Introduction

This background document presents some preliminary findings from OTA's ongoing Superfund Implementation assessment; the final report will be issued later this year. (Previously, OTA examined Superfund in its 1983 report *Technologies and Management Strategies for Hazardous Waste Control* and its 1985 report *Superfund Strategy*.)

To a large extent, the U.S. Environmental Protection Agency's Superfund program attempts to manage environmental cleanups by managing contractors. As Superfund budgets have grown, dependence on contractors has grown. Contracting means that the private sector works for the government and sometimes even conducts the business of the government. OTA's continuing work on Superfund has become focused on two key contractor issues:

- 1) Does large scale contracting in Superfund compromise environmental performance and is it cost effective?
- 2) Is there a good balance between using contractors and government workers in Superfund implementation?

In principle, privatization of government programs is not in conflict with the public interest, but **only** if there is effective government management and oversight. Indeed, the latter point is a critical Superfund issue. The effectiveness and efficiency of Superfund contracting depends in large part on how well **government** workers, career professionals, and political appointees design, administer, and review contract work. And because Superfund activities are

so technical, good contract management requires **independent** technical expertise of government workers. Inevitably, therefore, discussing Superfund contractors means addressing workforce issues in the Environmental Protection Agency (EPA).

To put the contractor issue in perspective, it is instructive to take a long-term view of cleanups of chemically contaminated sites in the United States. In our 1985 report Superfund Strategy we estimated the cost of future cleanups at about \$300 billion by government and industry over about 50 years. Today, with new information on how many sites require cleanup and on cleanup costs, that estimate looks low. OTA believes that a more realistic estimate is perhaps \$500 billion in cleanup costs facing American society over at least 50 years. However, until now government and industry have probably spent between \$5 and \$10 billion on cleanups--only 1 to 2 percent of what they may ultimately spend. In a sense, the early experiences with Superfund have been experimental and there is still time to learn from them in order to refine and improve Superfund and other cleanup programs. In the larger debate on Superfund that will intensify during the coming months prior to the next congressional reauthorization, reexamination of the roles of government and contractors could yield a large benefit.

After the program was reauthorized in 1986 by Congress for five years at \$8.5 billion, Henry Longest, Superfund program

I This estimate does not include projections for clean up of Department of Energy facilities.

director, addressed the use of the greatly increased funding:

A major portion of these resources . . . are to be allocated for extra-mural contracts. Consequently, successful pursuit of the Agency's Superfund objectives will depend in large part upon the Program's ability to direct and manage contractor resources effectively.²

For many tasks, there really is no alternative to using contractors for Superfund implementation. Originally, Superfund could not have been implemented as quickly as it was without major use of contractors, especially for emergency responses and initial site studies. Superfund will always use contractors, and OTA is not suggesting that the government can do away with contractors in Superfund implementation. However, a serious discussion of the role of contractors in Superfund is needed.

Even though contractors in general are highly professional and want to do a first rate environmental job, how well the public interest is served depends on how well a program is managed by the government. If the government does not demand, measure, and reward quality contractor work, it will not get it. And our research on Superfund since 1980 agrees with findings of the General Accounting Office (GAO), EPA's Inspector General (IG), and environmental groups that poor technical performance has been a problem, not all of the time, but all too frequently. Much of this results from the rapid initiation and expansion of the program and the enormous pressures imposed by the public and Congress on the program to perform quickly. The limited number, limited

experience, and high turnover of EPA's staff has made it very difficult for EPA to assure the environmental performance and economic efficiency of Superfund's contractors all of the time. And the problem is compounded by the inexperience and high turnover of workers for contractors, resulting from the explosive growth of that industry driven by the higher spending appropriated by Congress.

Understanding the role of contractors in Superfund means looking beyond what contractors do with equipment in the field, at specific sites. Contractors conduct so many program activities that, taken as a whole, the contracting industry has enormous influence over Superfund, perhaps more than Congress, the public, environmental groups, the news media, and other institutions.

Superfund's contractors do much more than detailed, engineering work. In a multitude of various work assignments, they play a major role in conceiving, analyzing, and structuring the policies and tasks which make up the Superfund program. In large measure the government (EPA, other Federal agencies, and State programs) depends on contractors for key information, analyses, insights, and management. Many of the government's most experienced workers have become senior managers for contractors and therefore may now be providing advice to more junior government workers. This contractor system is largely hidden from public scrutiny and accountability.

² U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, OSWER Directive 9242.3-07, memorandum from **Henry** J. Longest to division directors, (date unclear; March or May 1987).