	Defendant	Case #	Court	Adverse comment?	Modified as a result of adverse comment
06/21/2010	Navistar, Inc	EPA	09-1317	D.C. Circuit		
06/08/2010	Sierra Club	EPA	3:09-cv-751	W.D. WI		
06/04/2010	Sierra Club	EPA	3:10-cv-127	W.D. WI		
05/17/2010	Center for Biological Diversity	EPA	3:07-cv-02794-JCS	N.D. CA	X	Terms of the injunction were amended to exempt public health uses and reduce use limitations on certain termiticide and rodenticide applications.
04/19/2010	Louisiana Environmental Action Network	EPA	1:09-cv-1943	D. D.C.		
04/15/2010	American Nurses Association, et al.	Stephen L. Johnson	1:08-cv-2198	D. D.C.	X	
04/14/2010	Environmental Integrity Project, et al.	EPA	1:10-cv-165	D. D.C.		
03/22/2010	WildEarth Guardians	EPA	1:09-cv-01964	D. CO	X	
03/09/2010	WildEarth Guardians	EPA	09-cv-02109-MSK-KLM	D. CO		
03/01/2010	State of New Jersey, et al.	EPA	08-4818	3rd Circuit		
02/23/2010	WildEarth Guardians	EPA	4:09-cv-2453	N.D. CA		
02/05/2010	Environmental Integrity Project, et al.	EPA	1:09-cv-00218	D. D.C.		
02/04/2010	WildEarth Guardians, et al.	EPA	1:09-cv-00089	D. D.C.	X	
02/02/2010	WildEarth Guardians	EPA	1:09-cv-2148	D. CO		
01/29/2010	Comite Civico Del Valle, Inc	EPA	4:09-cv-04095	N.D. CA		
12/30/2009	Association of Irritated Residents	EPA	4:09-cv-1890	N.D. CA		
11/24/2009	Environmental Integrity Project, et al.	EPA	1:09-cv-1025	D. D.C.		
11/14/2009	Sierra Club	EPA	1:09-cv-1028	D. D.C.		
11/03/2009	Sierra Club, et al.	EPA	1:09-cv-00312	D. D.C.		
10/30/2009	Mossville Environmental Action Now, et al.	EPA	1:08-cv-1803	D. D.C.	X	
10/16/2009	Sierra Club	EPA	2:09-CV-00085-WOB	E.D. KY		

SA/CD Entry Date	Plaintiff/Petitioner	Defendant	Case #	Court	Adverse comment?	Modified as a result of adverse comment
09/22/2009	Sierra Club	EPA	3:09-cv-00122	W.D. WI		
09/08/2009	Association of Irritated Residents	EPA	4:08-cv-5650	N.D. CA		
09/08/2009	WildEarth Guardians	EPA	1:08-cv-2253	D. D.C.		
08/21/2009	Colorado Citizens Against Toxic Waste, Inc, et al.	EPA	1:08-cv-1787	D. CO		
06/18/2009	Alliance of Automobile Manufacturers	EPA	08-1109	D.C. Circuit		
06/02/2009	Sierra Club	EPA	08-c-664	W.D. WI		
06/01/2009	Sierra Club, et al.	EPA	1:08-cv-1999	D. D.C.		
05/22/2009	American Petroleum Institute	EPA	06-1321	D.C. Circuit		
05/21/2009	BCCA Appeal Group, et al.	EPA	3:08-cv-1491	N.D. TX		
03/19/2009	Environmental Integrity Project	EPA	1:09-cv-00087	D. D.C.		
03/16/2009	Environmental Integrity Project, et al.	EPA	1:09-cv-00088	D. D.C.		
03/03/2009	Rocky Mountain Clean Air Action, et al.	EPA	1:08-cv-01422-RWR	D. D.C.		
01/06/2009	Portland Cement Association	EPA	07-1046	D.C. Circuit		
09/12/2008	Association of Irritated Residents, et al.	EPA	08-0227	N.D. CA		
06/09/2008	Desert Rock Energy Company, LLC, et al.	EPA	4:08-cv-00872	S.D. TX	X	
06/04/2008	Sierra Club, et al.	EPA	06-CV-4000	N.D. IL		
05/14/2008	National Environmental Development Association's Clean Air Project	EPA	06-1428	D.C. Circuit		
03/25/2008	Coke Oven Environmental Task Force	EPA	06-1131	D.C. Circuit		
01/17/2008	Battery Council International	EPA	07-1364	D.C. Circuit		
11/19/2007	Center for Biological Diversity, et al.	EPA	05-1814	D. D.C.		
11/06/2007	Sierra Club	EPA	1:07-cv-01040	D. D.C.		
10/24/2007	Sierra Club	EPA	1:07-CV-00414	D. D.C.		

SA/CD Entry Date	Plaintiff/Petitioner	Defendant	Case #	Court	Adverse comment?	Modified as a result of adverse comment
09/17/2007	Citizens Against Ruining the Environment	EPA	06-CV-6915	N.D. IL		
09/13/2007	Rocky Mountain Clean Air Action	EPA	07-1012	D.C. Circuit	X	
09/07/2007	American Iron and Steel Institute, et al.	EPA	00-1434	D.C. Circuit		
08/23/2007	Sierra Club	EPA	07-C-0154-S	W.D. WI		
08/20/2007	Ingersoll-Rand Company	EPA	98-1597	D.C. Circuit		
07/19/2007	People of the State of Illinois ex rel. Madigan	EPA	1:06-CV-06909	N.D. IL		
07/09/2007	Steel Manufacturers Association, et al.	EPA	05-1135	D.C. Circuit		
06/14/2007	American Lung Association of Metropolitan Chicago, et al.	EPA	06-CV-6933	N.D. IL		
05/22/2007	Environmental Defense, Inc., et al.	EPA	06-1164	D.C. Circuit		
05/17/2007	Rocky Mountain Clean Air Action, et al.	EPA	1:06-CV-01992	D. D.C.		
05/14/2007	New Jersey Department of EPA	EPA	07-3746	3rd Circuit		
05/14/2007	State of New Jersey	EPA	07-612	D. NJ		
05/04/2007	Sierra Club	EPA	06-5288	N.D. CA		
03/22/2007	Pasadena Refining Systems, Inc.	EPA	04-60982	5th Circuit		
03/22/2007	Pasadena Refining Systems, Inc.	EPA	05-60551	5th Circuit		
03/20/2007	Our Children's Earth Foundation	EPA	05-73130	9th Circuit		
02/14/2007	Center for Biological Diversity, et al.	EPA	1:06-CV-01350	D.C. Circuit		
02/12/2007	Sierra Club, et al.	EPA	1:06-CV-1523	N.D. GA		
01/05/2007	American Founders' Society	EPA	04-1191	D.C. Circuit		
12/13/2006	Sierra Club	EPA	06-0663 BB/LFG	D. NM		
10/20/2006	Center for Biological Diversity	Stephen L. Johnson	02-1580-JSW	N.D. Cal.	X	Changes made to definition of "upland habitat"; flood control and rights-of-way fire protection uses were exempted from coverage under the injunction; and a few minor wording changes

SA/CD Entry Date	Plaintiff/Petitioner	Defendant	Case #	Court	Adverse comment?	Modified as a result of adverse comment
						were made.
10/16/2006	Kentuckians For The Commonwealth , et al.	EPA	1:06-CV-00184	D. D.C.		
10/02/2006	Natural Resources Defense Council	EPA	06-1059	D.C. Circuit		
08/21/2006	Our Children's Earth Foundation, et al.	EPA	05-05184 WHA	N.D. CA		
04/19/2006	Utility Air Regulatory Group	EPA	06-1056	D.C. Circuit		
03/28/2006	Natural Resources Defense Council	EPA	03-CV-02444 RDB	D. MD		
02/01/2006	Sierra Club	EPA	05-CV-02177	D. D.C.		
01/31/2006	United Farm Workers	EPA	2:04-cv-00099-RSM	W.D. WA		
01/27/2006	Sierra Club	EPA	05-1045	D.C. Circuit		

Response to Question for the Record

At the hearing, in response to a question about whether EPA's settlement agreements are made public, Administrator Jackson stated, "...most of our settlements are required by law to go through public comment."

- **Since 2006, which proposed settlement agreements, other than those related to cases in which EPA took enforcement action against an individual or entity, were published in the *Federal Register* for public comment?**

- **If some, but not all, settlement agreements are published for public comment, explain how EPA and the Department of Justice determine which to open for public comment. Have the criteria for these determinations changed since January 1, 2006, and, if so, how? Please distinguish between civil actions or petitions for review brought against the agency from civil or criminal enforcement actions taken by the agency against an individual or entity.**

- **Please explain in detail, how, since January 1, 2006, EPA has amended settlement agreements, other than those related to cases in which EPA took enforcement action against an individual or entity, after such agreements have been open for public comment.**

Under nearly a dozen environmental statutes, Congress has tasked the EPA with scores of duties, many with associated statutory deadlines. Pursuant to these duties, each year the EPA promulgates numerous rules and takes a broad array of other final agency actions. Many of these rules and other final actions are challenged in court. In addition, each year the EPA is subject to numerous "mandatory duty" and "unreasonable delay" lawsuits alleging that that the Agency has failed to take an action it is required by law to take or has unreasonably delayed in doing so. These suits are brought by a variety of different types of entities, including corporations, industry organizations, environmental and community organizations, and State, local, and tribal governmental entities.[1]

The U.S. Department of Justice (DOJ) represents EPA in defending these suits, and the Agency litigates many cases to final judgment. In some cases, however, the EPA determines, with DOJ's advice and concurrence, that it is in the best interests of the Federal government and the public to resolve the litigation through settlement. The determination whether to settle a lawsuit is based principally on the EPA's assessment, with DOJ's advice, of the Agency's duties under the relevant statute and the legal risks presented by the litigation. These factors are applied in an

[1] A recent Government Accountability Office (GAO) report on environmental litigation against the EPA found that "[n]o trend was discernible in the number of environmental cases brought against EPA from fiscal year 1995 through fiscal year 2010, as the number of cases filed in federal court varied over time." The report found that the average number of new environmental suits filed against the Agency per year during this period was 155. GAO, "Environmental Litigation: Cases against EPA and Associated Costs over Time" GAO-11-650 (Aug. 2011), at "Highlights" page and p. 13.

evenhanded manner, without regard to the identity or type of the plaintiff or petitioner in the case. The Assistant Attorney General for DOJ's Environment and Natural Resources Division must concur in any decision to enter into a settlement agreement or consent decree. With regard to consent decrees, a court generally will enter such a decree only if the court has determined that it is fair, reasonable, and consistent with the public interest and the underlying statute.

The EPA's use of consent decrees and settlement agreements to resolve lawsuits, whether brought by industry or environmental plaintiffs or petitioners or others, is a longstanding practice across both Republican and Democratic Administrations. The number and type of settlement agreements and consent decrees in any given year goes up and down over time and depends on a variety of factors, including the ebb and flow over time of Agency regulatory actions, of mandatory duties and deadlines triggered by such actions, and of lawsuits challenging such actions. Because the litigation process is often lengthy, settlement activity at any given time may be attributable in significant part to agency actions taken, or suits brought, years in the past.

The majority of the environmental lawsuits against the EPA are brought under the Clean Air Act.[2] Under section 113(g) of the Clean Air Act, the EPA is required to publish and take comment on a proposed settlement agreement or consent decree in litigation against the EPA under the Act at least 30 days in advance of finalizing such an agreement or decree. The EPA is not required to go through notice and comment on settlement agreements or consent decrees in defensive litigation under the other statutes it administers. However, public participation is provided for in most of the typical regulatory processes to which the EPA commits in a settlement agreement or consent decree. Where the Agency commits to undertake rulemaking, for example, such participation generally is provided through public notice and comment procedures under the Administrative Procedure Act.

The EPA generally does not publish proposed settlement agreements or consent decrees in litigation brought against the Agency under statutes other than the Clean Air Act. One exception to this general practice is that, during the period since 2001, several settlements in litigation involving regulation of pesticides have been published in the Federal Register for comment prior to finalization. The criteria for determining whether to publish proposed settlements for comment have not changed since January 1, 2006.

The attached chart identifies settlements entered into by the EPA under environmental statutes in the relevant time frame that the Agency published in the Federal Register for public comment. The chart also provides information on whether the EPA received adverse comment on a proposed settlement agreement or consent decree, whether the proposed agreement or decree was modified in response to such comments, and, if so, in what manner. In many instances, the EPA does not receive any adverse comments or comments requesting any change to the proposed settlement. Of the 93 settlements and consent decrees listed on the attached chart, for example,

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[2] A recent GAO report concluded that, from fiscal year 1995 through fiscal year 2010, Clean Air Act suits accounted for 59 percent of the environmental suits brought against the EPA. GAO, *supra* note 1, at "Highlights" page.

our records indicate that we received adverse comments on only 14 (about 15 percent). In some of the instances where the EPA has received adverse comments, it has amended the proposed settlement. Where the EPA did not do so, the Agency considered the comments and determined that they did not provide grounds warranting such an amendment.

AL-11-001-7674

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

NOV 15 2011

The Honorable Darrell Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515-6143

Dear Mr. Chairman:

I am responding to your letters sent to Margo Oge and me on October 18, 2011, asking for clarification on statements made at the October 12, 2011 hearing. The U.S. Environmental Protection Agency (EPA) establishes emissions standards for cars and trucks, and does not establish fuel economy standards. Our emissions standards for greenhouse gases (GHGs) differ from fuel economy standards in several important ways. EPA's emissions standards are designed to address the public health and welfare problems from air pollution.[1] The GHG standards control emissions of four GHGs, carbon dioxide (CO_2), nitrous oxide (NO), methane (CH_4), and hydroflourocarbons (HFCs), some of which have no overlap with fuel efficiency. In addition, the GHG emissions standards are defined in terms of grams of emissions of GHG per mile, not miles per gallon. While a gasoline and a diesel car may have identical miles per gallon for fuel economy, they will have significantly different CO_2 grams per mile because of differences in the carbon content of the fuel. Likewise, under EPA's GHG standards, operating a vehicle on electricity generally leads to a compliance value of zero grams per mile tailpipe emissions, while operation on electricity receives a specified mile per gallon value for fuel economy under the CAFE program.

The EPA has always recognized that, generally, the same technologies are used to reduce emissions of CO_2 and to increase fuel economy. Technology that makes a vehicle more fuel efficient results in using less fuel to travel a given distance or perform a certain amount of work, which reduces emissions of CO_2 and increases fuel economy. This technology overlap led EPA and the National Highway Traffic Safety Administration (NHTSA) to develop a joint technological basis in establishing the National Program.[2] Our joint technical work provided the basis for the successful 2012-2016 model year joint rulemaking, and will provide the same kind of robust, data-driven scientific basis for the proposal for 2017-2025 model year standards.

With respect to the scope of the express preemption provision in the Energy Policy and Conservation Act (EPCA), 49 U.S.C. 32919(a), our previous response to question 12 of your letter of September 30,

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[1] As discussed above, in *Massachusetts v. EPA* the Supreme Court held that GHGs are air pollutants under the Clean Air Act, and that EPA must determine whether emissions of GHGs from cars and trucks "*cause or contribute to air pollution which may reasonably be anticipated to endanger public health and welfare*" – which we have done through the Endangerment Finding. The Court further held that if EPA made such a determination, then EPA must act under Section 202(a) of the CAA —our authority for setting motor vehicle emission standards.

[2] 75 Fed. Reg. 25324, 25327 (May 7, 2010).

2011, explains the relationship of this EPCA provision to the Clean Air Act provision for a waiver of preemption of state motor vehicle emissions standards. As NHTSA has responsibility for setting federal fuel economy standards under EPCA, I would also refer you to the response to question number 23 in Secretary LaHood's letter of October 17, 2011, responding to your letter of September 30, 2011. In that response, Secretary LaHood explained that the National Program "simply does not implicate the statutory preemption provision." In light of that statement, there is no reason to address the scope of the EPCA preemption.

I trust the information provided above is useful. If you have further questions, please contact me or your staff may call Diann Frantz in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3668.

Sincerely,

Gina McCarthy
Assistant Administrator

AL-11-001-7569

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 27 2012

OFFICE OF
AIR AND RADIATION

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your letter of October 17, 2011, to Associate Administrator Michael L. Goo, requesting that the EMPAX Computable General Equilibrium (CGE) model be made available to the public. Mr. Goo has asked that I respond on his behalf.

We agree with you that the peer-reviewed EMPAX model should be publicly available, and we are working to make this model available through EPA's website. In addition to providing access to the EMPAX model, we will provide information on model operating requirements, including access to sources of data required to configure and run the model. For example, similar to many sophisticated economic models, EMPAX requires additional standard mathematical software to run the model, as well as economic input data. EPA's documentation for the model, which will also be available on the website, will explain what software and economic input data we use.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Diann Frantz in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-3668.

Sincerely,

Gina McCarthy
Assistant Administrator

AL-11-002-1451

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Debbie Stabenow
Chairwoman
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Madam Chairwoman:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Pat Roberts
Ranking Republican Member
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Roberts:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Max Baucus
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Baucus:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable John Boozman
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Boozman:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Robert P. Casey, Jr.
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Casey:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Saxby Chambliss
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Chambliss:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Thad Cochran
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Cochran:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Kirsten E. Gillibrand
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Gillibrand:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

As you noted in your letter, the EPA published the proposed rulemaking on October 21, 2011. In the proposed rule, the EPA requested comments on two proposed options, as well as alternative approaches to achieve its water-quality related objectives. The original deadline for submission of comments was December 20, 2011, and upon receiving input from many of our stakeholders, the EPA extended the deadline for an additional thirty (30) day period to January 19, 2012. The Agency believed that this 30-day extension provided an adequate amount of additional time for stakeholders to provide comment on this proposed rule.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Chuck Grassley
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Grassley:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Mike Johanns
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Johanns:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

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Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Amy Klobuchar
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Klobuchar:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

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Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Dick Lugar
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Lugar:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

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Sincerely,

Nancy K. Stoner
Acting Assistant Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2012

OFFICE OF WATER

The Honorable Ben Nelson
Committee on Agriculture, Nutrition and Forestry
United States Senate
Washington, D.C. 20510

Dear Senator Nelson:

Thank you for your letter dated December 13, 2011, to the U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson, expressing support for a sixty (60) day extension to the comment period for the National Pollutant Discharge Elimination System Concentrated Animal Feeding Operation proposed reporting rule. As the acting Assistant Administrator for the Office of Water, Administrator Jackson asked that I respond to your letter.

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Acting Assistant Administrator