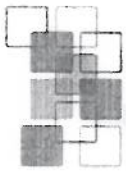

Center for
EFFECTIVE
GOVERNMENT
Formerly OMB Watch

OSWER Docket
EPA Docket Center, Mail Code2822–1T
U.S. Environmental Protection Agency
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October 29, 2014

Attention Docket ID No. EPA–HQ–OEM–2014–0328

The Center for Effective Government (CEG) respectfully submits these comments as supplemental to comments submitted on October 29, 2014 by CEG and more than 100 other organizations on the U.S. Environmental Protection Agency (EPA) Request for Information on Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) (hereafter "the RFI").

II.C.1 Update the List of Regulated Substances

a) Adding Other Toxic or Flammable Substances

EPA should regulate all substances with the potential for causing catastrophic incidents at chemical facilities within the RMP program. According to the Working Group on Executive Order 13650, "Communities need to know where hazardous chemicals are used and stored, how to assess the risks associated with those chemicals, and how to ensure community preparedness for incidents that may occur." But this information is difficult or impossible to find if the chemicals are not covered by regulatory programs like the RMP.

The Working Group document also reads: "Currently, there is no chemical security and safety data clearinghouse that contains all of the data points germane to all Federal agency regulations." The RMP database should, insofar as is possible, contain all of the information needed, because it is to some extent publicly available and national in scope. Even if an individual is primarily interested in sites in their area, it can be informative to compare practices at these sites with those elsewhere, and this can't be done without a database that is national in scope.

The current list of regulated substances in the RMP program is far too restricted. The Center for Effective Government studied EPCRA Tier II data that it obtained via FOIA from five states (Oregon, Minnesota, Illinois, Washington, and Wisconsin). EPCRA Tier II data contains information for emergency responders about hazardous chemicals at facilities. Although there are many differences between EPCRA Tier II and the RMP program, the similarities suggest that

EPA should examine EPCRA Tier II data closely for candidate chemicals that should be added to RMP.

Using a year of data from these five states, and considering only substances with more than a million total pounds on-site on average and more than 100 records, we found flammable chemicals like methanol, toluene, xylene, acetone, and butanone that are not listed in the RMP program, as well as toxic chemicals (or chemicals with other hazards) such as phenol, styrene, sulfuric acid, calcium hypochlorite, and hydrofluorosilicic acid. These are just a handful of examples of dangerous chemicals that are widely used in large quantities but are not included in the RMP program. EPA can collect and analyze Tier II data more easily than those outside the agency, and we urge it to conduct such a review for RMP candidate chemicals.

Another potential source of chemicals to add to the RMP program is the reports of chemical accidents sent to the National Response Center administered by the U.S. Coast Guard. The National Response Center maintains records of reported incidents going back through 1990, and these could be examined for significant incidents or recurring patterns of smaller ones if EPA has not yet done this already. If certain chemicals, even ones that aren't especially toxic or explosive, are repeatedly involved in accidents at facilities, EPA should consider including such chemicals in the RMP program. Ensuring that the RMP program includes a more comprehensive tracking of accidents involving chemicals will allow regulators, first responders, company representatives and others to use any patterns or reoccurrences to hopefully identify and address potential problems before any major accidents or releases.

b) Adding High and/or Low Explosives / d) Adding Reactive Substances / e) Adding Other Categories of Substances

EPA should add high explosives back to the RMP list since existing safety regulations are clearly not adequate to prevent significant accidents involving these substances. The 1998 explosion at Sierra Chemical Company's Kean Canyon explosives manufacturing plant and the 2011 explosion at Donaldson Enterprises in Waikele, Hawaii indicate that depending on existing safety regulations is wholly insufficient.

With regard to low explosives, reactive substances, and other categories of substances, we strongly urge EPA to add all substances with a significant chance of causing a catastrophic incident. There will be some additional cost for facilities to fill out RMP forms and do the planning involved, but that cost is minor compared to the damage, loss of life, and loss of public trust in industry and in the regulatory system when a major incident occurs and there is essentially no plan or public information available for dealing with it.

This omission was underscored in the aftermath of the West, Texas explosion as CEG was contacted by members of the public with questions about whether there were similar hazards in their communities and whether plans existed to minimize those hazards. We had to tell the people who inquired that that the substance which had presumably caused the explosion—

ammonium nitrate-- isn't regulated within the RMP. This naturally -- and accurately -- leads to the conclusion that if the source of a major explosion isn't listed in EPA's primary national database concerned with planning for chemical accidents, then regulation and planning is inadequate. Communities need to be informed about potential risks and brought into planning on how to deal with them, and this can't be done if significant sources of risk aren't even tracked for planning purposes.

D. 9 Threshold Quantities and Off-Site Consequence Analysis Endpoints for Regulated Substances Based on Acute Exposure Guideline Level Toxicity Values

Would revising the RMP rule to incorporate AEGL–2 and ERPG–2 values (when an AEGL is not available), as the basis for TQs and toxic endpoints make the RMP rule more protective of human health and the environment?

We strongly support using AEGL and modified ERPG values (when an AEGL is not available) as the basis for modifying the RMP rule with respect to calculating the threshold quantities and toxicity endpoints in place of the Immediately Dangerous to Life and Health (IDLH) values, or an approximation of the IDLH based on animal toxicity data, as the basis for establishing the toxicity Level of Concern (LOC) EPA uses for calculating threshold quantities and off-site consequence analysis endpoints. We support using the AEGL/modified ERPG values in place of the IDLH values as being more protective of public health and safety.

The IDLH is defined as the maximum concentration from which one could escape within 30 minutes without any escape-impairing symptoms or any irreversible health effects. However, as EPA notes the IDLH is based upon response of healthy male worker-population and does not take into account the exposure of more sensitive individuals, such as the elderly, pregnant women, children or people with various health problems. Further, the IDLH is based upon a maximum 30-minute exposure period which may underestimate actual exposures to accidental airborne releases. Last, the IDLH may not reflect the concentration that could result in serious but reversible injury because IDLHs were designed only to protect workers against concentrations that would cause death, irreversible health effects, or other deleterious effects (e.g. disorientation or incoordination) that would prevent escape. As noted in the RFI, "the use of AEGLs to recalculate RMP reporting thresholds would better reflect the potential for adverse effects of an accidental release upon individuals in a community compared to IDLHs because AEGLs take into account the potential exposure of more sensitive individuals, the potential for longer periods of exposure, and the potential for serious but reversible injuries" (pg. 44629).

Where AEGL values are not available for chemicals and EPA elects to use ERPG values for calculating threshold quantities and off-site consequence analyses, we support incorporating a safety factor into the ERPG value calculation. This safety factor should include consideration that ERPG values are limited to a 1-hour duration of exposure and therefore do not account for health endpoints that may occur at either shorter or longer durations of exposure, as well as the

fact that ERPG values do not consider health impacts on sensitive populations such as the elderly, children, and those with existing disease that are potentially more vulnerable to health effects from chemical exposures.

Given that AEGLs are established with five different exposure periods (10 minutes, 30 minutes, 1 hour, 4 hours, and 8 hours), which exposure time should be used if the AEGL is used to determine the TQs and/or toxic endpoints?

We support the use of AEGLs based on exposure periods associated with the adverse health impacts for the most sensitive members of the population.

What should be the hierarchy for developing an alternative or equivalent LOC when an AEGL value has not been established for a toxic substance? Should ERPG values be used instead if they exist? If no ERPG value exists, should an LOC based on the IDLH value be used instead if it exists?

As noted above, ERPG values should be modified with a safety factor to account for health impacts associated with exposure durations other than the 1-hour exposures used to develop ERPG values and an additional safety factor to account for consideration of effects on sensitive populations, which are not considered in development of ERPG values. Similarly, if IDLH values are used if no ERPG value exists for a chemical, safety factors should be incorporated into the IDLH value to account for health impacts on sensitive populations and exposure durations other than 30 minutes.

Should EPA consider using AEGL–1 rather than AEGL–2 values for calculating reporting thresholds and toxic endpoints in order to address acute effects that are transient and reversible (such as discomfort and irritation)?

We support the use of AEGL-1 rather than AEGL-2 values for calculating reporting thresholds and toxicity endpoints to address acute effects that are transient and reversible. Acute effects that are transient and reversible may be sufficient to impair the ability of potentially exposed individuals to avoid accident-related airborne chemical exposures. Using the example of sulfur dioxide (SO_2), which is discussed in this section of the RFI, there is extensive clinical study evidence that asthmatics respond with acute asthma symptoms and reversible loss of lung function with SO_2exposures as brief as five minutes with exercise (as might be the case with individuals running to escape a chemical release). The American Thoracic Society (ATS) has deemed that reversible loss of lung function in combination with the presence of symptoms be considered an adverse health effect that should be protected against. The ATS also notes that "air pollution-related symptoms associated with diminished quality of life or with a change in clinical status should be considered as adverse at the individual level"[i].

The AEGL-2 for $SO_2$is 75 ppb for all exposure times, while the corresponding AEGL-1 is set at 20 ppb. As noted in the 2008 EPA Integrated Science Assessment for Sulfur Dioxide (ISA)[ii],

"with elevated ventilation rates a large percentage of asthmatic individuals (up to 60%) experience moderate or greater decrements in lung function, frequently accompanied by respiratory symptoms, following peak exposures to SO2 at concentrations of 0.4-0.6 ppm"(emphasis added). The ISA also notes that "there is a relatively strong body of evidence to suggest that adolescents may experience many of the same respiratory effects at similar SO2 exposure concentrations". These reductions in lung function and increase in asthma symptoms clearly meet the ATS definition of an adverse health effect that should be protected against. Given that adult asthmatics and adolescents involved in escaping from a chemical facility release would be expected to experience relative high ventilation rates, using AEGL-2 values as the basis for determining reporting thresholds and toxicity endpoints would clearly not be protective of public health and safety.

Thank you for the opportunity to comment. Please contact us if there are any questions regarding the information submitted.

Sincerely,

Ronald White, Director of Regulatory Policy

Sean Moulton, Director of Open Government

Amanda Frank, Policy Analyst

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[i] American Thoracic Society. Statement on What Constitutes an Adverse Health Effect of Air Pollution?; American Thoracic Society, 1999. Accessed 10/18/14 at http://www.thoracic.org/statements/resources/archive/airpollution1-9.pdf

[ii] US Environmental Protection Agency, Integrated Science Assessment for Sulfur Oxides – Health Criteria; September 2008. http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=198843