

## MEMORANDUM

December 11, 2009

То:	Honorable Edward Markey Attention: Michal Freedhoff
From:	Dana A. Shea, Specialist in Science and Technology Policy, x7-6844
Subject:	RMP Facilities in the United States as of December 2009

This memorandum responds to your request regarding facilities submitting risk management plans (RMPs) to the U.S. Environmental Protection Agency (EPA). You requested an analysis of RMP facilities within the United States by potentially affected population. You also requested an analysis of facilities that were required by regulation to resubmit their information to the EPA but had not done so.

Under the Clean Air Act, Section 112(r), the EPA established a program requiring facilities possessing greater than certain threshold quantities of 140 chemicals to provide risk management plans to the EPA.<sup>1</sup> As part of this reporting requirement, facilities are required to determine the worst-case scenario release from a single chemical process, using EPA criteria and guidelines.<sup>2</sup> Facilities are also required to estimate the population potentially at risk from this worst-case scenario release by calculating the population that resides within a circle surrounding the facility. The distance the worst-case scenario release might travel determines the radius of the circle.<sup>3</sup>

The population potentially affected under an EPA worst-case scenario release is calculated in a circle around the facility. In the event of an actual catastrophic chemical release, meteorological effects would determine the direction of the release and therefore those potentially affected. Furthermore, how such a release would affect those exposed would vary depending on many factors, such as the demographics of the population and the surrounding geography and weather. In addition, worst-case scenarios do not take into account emergency response measures that facility operators or others might take to mitigate harm. Therefore, it is unlikely that this entire population would be affected by any single chemical release, even if it is a result of a worst-case accident.

Facilities may register and deregister from the RMP program as their chemical processes and the amounts of chemicals they store and use change. If a facility no longer possesses a regulated chemical above the

<sup>&</sup>lt;sup>1</sup> The list of 140 chemicals, including 77 toxic and 63 flammable chemicals, and their threshold quantities is found at 40 CFR 68.130.

<sup>&</sup>lt;sup>2</sup> The criteria and guidelines for determining the worst-case scenario release are found at 40 CFR 68.25. Some facilities have submitted information on multiple worst-case scenario releases.

<sup>&</sup>lt;sup>3</sup> This requirement is found at 40 CFR 68.30. The criteria for determining the distance a worst-case scenario release might travel are found at 40 CFR 68.22.

threshold quantity, it is required to inform the EPA and deregister from the program.<sup>4</sup> Facilities are required to review and update their RMP plans filed with the EPA at least once every five years.<sup>5</sup> For the purposes of this memorandum, facilities that have not reviewed and updated their RMP plan within five years of their submission will be termed facilities with overdue updates. The deadline for submissions under the RMP program was June 21, 1999.<sup>6</sup> The EPA maintains this information in the RMP\*National Database.

In 1999, Congress passed the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFRRA).<sup>7</sup> This act removes from RMP program coverage any flammable fuel used as fuel or held for sale as fuel by a retail facility. In implementing this act, the EPA allowed facilities that had previously filed under the RMP program the options of withdrawing from the program, which would delete the information from the EPA database, or taking no further action, which would leave the information in the EPA database as a voluntary submission.<sup>8</sup> Facilities exempted under CSISSFRRA that voluntarily submitted information are not required to update these submissions.

The data available in the RMP\*National Database is not sufficient to determine the full scope of actual compliance or noncompliance with the RMP program. Facilities that were required to, but did not, submit an RMP plan to the EPA would not be present in the RMP\*National Database, but would be out of compliance with the RMP program. As a result of the EPA's implementation of CSISSFRRA, some entries in the EPA database that have not been updated within the five year requirement are likely to be facilities falling under CSISSFRRA that opted to take no action. These facilities are not identified as such in the RMP\*National Database.<sup>9</sup> Thus, the number of facilities identified in this memorandum as having overdue updates is likely not equal to the total number of facilities not complying with the RMP program.

At your request, CRS has searched the December 2009 update of the EPA RMP\*National Database (with off-site consequence analysis (OCA) data) for facilities that have registered under the RMP program. Facilities that have deregistered from the RMP program were excluded. You requested that the facilities be classified by state according to the population potentially affected by a worst-case release, according to the EPA worst-case scenario criteria, using thresholds of 1,000 people, 10,000 people, 100,000 people, and 1,000,000 people. Additionally, you requested that facilities with overdue RMP updates be identified for each population category. Facilities with an RMP filing due to be updated by December 1, 2009, that had not been updated were considered overdue for the purposes of this analysis. These facilities include CSISSFRRA-exempted facilities as well as facilities that are covered by the regulation. All of the information in this memorandum is drawn from the EPA RMP\*National Database (with off-site consequence analysis (OCA) data). This information is presented in **Table 1**.

Since facilities may register and deregister from the RMP program as chemical processes and amounts of chemicals stored and used change, the number of facilities listed in **Table 1** should be considered as illustrative of the current industry profile, rather than absolute.

<sup>&</sup>lt;sup>4</sup> This requirement is found at 40 CFR 68.190. Facilities must deregister from the program within six months.

<sup>&</sup>lt;sup>5</sup> This requirement is found at 40 CFR 68.36. Facilities not excluded by the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40) that do not review and update the RMP plan are not in compliance with the RMP regulation. They may be subject to enforcement actions by the EPA under the Clean Air Act, Section 113.

<sup>&</sup>lt;sup>6</sup> 61 Federal Register 31,668 (June 20, 1996).

<sup>&</sup>lt;sup>7</sup> P.L. 106-40.

<sup>&</sup>lt;sup>8</sup> See 65 *Federal Register* March 13, 2000, p. 13,247.

<sup>&</sup>lt;sup>9</sup> Personal communication with EPA staff, September 25, 2007.

## Table I. Compliant, Update Overdue, and Total RMP Facilities in Each State, by PotentiallyAffected Population in EPA Defined "Worst Case" Scenarios (Parameters Designated by<br/>Requester)

	0 - 999				)00 - 9,9		10,0	)00 - 99	,999	100,	000 - 999	,999	I,	000,000	00+				
State	Compliant	Update Overdue	Total																
AK	17	I	18	13	0	13	0	0	0	0	0	0	0	0	0				
AL	78	6	84	88	3	91	36	0	36	9	0	9	0	0	0				
AR	34	6	40	68	5	73	52	3	55	2	0	2	0	0	0				
AS	0	0	0	0	0	0	I	0	I	0	0	0	0	0	0				
AZ	24	2	26	42	7	49	32	6	38	0	0	0	2	0	2				
CA	288	34	322	285	25	310	248	29	277	49	4	53	9	I	10				
СО	106	11	117	53	3	56	24	2	26	0	0	0	2	0	2				
СТ	9	0	9	11	2	13	10	I	11	I	0	I	0	0	0				
DC	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0				
DE	10	0	10	12	0	12	3	0	3	2	0	2	I	0	I				
FL	71	4	75	109	11	120	89	5	94	19	2	21	4	I	5				
GA	113	7	120	117	10	127	39	4	43	6	0	6	I	0	I				
GU	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0				
н	5	0	5	8	I	9	2	0	2	0	0	0	0	0	0				
IA	428	10	438	397	13	410	48	7	55	3	0	3	0	0	0				
ID	25	2	27	23	I	24	16	2	18	0	0	0	0	0	0				
IL	527	49	576	302	19	321	73	4	77	17	0	17	11	I	12				
IN	181	26	207	160	13	173	71	9	80	11	0	11	3	0	3				
KS	442	6	448	189	4	193	35	0	35	5	0	5	0	0	0				
KY	75	4	79	72	- 11	83	38	2	40	13	0	13	0	0	0				
LA	111	21	132	88	10	98	62	3	65	39	4	43	2	0	2				
MA	14	5	19	23	3	26	21	3	24	I	0	I	0	0	0				
MD	33	0	33	26	I	27	36	0	36	I	0	I	I	0	I				
ME	8	2	10	8	3	11	5	0	5	I	0	I	0	0	0				
MI	67	12	79	65	21	86	42	4	46	8	2	10	3	I	4				
MN	153	50	203	182	36	218	47	7	54	6	0	6	I	I	2				
MO	185	21	206	136	6	142	39	I	40	5	0	5	I	0	Ι				
MS	44	4	48	60	9	69	22	7	29	I	I	2	0	0	0				
MT	34	3	37	15	I	16	7	0	7	I	0	I	0	0	0				
NC	101	13	114	88	14	102	38	5	43	4	0	4	0	0	0				

0 - 999			١,٥	)00 - 9,9	999	10,0	)00 - 99	,999	100,	000 - 999	,999	I,	000,000	+	
State	Compliant	Update Overdue	Total												
ND	173	69	242	57	15	72	13	I	14	0	0	0	0	0	0
NE	286	3	289	173	2	175	40	0	40	2	0	2	0	0	0
NH	6	0	6	4	0	4	I	0	I	I	0	I	0	0	0
NJ	37	0	37	18	0	18	10	0	10	6	0	6	5	0	5
NM	49	3	52	7	I	8	6	0	6	2	0	2	0	0	0
NV	22	6	28	6	I	7	5	0	5	I	0	I	2	0	2
NY	44	2	46	65	2	67	36	0	36	18	0	18	I	0	I
ОН	124	20	144	168	17	185	71	14	85	11	3	14	5	0	5
ОК	173	25	198	68	16	84	36	I	37	8	0	8	0	0	0
OR	44	3	47	42	I	43	25	I	26	4	0	4	0	0	0
PA	116	I	117	145	4	149	79	0	79	9	0	9	2	0	2
PR	6	0	6	39	I	40	46	0	46	I	0	I	0	0	0
RI	I	0	I	5	0	5	6	0	6	3	0	3	0	0	0
SC	63	2	65	91	2	93	18	0	18	7	0	7	0	0	0
SD	46	6	52	27	4	31	4	0	4	0	0	0	0	0	0
TN	57	7	64	72	7	79	38	5	43	16	I	17	I	0	I
ΤХ	474	91	565	333	57	390	291	22	313	69	5	74	31	I	32
UT	40	6	46	22	I	23	9	3	12	4	0	4	3	0	3
VA	56	I	57	63	0	63	23	I	24	7	0	7	0	0	0
VI	0	0	0	0	0	0	I	0	I	0	0	0	0	0	0
VT	2	0	2	3	I	4	0	0	0	0	0	0	0	0	0
WA	118	6	124	88	4	92	29	2	31	10	0	10	0	0	0
WI	88	21	109	91	25	116	47	5	52	3	0	3	0	0	0
WV	28	0	28	26	I	27	15	0	15	7	0	7	0	0	0
WY	55	I	56	6	I	7	4	0	4	0	0	0	0	0	0
Total	5295	572	5867	4259	395	4654	1991	159	2150	393	22	415	91	6	97

**Source:** CRS analysis of the EPA RMP\*National Database (with off-site consequence analysis (OCA) data), updated December 1, 2009.

**Notes:** Facilities due to update their RMP filing by December I, 2009, that had not done so are categorized as "update overdue." Some of those facilities may be exempted from regulation by CSISSFRRA. In cases where facilities report multiple worst-case scenario releases, the worst-case scenario potentially affecting the most people has been considered. The column labeled State also includes American Samoa (AS), Guam (GU), Puerto Rico (PR), and the District of Columbia (DC).

You also requested that facilities with overdue RMP updates be classified by EPA region according to the population criteria described above. The EPA has ten regional offices, each of which is responsible for several states and, in some cases, territories.<sup>10</sup> This information is provided in **Table 2**.

				•	0 /	•
EPA Region	0 - 999	1,000 - 9,999	10,000 - 99,999	100,000 - 999,999	1,000,000+	Total
I	7	9	4	0	0	20
2	2	3	0	0	0	5
3	2	6	I	0	0	9
4	47	67	28	4	I	147
5	178	131	43	5	3	360
6	146	89	29	9	I	274
7	40	25	8	0	0	73
8	96	25	6	0	0	127
9	42	34	35	4	I	116
10	12	6	5	0	0	23
Total	572	395	159	22	6	1,154

Table 2. RMP Facilities with Overdue Updates in Each EPA Region, by Potentially Affected Population in EPA Defined "Worst Case" Scenarios (Parameters Designated by Requester)

**Source:** CRS analysis of the EPA RMP\*National Database (with off-site consequence analysis (OCA) data), updated December 1, 2009.

**Notes:** Facilities due to update their RMP filing by December 1, 2009, that had not done so were considered as "update overdue." Some of those facilities may be exempted from regulation by CSISSFRRA. In cases where facilities report multiple worst-case scenario releases, the worst-case scenario potentially affecting the most people has been considered.

Facilities might not review and update their filed RMP plans for several reasons: the facility is out of regulatory compliance; the facility is no longer in business; the facility has reduced the amount of reportable chemical to below threshold levels, but neglected to inform the EPA; or the facility falls under CSISSFRRA and is no longer covered by the RMP requirement. Any user of this data should use caution when drawing further conclusions from this analysis.

If you have any further questions regarding this topic or questions regarding the information in this memorandum, please contact me at 7-6844.

<sup>&</sup>lt;sup>10</sup> For a description of the various EPA regions, including the states located in each region, see online at http://www.epa.gov/epahome/locate2.htm.