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ENVIRONMENTAL RIGHT-TO-KNOW

EPA's Recent Rule Could Reduce Availability of Toxic Chemical Information Used to Assess Environmental Justice

Statement of John B. Stephenson, Director
Natural Resources and Environment



Highlights of [GAO-08-115T](#), a testimony before the Subcommittee on Environment and Hazardous Materials, Committee on Energy and Commerce, House of Representatives

Why GAO Did This Study

A 1994 Executive Order sought to ensure that minority and low-income populations are not subjected to disproportionately high and adverse health or environmental effects from agency activities. In a July 2005 report, GAO made several recommendations to improve the Environmental Protection Agency’s (EPA) adherence to these environmental justice principles.

The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) requires certain facilities that use toxic chemicals to report their releases to EPA, which makes the information available in the Toxics Release Inventory (TRI). Since 1995, facilities may submit a brief statement (Form A) in lieu of the more detailed Form R if releases of a chemical do not exceed 500 pounds a year. In January 2007, EPA finalized the TRI Burden Reduction Rule, quadrupling to 2,000 pounds what facilities can release before having to disclose details using Form R.

Congress is considering codifying the Executive Order and requiring EPA to implement GAO’s environmental justice recommendations. Other legislation would amend EPCRA to, among other things, revert the Form A threshold to 500 pounds or less. In this testimony, GAO discusses (1) EPA’s response to GAO’s environmental justice recommendations, (2) the extent to which EPA followed internal guidelines when developing the TRI rule and (3) the impact of the rule on communities and facilities.

To view the full product, including the scope and methodology, click on [GAO-08-115T](#). For more information, contact John Stephenson at (202) 512-3841 or stephensonj@gao.gov.

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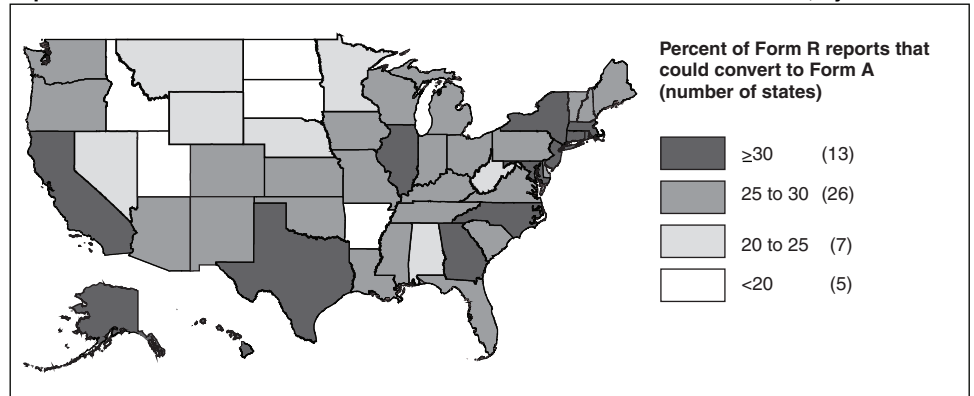
What GAO Found

EPA initially disagreed with GAO’s July 2005 environmental justice recommendations, saying it was already paying appropriate attention to the issue. GAO called on EPA to improve the way it addresses environmental justice in its economic reviews and to better explain its rationale by providing data to support the agency’s decisions. A year later, EPA responded more positively to the recommendations and committed to a number of actions. However, based on information that EPA has subsequently provided, GAO concluded in a July 2007 testimony that EPA’s actions to date were incomplete and that measurable benchmarks were needed to hold agency officials accountable for achieving environmental justice goals.

In developing the TRI rule, EPA did not follow key aspects of its internal guidelines, including some related to environmental justice. EPA did not follow guidelines to ensure that scientific, economic, and policy issues are addressed at appropriate stages of rule development. For example, EPA asserted that the rule would not have environmental justice impacts; however, it did not support this assertion with adequate analysis. The omission is significant because many TRI facilities that no longer have to submit Form R reports are located in minority and low-income communities; and the reduction in toxic chemical information could disproportionately affect them.

EPA’s TRI rule will reduce the amount of information about toxic chemical releases without providing significant savings to facilities. A total of nearly 22,200 Form R reports from some 3,500 facilities are eligible to convert to Form A under the rule. While EPA says the aggregate impact of these conversions will be minimal, the effect on individual states and communities may be significant, as illustrated below. Although making significantly less information available to communities, GAO estimated that the rule would save companies little—an average of less than \$900 per facility.

Impact of EPA’s TRI Rule on Percent of Form Rs That Could Convert to Form A, by State



Sources: GAO based on 2005 EPA TRI data and Map Info (map).

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss our work on two related issues. The first issue is the Environmental Protection Agency's (EPA) consideration of environmental justice in the development of new rules. Environmental justice generally refers to efforts to identify and address the disproportionately high and adverse human health and environmental impacts that air pollution and other environmental risks pose to specific populations—usually minority and low-income communities. The second issue is EPA's Toxic Release Inventory (TRI) Burden Reduction rule, which recently changed how much information some facilities are required to report to the public about their use and release of certain toxic chemicals. A key use of the TRI is for environmental justice purposes, and EPA used that rule as an example of how the agency has improved consideration of environmental justice issues in its rule development process. Specifically, information about toxic chemical use, transport, storage, and release captured in the TRI has been useful for determining whether minority and low-income populations bear disproportionately high and adverse human health or environmental effects of EPA programs, policies, and activities. Hence, while a change to TRI reporting requirements may not affect how much toxic waste is released to the environment, it could affect how much information communities will know about those toxic releases.

In 1994, President Clinton issued Executive Order 12898, which stated that EPA and other federal agencies, to the greatest extent practicable and permitted by law, shall make achieving environmental justice part of their missions by identifying and addressing, as appropriate, the disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States. To implement the order, EPA developed guidance for incorporating environmental justice into its programs, such as the enforcement of the Clean Air Act, which is intended in part, to control emissions that harm human health. A key to ensuring that environmental justice is sufficiently accounted for in agency decisions and operations is that it be considered at each point in the rule development process—including the point when agency workgroups typically consider regulatory options, perform economic analyses of proposed rules' costs, make proposed rules available for public comment, and finalize them before implementation.

Congress passed the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) to help inform citizens about releases of toxic

chemicals to the environment; to help governmental agencies, researchers, and others conduct research and gather data; and to aid in the development of appropriate regulations, guidelines, and standards. Section 313 of EPCRA generally requires certain facilities that manufacture, process, or otherwise handle specified amounts of any of 581 individual chemicals and 30 additional chemical categories to annually report the amount of those chemicals that they released to the environment, including whether those chemicals were released to the air, soil, or water. Facilities comply with TRI reporting requirements by submitting to EPA and their respective state information for each TRI-listed chemical that they use in excess of certain thresholds using a Form R report. Since 1995, EPA has allowed certain facilities to submit information on a brief Form A certification statement (Form A) in lieu of the detailed Form R report if they release or manage no more than 500 pounds of a chemical that is not persistent, bioaccumulative, and toxic (non-PBT) during the year. While both Form R and Form A capture information about a facility's identity, such as mailing address and parent company, and information about a chemical's identity, such as its generic name, only Form R captures detailed information about the chemical, such as quantity disposed or released onsite to air, water, and land or injected underground, or transferred for disposal or release off-site. Form R also provides information about the facility's efforts to reduce pollution at its source, including the quantities of waste it manages both on- and off-site, and how it manages waste, such as amounts recycled, burned for energy recovery, or treated. We provide a detailed comparison of the TRI data on Form R and Form A in Appendix I.

On December 22, 2006, EPA issued the TRI Burden Reduction rule, which sought to reduce industry's reporting burden by: (1) quadrupling the Form A threshold from 500 to 2,000 pounds of releases for a non-PBT chemical, and (2) allowing certain facilities to use Form A for non-dioxin, persistent bioaccumulative toxic (PBT) chemicals, such as lead and mercury, provided that they release none of the PBT chemical to the environment. The rule went into effect for reporting calendar year 2006 releases, which were due by July 1, 2007. Because EPA typically releases TRI data to the public in the spring following the due date, the most currently available data are for calendar year 2005; the 2006 data are expected in spring of 2008.

The Congress is considering legislation to codify Executive Order 12898, relating to environmental justice, to require the Administrator of the Environmental Protection Agency (EPA) to fully implement the recommendations that GAO made in 2005.¹ Additional legislation has been introduced that would, among other things, effectively repeal EPA's TRI Burden Reduction Rule.² Specifically, the bills would amend EPCRA to (1) require the Administrator of EPA to establish the eligibility threshold for use of Form A at not greater than 500 pounds for non-PBT chemicals, (2) prohibit use of Form A for PBT chemicals,³ and (3) repeal a provision of EPCRA allowing the Administrator of EPA to modify the frequency of toxic chemical release reporting.

My testimony this morning is based, in part, on a July 2007 update to our 2005 report on environmental justice, which recommended that EPA devote more attention to environmental justice when developing clean air rules.⁴ Our 2005 report examined how EPA considered environmental justice during the drafting of three air rules and concluded that the manner in which EPA had incorporated environmental justice into its air rulemaking process fell short of the goals set forth in Executive Order 12898. In that report, we recommended four actions to help EPA resolve the problems we identified. Specifically, we called on:

1. EPA's rulemaking workgroups to devote attention to environmental justice while drafting and finalizing clean air rules;
2. the EPA Administrator to enhance workgroups' ability to identify potential environmental justice issues by (1) providing workgroup members with guidance and training to help them identify potential environmental justice problems and (2) involving environmental justice coordinators in the workgroups when appropriate;

¹S. 642, H.R. 1103. The bills would also codify recommendations that EPA's Inspector General made in a report on EPA's environmental justice activities. EPA Office of Inspector General, *EPA Needs To Conduct Environmental Justice Reviews of Its Programs, Policies And Activities*, Report No. 2006-P-00034 (Washington, D.C.: September 18, 2006).

²S. 595, H.R. 1055.

³The bills specifically prohibits the use of Form A with respect to any chemical identified by the Administrator as a chemical of special concern under 40 C.F.R. § 372.28 (or a successor regulation).

⁴GAO, *Environmental Justice: EPA Should Devote More Attention to Environmental Justice When Developing Clean Air Rules*, [GAO-05-289](#) (Washington, D.C.: July 22, 2005).

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3. the EPA Administrator improve assessments of potential environmental justice impacts in economic reviews by identifying the data and developing the modeling techniques needed to assess such impacts; and
 4. the EPA Administrator to direct cognizant officials to respond more fully to public comments on environmental justice by, for example, better explaining the rationale for EPA's beliefs and by providing supporting data.

My testimony also draws on our February 2007 testimony, in which we discussed our then-ongoing work on EPA's TRI program.⁵ We expect to publish the final results of our evaluation later this month. My statement today provides: (1) EPA's responses to the recommendations we made to EPA to address the environmental justice problems we identified in 2005, (2) our assessment of the extent to which EPA followed internal rule development guidelines when developing its TRI Burden Reduction Rule, including its implications for environmental justice, and (3) estimates of the impact of the TRI Burden Reduction Rule on communities and facilities.

In summary:

- In commenting on the draft of our July 2005 environmental justice report, EPA initially disagreed with our recommendations, saying it was already paying appropriate attention to environmental justice. A year later, in a letter to the Comptroller General, EPA responded more positively to our recommendations and committed to taking a number of actions to address them. However, based on information that EPA has subsequently provided regarding the recommendations we made in that report, we concluded in our July 2007 testimony that EPA's actions to date suggest the need for measurable benchmarks to achieve environmental justice goals and to hold agency officials accountable for making meaningful progress.⁶
- As I discussed in our February 2007 testimony, we found that EPA did not follow key aspects of its internal guidelines—including some related to

⁵GAO, *Environmental Information: EPA Actions Could Reduce the Availability of Environmental Information to the Public*, [GAO-07-464T](#) (Washington, D.C.: February 6, 2007).

⁶GAO, *Environmental Justice: Measurable Benchmarks Needed to Gauge EPA Progress in Correcting Past Problems*, [GAO-07-1140T](#) (Washington, D.C.: July 25, 2007).

environmental justice—in developing the TRI Burden Reduction Rule. We found that EPA’s deviations from its guidelines were due, in part, to pressure from the Office of Management and Budget to significantly reduce industry’s TRI reporting burden by the end of December 2006. Throughout this process, senior EPA management has the authority to depart from the guidelines. Nevertheless, we have identified several significant differences between the guidelines and the process EPA followed for this case, which was widely criticized by the public, including attorneys general from 12 states. Specifically, EPA did not follow key steps in its guidelines intended to ensure that scientific, economic, and policy issues were adequately addressed at the appropriate stages of development and to ensure cross-agency participation until the final action is completed. For example, the draft rule and supporting analyses are to be circulated for final agency review, a key step when EPA’s internal and regional offices should have discussed with senior management whether they concurred with the rule. However, their input was limited at this stage because the review package addressed the “no significant change” option rather than the increased Form A threshold option that was subsequently included in the proposed rule and ultimately finalized. With regard to environmental justice, EPA asserted that the TRI rule would not have environmental justice impacts; however, the agency did not explain a key assumption it used in arriving at this conclusion. This is particularly significant because, according to EPA data that we examined, facilities that report to the TRI are more likely to be located near minority and low-income communities. Therefore any reduction in the availability of TRI data seems likely to disproportionately affect them.

- EPA’s TRI Burden Reduction Rule will reduce the amount of information about toxic chemical releases previously available to the public. EPA asserted that the final rule would not result in the loss of critical information and would significantly reduce industry’s reporting burden. With regard to EPA’s assertion that critical information would not be lost, the agency estimated that less than 1 percent of the total pounds of chemical releases would no longer be reported to the TRI. However, we found the impact on data available to many communities could be more significant than EPA’s national totals indicate, particularly at the local level. We estimated that a total of nearly 22,200 Form R reports are eligible to convert to Form A under the revised TRI reporting thresholds, ranging from 25 in Vermont to 2,196 in Texas. The number of chemicals for which only Form A information may be reported under the TRI rule ranges from 3 chemicals in South Dakota to 60 chemicals in Georgia. Taken by facility, some 3,500 facilities would no longer have to report any quantitative information about their chemical use and releases to the TRI, ranging from 5 in Alaska to 302 in California. With regard to EPA’s assertion that the

final rule will result in significant reduction in industry’s reporting burden, EPA estimated that the rule would save \$5.9 million at most, which we calculated would amount to savings of less than \$900 per facility.

EPA’s Response to Our Environmental Justice Recommendations Suggests a Need for Clear Benchmarks to Measure Progress

As we testified in July 2007, EPA’s actions in response to our previous recommendations suggest the need for measurable benchmarks—both to serve as goals to strive for in achieving environmental justice in its rulemaking process, and to hold cognizant officials accountable for making meaningful progress. In commenting on our draft 2005 report, EPA disagreed with the four recommendations we made, saying it was already paying appropriate attention to environmental justice. A year later, in its August 24, 2006 letter to the Comptroller General, EPA responded more positively to our recommendations and committed to taking a number of actions to address these issues.⁷ Specifically, EPA’s letter stated:

- In response to our first recommendation, calling upon EPA’s rulemaking workgroups to devote attention to environmental justice while drafting and finalizing clean air rules, EPA responded that, to ensure consideration of environmental justice in the development of regulations, its Office of Environmental Justice was made an ex officio member of the agency’s Regulatory Steering Committee, the body that oversees regulatory policy for EPA and the development of its rules. EPA also said that (1) the agency’s Office of Policy, Economics and Innovation (responsible in part for providing support and guidance to EPA’s program offices and regions as they develop their regulations) had convened an agency-wide workgroup to consider where environmental justice might be considered in rulemakings and (2) it was developing “template language” to help rule writers communicate findings regarding environmental justice in the preamble of rules. In addition, EPA officials emphasized that its Tiering Form—a key form completed by workgroup chairs to alert senior managers to the potential issues related to compliance with statutes, executive orders, and other matters—would be revised to include a question on environmental justice.
- In response to our second recommendation, calling on EPA to provide workgroup members with guidance and training to help them identify potential environmental justice problems and involve environmental

⁷31 U.S.C. 720 requires the head of a federal agency to submit a written statement of the actions taken on our recommendations to the Senate Committee on Homeland Security and Governmental Affairs, the House Committee on Oversight and Government Reform, and the House and Senate Committees on Appropriations within specified timeframes.

justice coordinators in the workgroups when appropriate, EPA said it was creating a comprehensive curriculum to meet the needs of agency rule writers. Specifically, EPA explained that its Office of Policy, Economics, and Innovation was focusing on how best to train agency staff to consider environmental justice during the regulation development process and that its Office of Air and Radiation had already developed environmental justice training tailored to the specific needs of that office. Among other training opportunities highlighted in the letter was a new on-line course offered by its Office of Environmental Justice to address a broad range of environmental justice issues. EPA also cited an initiative by the Office of Air and Radiation's Office of Air Quality Planning and Standards to use a regulatory development checklist to ensure that potential environmental justice issues and concerns are considered and addressed at each stage of the rulemaking process. In response to our call for greater involvement of Environmental Justice coordinators in workgroup activities, EPA said that as an ex officio member of the Regulatory Steering Committee, the Office of Environmental Justice would keep the program office environmental justice coordinators informed about new and ongoing rulemakings with potential environmental justice implications via monthly conference calls with the environmental justice coordinators.

- In response to our third recommendation, calling on the EPA Administrator to identify the data and develop the modeling techniques needed to assess potential environmental justice impacts in economic reviews, EPA responded that its Office of Air and Radiation was reviewing information in its air models to assess which demographic data could be analyzed to predict possible environmental justice effects. EPA also stated it was considering additional guidance to address methodological issues typically encountered when examining a proposed rule's impacts on subpopulations highlighted in the executive order. Specifically, EPA discussed creating a handbook that would discuss important methodological issues and suggest ways to properly screen and conduct more thorough environmental justice analyses. Finally, it noted that the Office of Air and Radiation was assessing models and tools to (1) determine the data required to identify communities of concern, (2) quantify environmental health, social and economic impacts on these communities, and (3) determine whether these impacts are disproportionately high and adverse.
- In response to our fourth recommendation, calling on the EPA Administrator to direct cognizant officials to respond more fully to public comments on environmental justice by, for example, better explaining the rationale for EPA's beliefs and by providing supporting data, EPA said that as a matter of policy, the agency includes a response to comments in the

preamble of a final rule or in a separate “Response to Comments” document in the public docket for its rulemakings. The agency noted, however, that it will re-emphasize the need to respond to comments fully, to include the rationale for its regulatory approach, and to better describe its supporting data.

However, more recent information from agency officials indicates that EPA’s handling of environmental justice issues continues to fall short of our recommendations and the goals set forth in Executive Order 12898. In July 2007, we met with EPA officials to obtain current information on EPA’s environmental justice activities, focusing in particular on those most relevant to our report’s recommendations. Specifically:

- Regarding our first recommendation that workgroups consider environmental justice while drafting and finalizing regulations, the Office of Environmental Justice has not participated directly in any of the 103 air rules that have been proposed or finalized since EPA’s August 2006 letter. According to EPA officials, the Office of Environmental Justice did participate in one workgroup of the Office of Solid Waste and Emergency Response, and provided comments on the final agency review for the Toxic Release Inventory Reporting Burden Reduction Rule. In addition, EPA explained that the inclusion of environmental justice on its Tiering Form has been delayed because it is only one of several issues being considered for inclusion in the tiering process.
- Regarding our second recommendation to improve training and include Environmental Justice coordinators in workgroups when appropriate, our latest information on EPA’s progress shows mixed results. On the one hand, EPA continues to provide an environmental justice training course that began in 2002, and has included environmental justice in recent courses to help rule writers understand how environmental justice ties into the rulemaking process. On the other hand, some training courses that were planned have not yet been developed. Specifically, the Office of Policy, Economics, and Innovation has not completed the planned development of training on ways to consider environmental justice during the regulation development process. In addition, officials from EPA’s Office of Air and Radiation told us in July that they were unable to develop environmental justice training—training EPA told us in 2006 that it had already developed—due to staff turnover and other reasons. Regarding our recommendation to involve the Environmental Justice coordinators in rulemaking workgroups when appropriate, EPA officials told us that active, hands-on participation by Environmental Justice coordinators in rulemakings has yet to occur.

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- Regarding our third recommendation that EPA identify the data and develop modeling techniques to assess potential environmental justice impacts in economic reviews, EPA officials said that their data and models have improved since our 2005 report, but that their level of sophistication has not reached their goal for purposes of environmental justice considerations. EPA officials said that to understand how development of a rule might affect environmental justice for specific communities, further improvements are needed in modeling, and more specific data are needed about the socio-economic, health, and environmental composition of communities. Only when they have achieved such modeling and data improvements can they develop guidance on conducting an economic analysis of environmental justice issues. According to EPA, among other things, economists within the Office of Air and Radiation are continuing to evaluate and enhance their models in a way that will further improve consideration of environmental justice during rulemaking. For example, EPA officials told us that a contractor would begin to analyze the environmental justice implications of a yet-to-be-determined regulation to control a specific air pollutant in July 2007. EPA expects that the study, due in June 2008, will give the agency information about what socio-economic groups experience the benefits of a particular air regulation, and which ones bear the costs. EPA expects that the analysis will serve as a prototype for analyses of other pollutants.
 - Regarding our fourth recommendation that the Administrator direct cognizant officials to respond more fully to public comments on environmental justice, EPA officials cited one example of an air rule in which the Office of Air and Radiation received comments from tribes and other commenters who believed that the a proposed air quality standard raised environmental justice concerns. According to the officials, the agency discussed the comments in the preamble to the final rule and in the associated response-to-comments document. Nonetheless, the officials with whom we met said they were unaware of any memoranda or revised guidance that would encourage more global, EPA-wide progress on this important issue.

As we testified in July 2007, EPA's actions to date were sufficiently incomplete that measurable benchmarks are needed to achieve environmental justice goals and hold agency officials accountable for making meaningful progress on environmental justice issues.

EPA's TRI Rulemaking Deviated From Key Internal Guidelines, Including Some Related to Environmental Justice

As I discussed in our February 2007 testimony, EPA deviated from key internal guidelines in developing the TRI Burden Reduction Rule. EPA's Action Development Process provides a sequence of steps designed to ensure that scientific, economic, and policy issues are adequately addressed at the appropriate stages of rule development and to ensure cross-agency participation until the final rule is completed. Some of those steps relate to environmental justice issues. We found that EPA's deviations were caused, in part, by pressure from the Office of Management and Budget to reduce industry's TRI reporting burden by the end of December 2006. Throughout this process, senior EPA management has the authority to depart from the guidelines. Nevertheless, we identified several significant differences between the guidelines and the process that EPA followed in developing the TRI rule. Specifically:

- EPA did not follow a key element of its guidelines that is intended to identify and selection the options that best achieve the goal of the rulemaking. Specifically, an internal workgroup was charged with identifying and assessing options to reduce TRI reporting burden on industry and providing EPA management with a set of options from which management makes the final selection. However, in this case EPA management selected an altogether different option than the ones identified and assessed by the TRI workgroup. The TRI workgroup identified three options from a larger list of possible options that had been identified through a public stakeholder process, and the workgroup had scoped out these options' costs, benefits, and feasibility. The first two options allowed facilities to use Form A in lieu of Form R for PBT chemicals, provided the facility had no releases to the environment.⁸ The third option would have created a new form, in lieu of Form R, for facilities to report "no significant change" if their releases changed little from the previous year. Under this element of EPA's guidelines, senior management then selects the option(s) that best achieve the rule's goals. However, based on our review of documents from the June 2005 options selection briefing for the Administrator and subsequent interviews with senior EPA officials, EPA deviated from this process. Specifically, it appears that the Office of Management and Budget (OMB) suggested an alternate option—increasing the Form A eligibility for non-PBT chemicals from 500 to 5,000 pounds—as a way of providing what OMB considered

⁸Specifically, the workgroup considered and analyzed options to facilities to (1) report PBT chemicals using Form A if they have zero releases and zero total other waste management activities or (2) report PBT chemicals using Form A if they have zero releases and no more than 500 pounds of other waste management activities.

significant burden reduction. Yet the TRI workgroup had previously dropped this option from further consideration because of its impact on the TRI. In addition to reviving this burden reduction option, the Administrator directed EPA staff to expedite the rule development process after the briefing in order to meet a commitment to OMB to reduce the TRI reporting burden by the end of December 2006.

- Second, we found problems with the extent to which the agency sought input from internal stakeholders. EPA’s rule development guidelines are designed to ensure cross-agency participation until the rule is completed. For example, a key step in the guidelines provides for the draft rule and supporting analyses to be circulated for final agency review, when EPA’s internal and regional offices should have discussed with senior management whether they concurred with the rule. As provided for in its guidelines, EPA conducted a final agency review for the rule in July 2005. However, the draft rule and accompanying economic analysis that was circulated for review did not discuss or evaluate the impact of raising the Form A non-PBT threshold above 500 pounds because the economic analysis for this option was not yet completed. In fact, such an analysis was not completed until after EPA sent the proposed rule to OMB for review. Because the final agency review package addressed to the “no significant change” option rather than the increased Form A threshold option, the EPA Administrator and the EPA Assistant Administrator for Environmental Information likely received limited input from internal stakeholders about the option to increase the Form A non-PBT threshold prior to sending the proposed rule to OMB for official review. Indeed, a measure of how rushed the process became is that the economic analysis for the proposed rule was completed just days before the proposal was signed by the Administrator on September 21, 2005 for publication in the *Federal Register*.⁹
- Third, our review of EPA’s rule development process found that the agency did not conduct an environmental justice analysis to substantiate its assertion that the TRI rule would not have environmental justice impacts. In its proposed rule, EPA stated that it had “no indication that either option [changing reporting requirements for non-PBT and PBT chemicals] will disproportionately impact minority or low-income

⁹70 Fed. Reg. 57822 (October 4, 2005).

communities.”¹⁰ EPA concluded that it “believes that the data provided under this proposed rule will continue to provide valuable information that fulfills the purposes of the TRI program...” and that “the principal consequence of finalizing today’s action would be to reduce the level of detail available [to the public] on some toxic chemical releases or management.” However, the reason EPA said it had no indication about environmental justice impacts is because the agency did not complete an environmental justice assessment before it published the rule for comment in the *Federal Register*. Furthermore, we found that the statement concerning disproportionate impacts in the proposed rule was not written by EPA; rather, it was added by the Office of Management and Budget during its official review of the rule.¹¹

After publication of the TRI rule in the *Federal Register*, EPA received over 100,000 comments during the rule’s public comment period. Most commenters opposed EPA’s rule because of its impact on the TRI, and some commenters, including the attorneys general of California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, New Hampshire, New Jersey, New Mexico, New York, Vermont, and Wisconsin, questioned whether EPA had evaluated environmental justice issues. In addition, three members of the House Committee on Government Reform wrote to EPA Administrator Stephen Johnson in December 2005 asking that he substantiate EPA’s conclusion that the TRI rule would not disproportionately impact minority and low-income communities.

In March 2006, EPA provided Congress with an environmental justice analysis showing that it had evaluated affected areas by zip codes and by proximity to facilities reporting to TRI. Table 1 summarizes the results of that analysis, which found that communities within 1 mile of facilities that reported to the TRI were about 42 percent minority, on average, compared to about 32 percent for the country as a whole. In addition those same communities are about 17 percent below the poverty level, compared to

¹⁰EPA proposed two options allowing a reporting facility to use the brief Form A for (1) a non-PBT chemical, so long as the annual report amount was not greater than 5,000 pounds, and (2) for PBT chemicals when there are no releases and the annual reportable amount is no more than 500 pounds. 70 Fed. Reg. 57822 (October 2, 2005). The annual reportable amount is the combined total quantity released at the facility, treated at the facility, recovered at the facility as a result of recycle operations, combusted for the purpose of energy recovery at the facility, and amounts transferred from the facility to off-site locations for the purpose of recycling, energy recovery, treatment, and/or disposal.

¹¹See docket EPA-HQ-TRI-2005-0073-0027, Toxics Release Inventory Burden Reduction Proposed Rule (Federal Register Notice Comparison Document).

about 13 percent for the country as a whole. (Compare table 1, columns A and B.)

Table 1: Minority and Poverty Demographics of the U.S. Population Compared to Communities within 1-mile of a Facility that Filed at Least One TRI Form R Report for 2003

(Percent)

	Column A	Column B	Column C	Column D
U.S. population		Within 1-mile of all facilities that filed a Form R	Within 1-mile of facilities that filed a Form R for but could have used Form A under proposed rule	Within 1-mile of facilities that filed a Form R but could have used Form A under final rule
Minority	31.8	41.8	43.5	43.8
Below U.S. poverty level	12.9	16.5	17.0	17.0

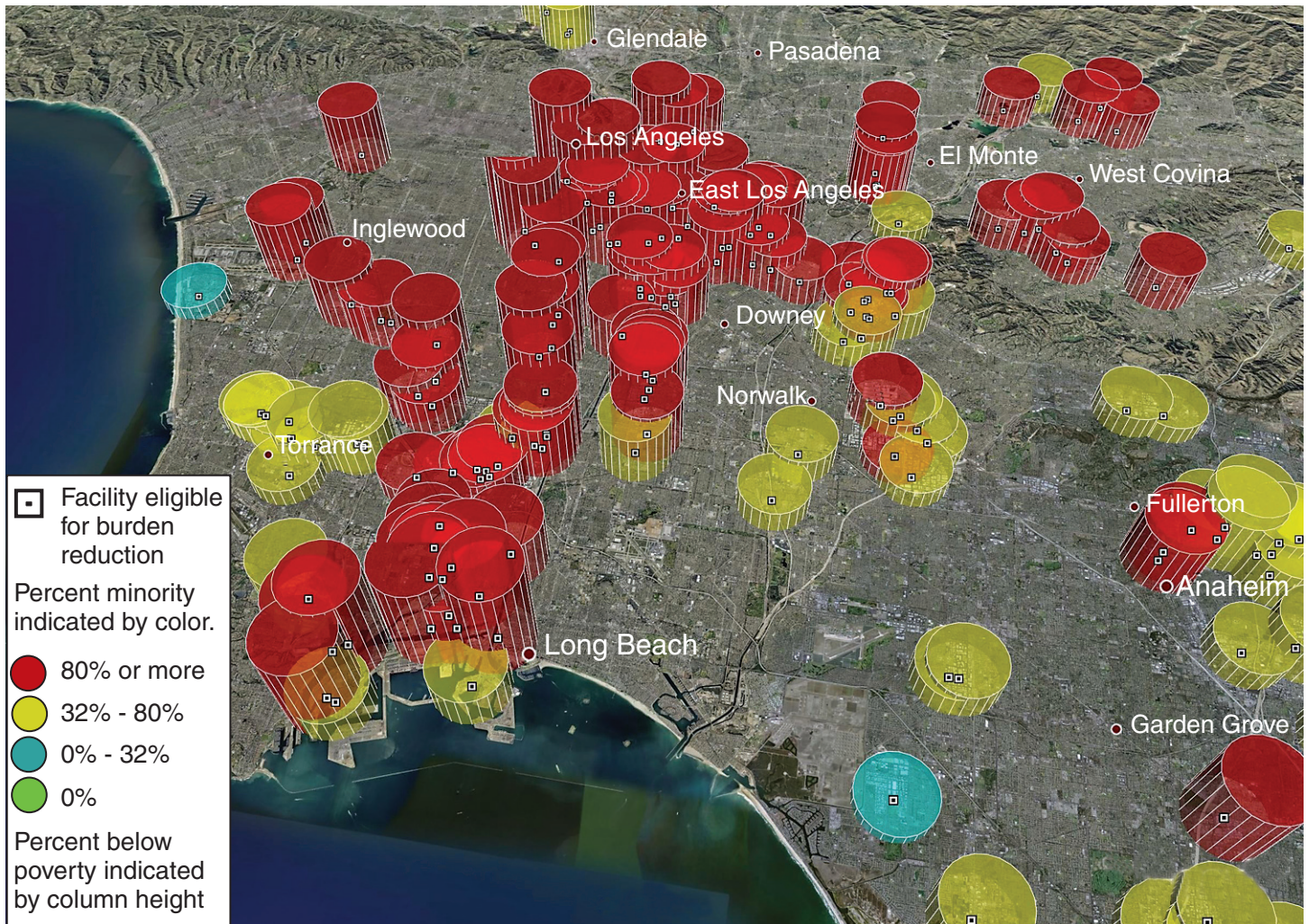
Source: GAO summary of EPA analysis.

EPA concluded that the results showed little variance in minority or poverty concentration near facilities currently reporting to the TRI compared to facilities that would be affected by the rule. (Compare table 1, columns B and C.) EPA argued that “while there is a higher proportion of minority and low-income communities in close proximity to some TRI facilities than in the population generally, the rule does not appear to have a disproportionate impact on these communities, since facilities in these communities are no more likely than elsewhere to become eligible to use Form A as a result of the rule.” However, EPA’s analysis indicates that TRI facilities are in communities that are one-third more minority and one-quarter more low-income, on average, than the U.S. population as a whole. Therefore, in comparison to the country at large, those populations would likely be disproportionately affected by an across-the-board reduction in TRI information. (Compare table 1, columns A and C.).¹² Thus, EPA assumed that although minority and low-income communities disproportionately benefit from TRI information, this fact was irrelevant to its environmental justice analysis. However, the agency did not explain or provide support for this assumption.

¹²EPA also argued that while the TRI program “provides important information that *may indirectly lead* to improved health and environmental conditions on the community level, it is not an emissions release control regulation that could directly affect health and environmental outcomes in a community.” 71 Fed. Reg. 76944 (emphasis added). This statement overlooks EPA’s own repeated assertions that the TRI program has resulted in substantial reductions in chemical releases. E.g., 2001 Toxic Release Inventory Public Data Release Report at 1-1 (2003); 1996 Toxic Release Inventory Public Data Release Report at 1 (1998).

I would like to illustrate the impact of EPA's rule on the TRI using a new tool that can help the public better understand environmental issues in their communities. Google Earth is a free geographic mapping tool that overlays various content, including TRI data from EPA, onto satellite photos and maps. Using this tool, the public can combine EPA's TRI and various demographic data to view the environmental justice impacts of EPA's TRI rule. As an example, Figure 1 shows a satellite image of southern California, including Los Angeles County and part of Orange County. The small dots indicate TRI facilities eligible for burden reduction under the TRI rule (i.e., eligible for reduced reporting on Form A). On top of every facility is a cylinder that indicates the demographic details of the people living within 1 mile of the facilities. Specifically, the cylinders' color shows the percent of that population that is minority (e.g., red cylinders indicate a community that is 80% or more minority). The cylinders' height shows the percent of that population living below the poverty level (e.g., taller cylinders indicate poorer communities). As the height and color of the cylinders shows, the communities in southern California near TRI-reporting facilities that are eligible for reduced reporting under EPA's rule, are disproportionately minority and low-income.

Figure 1: Minority- and Poverty-levels of Communities Within One Mile of Facilities in Southern California That Are Eligible for Burden Reduction



Source: Google Earth based on EPA and Census Bureau data.

As I mentioned earlier in my testimony, EPA’s latest response to our environmental justice recommendations used TRI as an example of how the agency has improved its handling of environmental justice in the rule development process. However, our analysis shows that EPA did not complete an environmental justice assessment before concluding that the proposed TRI rule did not disproportionately affect minority and low-income populations. Even after EPA completed its analysis—in response to pressure from Members of Congress and the public—the agency

concluded that the rule had no environmental justice implications despite the fact that TRI facilities are, on average, more likely to be minority and low-income than the U.S. as a whole; therefore, in comparison to the population at large, those populations would likely be disproportionately affected by an across-the-board reduction in TRI information.

EPA Actions Reduce the Amount of Information About Toxic Chemical Releases Previously Available to the Public

EPA asserted that its TRI Burden Reduction Rule will result in significant burden reduction without losing critical information, but our analyses show otherwise. We found that the rule, which went into effect for the reports that were due by July 1st of this year, reduces the quantity and detail of information currently available to many communities about toxic chemicals used, transported, or released in their environment.¹³ For each facility that chooses to file a Form A instead of Form R, the public will no longer have available quantitative information about a facility's releases and waste management practices for a specific chemical that the facility manufactured, processed, or otherwise used. Appendix I shows the data that is contained on Form R compared to Form A. It is not possible to precisely quantify how much information will no longer be reported to the TRI on the detailed Form R because not all eligible facilities will take advantage of rule allowing them to submit the brief Form A. But using the most recent available data for calendar year 2005, it is possible to estimate what currently-reported information no longer has to be reported under EPA's revised TRI reporting requirements.

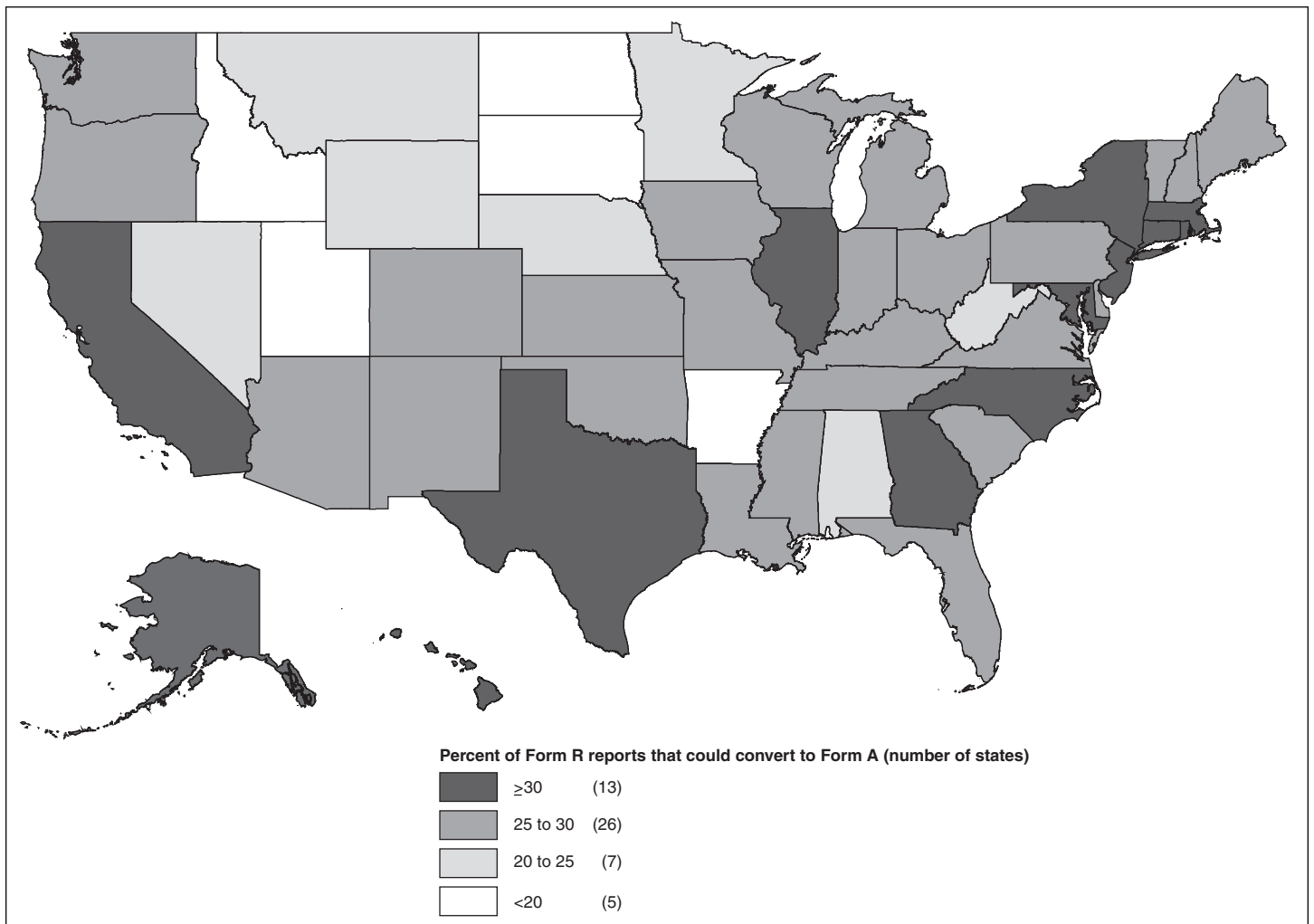
Our analysis shows that EPA's TRI rule could, by increasing the number of facilities that may use Form A, significantly reduce the amount of information currently available to many communities about toxic chemicals used, transported, or released into their environment. EPA estimated that the impact of its change to TRI would be minimal; amounting to less than 1 percent of total pounds of chemicals released nationally that no longer would have to be reported to the TRI. However, we found that the impact on individual communities is likely to be more significant than these national aggregate totals indicate. Specifically, EPA estimated that the Form R reports that could convert to Form A account for 5.7 million pounds of releases not being reported to the TRI (only 0.14% of all TRI release pounds) and an additional 10.5 million pounds of waste management activities (0.06% of total waste management pounds). However, to understand the potential impact of EPA's changes to TRI

¹³ [GAO-07-464T](#).

reporting requirements more locally, we used 2005 TRI data to estimate the number of detailed Form R reports that would no longer have to be submitted in each state and found that nearly 22,200 Form R reports (28 percent) could convert to Form A under EPA's new Form A thresholds.¹⁴ The number of possible conversions ranges by state from 25 in Vermont (27.2 percent of all Form Rs formerly filed in the state) to 2,196 Form Rs in Texas (30.6 percent of Form Rs formerly filed in the state). As figure 2 shows, Alaska, California, Connecticut, Georgia, Hawaii, Illinois, Maryland, Massachusetts, New Jersey, New York, North Carolina, Rhode Island, and Texas could lose at least 30 percent of Form R reports.

¹⁴We provide our estimates of these impacts, by state, in Appendix II.

Figure 2: Estimate of Impact Allowed by EPA's Changes on Number of Form Rs, by State



Sources: GAO based on 2005 EPA TRI data and Map Info (map).

Another way to characterize the impact of the TRI burden reduction rule is to examine what currently-available public data may no longer be reported about specific chemicals at the state level. The number of chemicals for which only Form A information may be reported under the TRI rule ranges from 3 chemicals in South Dakota to 60 chemicals in Georgia. That means that the specific quantitative information currently reported about those chemicals may no longer appear in the TRI database. Figure 3 shows that

thirteen states—Delaware, Georgia, Hawaii, Iowa, Maryland, Massachusetts, Missouri, North Carolina, Oklahoma, Tennessee, Vermont, West Virginia, and Wisconsin—could no longer have quantitative information about at least 20 percent of TRI-reported chemicals in the state.

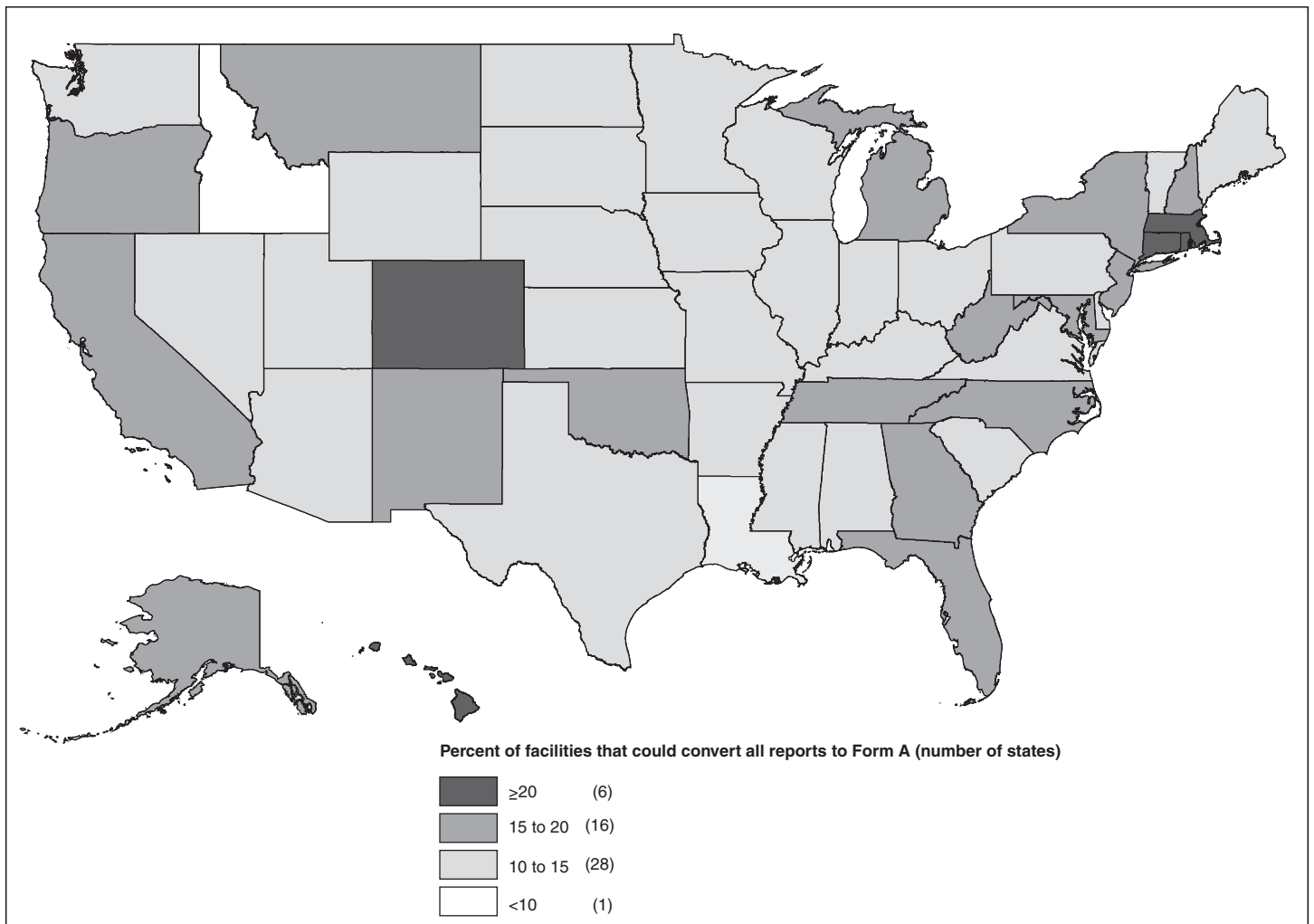
Figure 3: Estimate of Percent of Chemicals For Which Facilities Could Report on Form A, by State



Sources: GAO based on 2005 EPA TRI data and Map Info (map).

The impact of the loss of information from these Form R reports can also be understood in terms of the number of facilities that could be affected. We estimated that 6,620 facilities nationwide could choose to convert at least one Form R to a Form A, and about 54 percent of those would be eligible to convert all their Form Rs to Form A. That means that approximately 3,565 facilities would not have to report any quantitative information about their chemical releases and other waste management practices to the TRI, according to our estimates. The number of facilities ranges from 5 in Alaska to 302 in California. For example, in 2005, the ATSC Marine Terminal, bulk petroleum storage facility in Los Angeles County, California, reported releases of 13 different chemicals—including highly toxic benzene, toluene, and xylene—to the air. Although the facility's releases totaled about 5,000 pounds, it released less than 2,000 pounds of each chemical, and therefore would no longer have to file Form Rs for them. As figure 4 shows, more than 10 percent of facilities in each state except Idaho would no longer have to report any quantitative information to the TRI. The most affected states are Colorado, Connecticut, the District of Columbia, Hawaii, Massachusetts, and Rhode Island, where more than 20 percent of facilities could choose to not disclose the details of their chemical releases and other waste management practices by submitting a Form A in lieu of a Form R. Furthermore, our analysis found that citizens living in 75 counties in the United States—including 11 in Texas, 10 in Virginia, and 6 in Georgia—could have no quantitative TRI information about local toxic pollution.

Figure 4: Estimate of Percent of Facilities That Could Convert All Form Rs to Form A, by State



Sources: GAO based on 2005 EPA TRI data and Map Info (map).

With regard to EPA’s assertion that the TRI rule will result in significant reduction in industry’s reporting burden—the primary rationale for the rule—the agency estimated that the rule would save, at most, \$5.9 million. (See table 2.) According to our calculations, these costs savings amount to only 4 percent of the \$147.8 million total annual cost to industry of TRI reporting. Also, as we testified in February 2007, EPA’s estimate likely overestimates the total cost savings (i.e., burden reduction) that will be

realized by reporting facilities because not all eligible facilities will choose to file a Form A in lieu of Form R.

Table 2: EPA Estimates of Annual Savings from Changes to TRI Reporting Requirements

Option	Newly eligible Form Rs	Eligible facilities	Burden (hours per form)	Annual burden savings (hours)	Cost savings per form	Annual cost savings
New PBT chemical eligibility	2,360	1,796	15.5	36,480	\$748	\$1,764,969
Increased eligibility for non-PBT chemicals	9,501	5,317	9.1	86,924	438	4,160,239
Total	11,861	6,670		123,404		\$5,925,208

Source: EPA based on reporting year 2004 TRI data.

Concluding Observations

Environmental justice and the TRI are related and mutually dependent. Our assessment shows that EPA did not fully consider important impacts of its TRI rule, including environmental justice impacts on communities, when evaluating the rule’s costs and benefits. That is, EPA’s recent changes to TRI reporting requirements will reduce the amount and specificity of toxic chemical information that facilities have to report to the TRI and that will, in turn, impact communities’ ability to assess environmental justice and other issues. It is unlikely that the TRI rule provides, as EPA asserts, significant reduction in industry’s reporting burden without losing critical environmental information.

Mr. Chairman, this concludes my prepared statement. I would be happy to respond to any questions that you or members of the Subcommittee may have at this time.

Contact and Staff Acknowledgments

Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. For further information about this testimony, please contact John Stephenson at (202) 512-3841 or stephensonj@gao.gov. Key contributors to this testimony were Steven Elstein, Terrance Horner, Richard Johnson, and Daniel Semick. Other contributors included Mark Braza, Karen Febey, Kate Cardamone, Alison O’Neill, and Jennifer Popovic.

Appendix I: Comparison of Information Collected on the TRI Form R and Form A Certification Statement

Facilities must submit a detailed Form R report for each designated chemical that they use in excess of certain thresholds, or certify that they are not subject to the reporting requirement by submitting a brief Form A certification statement. Form A captures general information about the facility, such as address, parent company, industry type, and basic information about the chemical or chemicals it released. Form R includes the same information, but also requires facilities to provide details about the quantity of the chemical they disposed or released onsite to the air, water, land, and injected underground, or transferred for disposal or release off-site. Table 3 provides details about the specific information the facilities provide on the Form R and Form A.

Table 3: Information Collected on the TRI Form R and Form A Certification Statement

Form R	Form A
Facility Identification Information	Facility Identification Information
<ul style="list-style-type: none"> • TRI Facility ID Number • Reporting year • Trade secret information (if claiming that toxic chemical is trade secret) • Certification by facility owner/operator or senior management official • Facility name, mailing address • Whether form is for entire facility, part of facility, federal facility, or contractor at federal facility • Technical contact name, telephone number, Email address • Public contact name, telephone number • North American Industry Classification System (NAICS) codes • Dun & Bradstreet number • Parent company information (name, Dun & Bradstreet number) 	<ul style="list-style-type: none"> • TRI Facility ID Number • Reporting year • Trade secret information (if claiming that toxic chemical is trade secret) • Certification by facility owner/operator or senior management official • Facility name, mailing address • Whether form is for entire facility, part of facility, federal facility, or contractor at federal facility • Technical contact name, telephone number, Email address • North American Industry Classification System (NAICS) codes • Dun & Bradstreet number • Parent company information (name, Dun & Bradstreet number)

Form R**Chemical Specific Information**

- Chemical Abstracts Service (CAS) registry number
- EPCRA Section 313 chemical or chemical category name
- Generic name
- Distribution of each member of the dioxin or dioxin-like compound category
- Generic name provided by supplier if chemical is component of a mixture
- Activities and uses of the chemical at facility, whether chemical is:
 - produced or imported for on-site use/processing, for sale/distribution, as a byproduct, or as an impurity
 - processed as a reactant, a formation component, article component, repackaging, or as an impurity
 - otherwise used as a chemical processing aid, manufacturing aid, or as an ancillary or other use
- Maximum amount onsite at any time during the year

On-site Chemical Release Data

- Quantities released on-site to:
 - air as fugitive or non-point emissions
 - air as stack or point emissions
 - surface water as discharges to receiving streams or water bodies (including names of streams or water bodies)
 - underground injection
 - land, including RCRA Subtitle C landfills, other landfills, land treatment/application farming, RCRA Subtitle C surface impoundments, other surface impoundments, other land disposal
- Basis for estimates of releases (i.e., monitoring data or measurements, mass balance calculations, emissions factors, other approaches)
- Quantity released as a result of remedial actions, catastrophic events, or one-time events not associated with production processes

Form A**Chemical Specific Information**

- Chemical Abstracts Service (CAS) registry number
- EPCRA Section 313 chemical or chemical category name
- Generic name

On-site Chemical Release Data

Not reported on Form A

Form R	Form A
<p>On-site Chemical Waste Management Data</p> <ul style="list-style-type: none"> • Quantities managed on-site through: <ul style="list-style-type: none"> • recycling • energy recovery • treatment • Recycling processes (e.g., metal recovery by smelting, solvent recovery by distillation) • Energy recovery methods (e.g., kiln, furnace, boiler) • Waste treatment methods (e.g., scrubber, electrostatic precipitator) for each waste stream (e.g., gaseous, aqueous, liquid non-aqueous, solids) • On-site waste treatment efficiency 	<p>On-site Chemical Waste Management Data</p> <p>Not reported on Form A</p>
<p>Off-site Transfers for Release or Other Waste Management</p> <ul style="list-style-type: none"> • Quantities transferred to any Publicly Owned Treatment Works (POTW) <ul style="list-style-type: none"> • POTW name(s), address(es) • Quantities transferred to other location for disposal or other release <ul style="list-style-type: none"> • underground injection • other land release • Quantities transferred to other location for waste management <ul style="list-style-type: none"> • treatment • recycling • energy recovery • Quantity transferred off-site for release, treatment, recycling, or energy recovery that resulted from remedial actions, catastrophic events, or one-time events not associated with production processes • Off-site location(s) name and address • Basis for estimates for amounts transferred • Whether receiving location(s) is/are under control of reporting facility/parent company 	<p>Off-site Transfers for Release or Other Waste Management</p> <p>Not reported on Form A</p>

Form R**Source Reduction and Recycling Activities**

- Total quantities, for (1) the prior and (2) current reporting years and estimated totals for (3) the following and (4) second following years for:
 - on-site disposal to underground injection wells, RCRA Subtitle C landfills, and other landfills
 - other on-site disposal or other releases
 - off-site transfer to underground injection wells, RCRA Subtitle C landfills, and other landfills
 - other off-site disposal or other releases
 - on-site treatment
 - on-site recycling
 - on-site energy recovery
 - off-site treatment
 - off-site recycling
 - off-site energy recovery
- Production ratio or activity index
- Source reduction activities the facility engaged in during the reporting year (e.g., inventory control, spill/leak prevention, product modifications)
- Option to submit additional information on source reduction, recycling, or pollution control activities

Form A**Source Reduction and Recycling Activities**

Not reported on Form A

Sources: EPA TRI Form R and Form A.

Appendix II: GAO Estimates of the Possible Impact of Reporting Changes on TRI Data

We analyzed 2005 TRI data provided by EPA to estimate the number of Form Rs that could convert to Form A in each state and determined the possible impacts that this could have on data about specific chemicals and facilities. EPA released the 2005 data in March 2007; 2006 data is expected in spring of 2008. Table 4 provides our estimates of the total number of Form Rs eligible to convert to Form A, including the percent of total Form Rs submitted by facilities in each state. The table also provides our estimates of the number of unique chemicals for which no quantitative information would have to be reported in each state, including the percent of total chemicals reported in each state. The last two columns provide our estimates for the number of facilities that would longer have to provide quantitative information about their chemical releases and waste management practices, including the percent of total facilities reporting in each state.

Table 4: Estimated Impact of TRI Reporting Changes on Number of Form Rs, Chemicals, and Facilities, by State

State	Form Rs		Chemicals		Facilities	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
AK	59	36.6	8	17.0	5	15.6
AL	456	22.0	34	17.1	69	12.9
AR	247	17.7	18	5.8	39	11.0
AZ	221	27.7	12	10.8	50	15.0
CA	1,533	37.5	36	18.2	302	19.9
CO	162	25.8	11	11.1	51	21.8
CT	299	33.5	16	15.4	73	20.6
DC	4	28.6	2	18.2	2	28.6
DE	80	27.7	24	23.3	10	14.1
FL	479	27.4	19	13.2	119	17.2
GA	678	30.9	60	29.1	132	16.7
HI	67	37.9	12	26.1	9	23.1
IA	371	27.7	34	22.2	46	10.6
ID	41	14.4	8	10.4	8	7.3
IL	1,155	30.0	37	16.4	171	14.3
IN	900	25.6	29	14.6	143	14.4
KS	291	28.3	23	16.0	41	14.0
KY	490	25.7	28	15.3	63	13.4
LA	665	25.6	34	13.1	46	12.4
MA	574	38.0	23	20.4	119	20.1
MD	221	32.6	24	22.6	34	16.6

State	Form Rs		Chemicals		Facilities	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
ME	105	26.1	8	11.3	14	13.7
MI	965	29.7	36	19.0	145	16.1
MN	263	21.0	20	15.4	55	11.5
MO	498	27.3	43	21.7	80	14.2
MS	265	25.0	29	18.7	37	11.8
MT	61	21.8	10	13.5	7	15.2
NC	705	30.1	43	24.9	148	17.8
ND	29	13.8	7	11.5	6	12.5
NE	116	20.3	11	7.9	24	12.9
NH	98	29.1	13	17.3	23	16.1
NJ	582	35.1	34	16.0	101	19.3
NM	96	29.2	11	15.3	15	19.2
NV	96	21.2	14	18.9	19	14.3
NY	663	31.8	33	19.1	122	17.2
OH	1,557	28.5	38	12.6	218	13.8
OK	273	26.1	30	23.3	50	15.2
OR	236	28.6	16	15.5	47	15.5
PA	1,253	29.9	30	15.2	192	14.9
RI	112	39.3	12	17.4	30	23.4
SC	596	29.0	36	17.6	78	15.0
SD	44	19.6	3	5.8	10	10.5
TN	569	27.6	40	20.9	105	16.2
TX	2,196	30.6	29	9.3	210	14.1
UT	146	19.9	11	9.9	25	12.6
VA	401	25.2	23	14.8	70	14.3
VT	25	27.2	9	23.7	6	14.6
WA	276	26.4	22	19.8	43	12.5
WI	692	25.4	31	21.2	113	12.5
WV	222	22.8	40	24.1	35	17.4
WY	60	23.6	9	14.5	5	10.9
Total	22,193				3,565	

Source: GAO analysis of EPA TRI data.

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