



.Memorandum

June 27, 2005

TO: Honorable Edward Markey
Attention: Michal Freedhoff

FROM: Dana A. Shea
Analyst in Science and Technology Policy
Resources, Science, and Industry Division

SUBJECT: RMP Facilities in the United States as of May 2005

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.

Under the Clean Air Act, Section 112(r), the EPA established a program requiring risk management plans to be provided to the EPA by facilities possessing greater than certain threshold quantities of 140 chemicals.¹ 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.² 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, with the radius of the circle determined by the distance the worst-case scenario release might travel.³

Since the population potentially affected under an EPA worst-case scenario release is calculated in a circle around the facility, 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. In the event of an actual catastrophic chemical release, meteorologic effects will determine the direction of the release, and therefore those potentially affected, and effects on the health of those individuals affected would vary, depending on many factors. In addition, worst-case

¹ The list of 140 chemicals, 77 toxic chemicals and 63 flammable chemicals, and their threshold quantities are found at 40 CFR 68.130.

² The criteria and guidelines for determining the worst-case scenario release are found at 40 CFR 68.25.

³ 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.

scenarios do not take into account emergency response measures that might be taken by operators of the facilities or others to mitigate harm.

Facilities may register and deregister from the RMP program as their chemical processes and the amounts of chemicals they store and use change. Facilities are required to review and update the RMP plan filed with the EPA at least once every five years.⁴ Possible reasons that facilities might not review and update the filed RMP plan include: the facility is out of 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 fell under the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (CSISSFRA) and is no longer covered by the RMP requirement.

In 1999, Congress passed the Chemical Safety Information, Site Security and Fuels Regulatory Relief Act.⁵ This act removes from coverage by the RMP program any flammable fuel when 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.⁶ As a result, some entries in the EPA database which have not been updated within the five year requirement are likely to be facilities falling under CSISSFRA that opted to take no action.

At your request, I searched the May 2005 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 these 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 out-dated RMP filings be identified and subtracted from each population category. Facilities required to update their RMP filing by April 1, 2005 that had not done so were considered out of date for the purposes of this analysis and were excluded. Therefore, each category is described by a range of values, with the lower value being current, compliant RMP facilities and the upper value being all registered RMP facilities.

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

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

⁴ This requirement is found at 40 CFR 68.36. Facilities not excluded by CSISSFRA 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 EPA under the Clean Air Act, Section 113.

⁵ P.L. 106-40.

⁶ See 65 *Fed. Reg.* March 13, 2000, p. 13,247.

Table 1. Compliant and Total RMP Facilities in Each State, by Potential Affected Population (Parameters Designated by Requester)

| State | Compliant and Total Number of Facilities with a Worst-Case Release Potentially Affecting a Population of: | | | | |
|-------|-----------------------------------------------------------------------------------------------------------|---------------|-----------------|-------------------|------------|
| | 0 - 999 | 1,000 - 9,999 | 10,000 - 99,999 | 100,000 - 999,999 | 1,000,000+ |
| AK | 14 - 18 | 10 - 11 | 0 | 0 | 0 |
| AL | 78 - 103 | 65 - 86 | 35 - 42 | 12 - 13 | 0 |
| AR | 49 - 59 | 66 - 80 | 44 - 51 | 3 | 0 |
| AS | 0 | 0 | 0 - 1 | 0 | 0 |
| AZ | 26 - 42 | 40 - 46 | 28 - 37 | 4 - 5 | 2 |
| CA | 274 - 339 | 230 - 298 | 258 - 294 | 52 - 58 | 11 - 13 |
| CO | 119 - 128 | 63 - 67 | 24 | 1 | 1 |
| CT | 8 - 11 | 19 - 24 | 7 - 12 | 1 | 0 |
| DC | 0 | 1 | 1 | 0 | 0 |
| DE | 11 | 15 | 4 | 3 | 2 |
| FL | 81 - 90 | 156 - 176 | 112 - 125 | 21 - 22 | 7 |
| GA | 119 - 132 | 134 - 143 | 48 - 48 | 7 | 1 |
| GU | 2 - 4 | 0 | 0 | 0 | 0 |
| HI | 5 - 6 | 8 - 9 | 2 | 0 | 0 |
| IA | 476 - 527 | 380 - 395 | 55 - 60 | 3 | 0 |
| ID | 24 - 29 | 23 - 25 | 14 - 16 | 0 | 0 |
| IL | 530 - 630 | 290 - 317 | 60 - 70 | 20 - 25 | 12 - 13 |
| IN | 213 - 265 | 140 - 160 | 50 - 62 | 13 - 14 | 3 - 4 |
| KS | 493 - 540 | 199 - 217 | 31 - 35 | 4 - 5 | 0 |
| KY | 78 - 86 | 74 - 81 | 32 - 36 | 16 | 0 |
| LA | 121 - 138 | 88 - 106 | 50 - 57 | 47 - 50 | 2 |
| MA | 22 - 27 | 24 - 34 | 22 - 27 | 1 | 1 |
| MD | 37 - 38 | 21 - 26 | 42 - 73 | 7 | 3 |
| ME | 10 - 13 | 12 - 14 | 4 - 5 | 1 - 2 | 0 |
| MI | 79 - 92 | 78 - 91 | 38 - 47 | 11 - 12 | 5 |
| MN | 193 - 281 | 154 - 196 | 45 - 54 | 8 | 3 |
| MO | 164 - 214 | 126 - 151 | 37 - 40 | 6 - 8 | 0 |

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| | | | | | |
|----|-----------|-----------|-----------|---------|---------|
| MS | 49 - 54 | 60 - 69 | 42 - 45 | 2 | 0 |
| MT | 45 - 56 | 20 - 22 | 7 | 3 | 0 |
| NC | 106 - 138 | 90 - 108 | 42 - 46 | 7 - 8 | 1 |
| ND | 232 - 266 | 71 - 78 | 11 | 0 | 0 |
| NE | 303 - 339 | 192 - 207 | 35 - 36 | 2 - 3 | 0 |
| NH | 5 - 7 | 5 - 8 | 1 | 1 | 1 |
| NJ | 44 - 46 | 20 | 19 - 20 | 6 - 7 | 7 |
| NM | 40 - 46 | 12 | 6 - 7 | 2 | 0 |
| NV | 23 - 29 | 6 - 7 | 4 - 5 | 3 - 4 | 1 |
| NY | 53 - 60 | 66 - 70 | 32 - 35 | 15 - 16 | 3 |
| OH | 158 - 167 | 151 - 169 | 88 - 95 | 16 - 17 | 8 |
| OK | 158 - 214 | 79 - 103 | 23 - 25 | 7 | 0 |
| OR | 50 - 55 | 39 - 40 | 25 | 4 | 0 |
| PA | 101 - 111 | 144 - 159 | 80 - 82 | 16 - 18 | 2 |
| PR | 9 - 16 | 38 - 58 | 38 - 53 | 1 | 0 |
| RI | 1 - 5 | 4 - 6 | 6 - 7 | 4 | 0 |
| SC | 66 - 73 | 107 - 109 | 20 - 21 | 9 | 0 |
| SD | 44 - 46 | 29 - 32 | 5 | 0 | 0 |
| TN | 62 - 69 | 92 - 101 | 31 - 34 | 19 - 20 | 0 |
| TX | 466 - 598 | 321 - 423 | 260 - 311 | 59 - 67 | 28 - 29 |
| UT | 41 - 43 | 18 - 20 | 11 | 5 | 1 |
| VA | 56 - 64 | 67 - 70 | 21 - 21 | 9 | 0 |
| VI | 0 | 0 | 1 | 0 | 0 |
| VT | 2 - 4 | 4 - 6 | 0 | 0 | 0 |
| WA | 125 - 135 | 79 - 82 | 30 - 33 | 8 | 1 |
| WI | 89 - 124 | 94 - 116 | 50 - 54 | 6 | 0 |
| WV | 24 - 27 | 27 | 18 - 20 | 8 | 0 |
| WY | 53 - 57 | 9 | 3 | 0 | 0 |

Source: CRS analysis of the EPA RMP*National Database (with off-site consequence analysis (OCA) data), updated May 2005.

Note: Facilities required to update their RMP filing by April 1, 2005 that had not done so were considered out of compliance and excluded when considering the compliant facility universe. In cases where facilities report multiple worst-case scenario releases, the worst-case scenario potentially affecting the most people has been considered. When all facilities in a given category are compliant, only a single value is reported.