(e.g., a different wind speed), the results of dispersion modeling are best used to provide a general idea of impact; models do not have a level of predictive accuracy that can reliably differentiate between, for example, a release with a four-mile zone and one with a five-mile zone. Third, dispersion modeling is expensive, especially for sources that are outside of the chemical industry. Given that the results of sophisticated modeling may not be more accurate than results derived from simple tables, EPA decided that a simpler approach that would provide comparable data among sources was preferable. Sources that wish to conduct more sophisticated modeling may, but would not be required to do so, under the rule. For sources that want to do modeling, a number of models available in the public domain exist; EPA has published guidance on the use of these models. An alternative approach would be to limit use of the lookup tables to Tier 2 sources and require Tier 3 sources to conduct air dispersion modeling. EPA requests comments on this alternative.

Offsite Consequence Analysis

EPA agrees with commenters that further direction is necessary with respect to assessments of potentially affected populations and the environment. Section 68.15(e)(3) of the proposed rule requires an analysis of populations within distances of potential exposure. The preamble to the proposed rule specified that sensitive populations potentially affected by a release should be identified. Although much of this information is readily available, identification of some sensitive populations, such as day care centers and nursing homes, could require considerable effort, especially where the vulnerable zone crosses several jurisdictions. In addition, sources in the same area would be required to duplicate each other's efforts.

To limit the effort required to define offsite populations, EPA is proposing that offsite populations be defined using available Census data. Information on the number of children and people over 65 may be considered a proxy for sensitive populations. With the assistance of the Bureau of the Census and NOAA, EPA is developing a geographic information system, LandView, that will facilitate analysis of resident populations. In addition, EPA may require sources to identify public arenas or institutions that are potentially affected. These arenas or institutions would be limited to those identified on available street maps or Census TIGER files.

EPA has proposed that sources analyze both potential human health impacts and environmental impacts in hazard assessments and consider such impacts in designing prevention and response programs. "The environment" is specifically mentioned twice in section 112(r)(7)(B) as a receptor to be protected by emergency response measures. First, section 112(r)(7)(B)(i)states that regulations under subparagraph B "shall include procedures and measures for emergency response after an accidental release of a regulated substance in order to protect human health and the environment.' Second, under the response program provisions of the risk management plan, the plan must address "specific actions to be taken in response to an accidental release of a regulated substance so as to protect human health and the environment." Also, a third reference to "the environment" is ambiguous and may refer not only to response measures, but also to other aspects of risk management plans (CAA 112(r)(7)(B)(ii).

The structure of the CAA's accidental release provisions integrates the assessment of potential hazards and the prevention of accidents with response planning to prevent potentially hazardous conditions from resulting in accidents and ensure that the response measures are adequate in the event of an accidental release. EPA supports this integrated approach to planning with respect to accidents. EPA believes it is reasonable for sources to address not only human health impacts, but also environmental impacts in the hazard assessment. In light of the mandatory CAA language requiring that the environment be addressed as a receptor for purposes of emergency response, EPA invites comments on this approach.

EPA recognizes that one of the concerns of commenters about addressing the environment in a hazard assessment was that the proposed rule discussion of environmental impacts was not specific enough. Consequently, EPA would revise § 68.15(e)(4) of the proposed rule to require identification of sensitive environments (rather than analysis of potential environmental damage) within the radius determined by the worst-case and more likely accidental release scenario analyses. In addition, EPA would revise § 68.15(h)(3)(v) to require sources to list the sensitive environments within the accidental release scenario radii in the RMP. To identify receptors, the source could call the appropriate state or Federal agencies to determine if any sensitive environments were within the impact distances.

EPA requests comments on the use of all or part of Appendix I of the NOAA Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments (59 FR 14714, March 29, 1994) for determination of sensitive environments. Appendix I lists the following sensitive environments and identifies responsible Federal agencies: wetlands (as defined in 40 CFR part 230.3); critical habitat for designated or proposed endangered/ threatened species; habitat used by designated or proposed endangered/ threatened species or marine mammals; national marine sanctuaries; national parks; Federal wilderness areas; national estuary program areas; near coastal waters program areas; clean lakes program critical areas; national monuments; national recreational areas; national preserves; national wildlife refuges; coastal barrier resource system; national river reach designated as recreational; Federal or state designated wild and scenic rivers; national conservation areas; hatcheries; waterfowl management areas; cultural resources: areas of critical environmental concern; and the national forest system. Accidental releases of volatile substances may not represent a major threat to certain of the sensitive environments listed above. For example, wetlands, national marine sanctuaries, national monuments, national estuary program areas, near coastal waters program areas, and clean lakes program critical areas may not be threatened by accidental releases to the air. They could, however, be threatened by volatile liquid releases. In addition, deposition of listed substances from accidental releases of toxics to the air could also represent a threat to these sensitive environments. EPA requests comment on whether these, and other, specific sensitive environments should be removed from consideration for identification of sensitive environments.

C. Accident Information Reporting

The proposed rule addresses emergency notification (§ 68.45(b)) and self-investigation of accidental releases (§ 68.40). However, other than the fiveyear accident history in the RMP and emergency reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and EPCRA, sources are not required to report any accident data or results of accident investigations. Certain accidental release information that otherwise is not available could be useful to states and EPA to learn which types of sources are having problems, understand more about accident causes, track trends in chemical accidents and