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ROBBING PETER TO PAY PAUL

Pentagon seeks ways to fund chemical weapons destruction and meet a treaty deadline



COLD STORAGE Chemical weapons are stored in igloos like these at an undisclosed location until transferred to an incinerator for destruction.

ARMY CHEMICAL MATERIALS AGENCY PHOTO

[LOIS R. EMBER, C&EN WASHINGTON](#)

U.S. efforts to destroy its aging stocks of chemical weapons appear to be spiraling out of control. A program that the Pentagon in 1985 said would take 10 years and cost \$1.9 billion has now soared to \$25 billion and counting and may not be able to meet the chemical weapons treaty's ultimate deadline of 2012 for total destruction of the U.S. stockpile.

In describing the program, the critics' mantra for years has been that it's sorely over budget and woefully behind schedule. Now, they are claiming that the Pentagon is playing a shell game--shifting funds allotted to disposal sites yet to be built to currently operating facilities that are experiencing costly overruns.

Pentagon officials could ask Congress for more money to meet the nation's treaty obligations. But with escalating costs to deal with ongoing insurgencies in Iraq and Afghanistan and with homeland security, the Pentagon is reluctant to take that tack. To do so, these officials "would have to admit that there are huge cost overruns at operating incinerator sites," points out Ross Vincent, chair of the [Sierra Club's Sangre de Cristo Group](#). Vincent's group allies itself with the [Chemical Weapons Working Group \(CWWG\)](#), which opposes incineration of chemical weapons.

Back in the early to mid-80s, community resistance, political realities, and a National Academy of Sciences study that outlined inherent risks in transporting chemical weapons from one site to another forced the Pentagon's hand. Instead of its preferred option of moving all chemical weapons to a few destruction sites, the Pentagon conceded that weapons would have to be destroyed at nine U.S. storage sites using an incineration process dubbed Baseline.

When communities surrounding four of the eight storage sites balked at using incineration to destroy the chemical stocks, the Army--guardian of these weapons--decided that neutralizing weapons stored at those four sites would work as well. Currently, the Aberdeen, Md., site has destroyed nearly all of its bulk containers of mustard agent. Another storage facility in Newport, Ind., has built a neutralization facility but is unable to begin destroying agent because no decision has been made on what to do with the by-products of the hydrolysis (neutralization) process.

For many months, a trained staff has remained idle at Newport until a decision is made on where to perform secondary treatment on the hydrolysate. This standoff "is costing the U.S.

taxpayer a lot of money, easily \$1 million a week," says a source familiar with the Army's demilitarization program and U.S. treaty obligations.

Proposed neutralization facilities at storage sites in Pueblo, Colo., and Richmond, Ky., have yet to be constructed. Congress has budgeted funds for research and development of a two-stage destruction process--hydrolysis followed by biodegradation of the hydrolysate--for design development and for initial construction at the two sites. According to Craig Williams, CWWG director, these funds have been systematically diverted to pay for dismantling weapons at operating incinerator sites.

"Colorado and Kentucky are currently being tagged as bill payers for the cost overruns associated with the other sites," Williams says. As one example, he says, last year "the budgeted, estimated requirement for Colorado to move forward was \$152 million, but the Pentagon pulled \$147 million to pay the bills at other sites." He has released internal Pentagon documents to support his statement. Funding for the two sites has been zeroed out in the President's fiscal 2006 budget request.



Williams

THERE ARE currently three operating incinerator facilities: Tooele, Utah; Anniston, Ala.; and Umatilla, Ore. A fourth, at Pine Bluff, Ark., will begin operating shortly. When the stockpile of weapons on Johnston Atoll in the Pacific Ocean--now completely destroyed--and the bulk mustard agent in Aberdeen--now nearly destroyed--are added to the destruction tallies from Anniston, Umatilla, and Tooele, the Army says that more than 35% of the 31,000 tons of agent in the U.S. arsenal has been eliminated.

Still, dismantling the stocks at the incinerator sites has been far from trouble-free, though operations at the Anniston and Umatilla sites are moving along fairly well at the moment. The Tooele facility, however, has run into a potentially serious, costly, and time-draining hitch.

Tooele is now destroying its munitions filled with the nerve gas VX. The VX destruction campaign is slated for completion by the end of spring, Tooele spokesman Chuck Sprague says. If all goes well, Sprague says, the depot will begin destroying mustard agent early next year, starting with munitions and proceeding to bulk stocks.

Tooele holds a lot of bulk mustard agent--about 6,400 1-ton containers, says T. Trace Salmon, an engineer with the [Army's Chemical Materials Agency \(CMA\)](#), which is supervising the site's civilian contractor, EG&G. Sampling 98 of the 6,400 containers found that "most, though not all 98, were contaminated with mercury," Salmon says. Furthermore, he says, about 25% of all the containers are estimated to be heavily contaminated.

When incinerated, the mercury would vaporize, and scrubbing it from the gas stream would be difficult. Environmental laws and the facility's operating permit prohibit the heavy metal from being released to the air. Salmon says the incinerator's filtration system--a sulfur-impregnated carbon pollution abatement system--will probably be able to eliminate the mercury in the exhaust air stream during destruction of the low- to medium-contaminated mustard agent.

And Salmon believes that changing the operating parameters of the incinerator and using the pollution abatement system might allow for incineration of the highly contaminated mustard agent. Still, he says, "there is the significant potential" that 25% of bulk mustard agent will have to be neutralized, using a process similar to one being used at Aberdeen.

Tooele was designed and built as an incinerator site, which means a neutralization facility will have to be built. Construction is slated to begin this summer.

Before the neutralization plant can start up, the Army and its contractor have to go back to Utah to request a modification of the site's operating permit. Salmon says the goal is to submit the request around June; receiving approval from the state could take about six months.

In addition to the time-consuming exercises of building a plant and applying for a permit, the Army plans to sample every ton container for mercury. This, admits Sprague, "is labor intensive" and time devouring.

Neutralization probably could begin no earlier than 2006. The Army has asked EG&G how long it would take if 25% of the bulk containers have to be neutralized. EG&G does not yet have an answer.

The Army's current projection is for Tooele's stockpile to be completely destroyed by 2008. A

source familiar with the site says that it's "my gut feeling that the 2008 deadline is soft, but 2012 is doable." Williams says Tooele, along with Umatilla and Anniston, is "up against or slightly over the 2012 deadline."

Such unanticipated problems as the mercury-tainted containers drive up costs. "Every year, the cost exceedances at the operating sites have continued to grow at well over anticipated rates," Williams says. But instead of going to Congress to ask for more money, the Pentagon "lowballs its top-line budget request and then goes looking within the program" for ways to shift funds to those sites operating over budget. "This funding approach," Williams contends, "makes compliance with the 2012 Chemical Weapons Convention deadline impossible."

Last December, Michael W. Wynne, acting undersecretary of defense for acquisition, technology, and logistics, gave the Army its marching orders. In a memo, Wynne wrote, "Under the new funding profile, [the Army] shall develop alternatives to achieve the 2012 CWC deadline." Among the options he asked the Army to consider were delay of the destruction programs at Pueblo and Richmond and ways to safeguard the stockpile to minimize risks incurred if weapons are transferred to other sites.

According to Williams, the stocks at Pueblo and Richmond add up to 3,134 tons of chemical weapons and constitute 15% of the U.S. stockpile yet to be dismantled. Citing a 2002 classified report to Congress, Williams says the Army considers the Richmond site to be the one site terrorists most likely will target after 2007.

Wynne asked for a briefing on alternatives by March 21. But Patrick J. Wakefield, deputy assistant to the secretary of defense for chemical demilitarization and threat reduction, who actually ordered the Army to conduct the assessment, asked for an interim briefing on Feb. 22. That scheduled briefing, which CMA had prepared for, was canceled at the last minute and has been rescheduled for Mar. 4.

Among the options CMA is assessing are relocating selected stockpiles and/or destruction equipment, personnel, and processes; redistributing--that is, transporting--weapons among sites; and replicating proven designs and processes at other sites. Other alternatives include revising secondary treatment processes and working with the Organization for the Prohibition of Chemical Weapons to redefine the actual point of chemical agent destruction.

When asked how the Pentagon could transfer weapons among sites when current law forbids that, CMA spokesman Jeff Lindblad said DOD "would have to get the congressional mandate changed or seek an executive order."



GETTING CONGRESS to amend the law would be difficult, if current maneuvering to prevent even the study of the transportation option is any indication. The weapons likely to be moved en masse are those now stored at Pueblo and Richmond. So, unsurprisingly, Colorado Sens. [Wayne Allard](#) (R) and [Ken L. Salazar](#) (D)--with other senators whose states store weapons as cosponsors--have introduced S. 186, which would deny DOD the funds for conducting the

alternatives study. A similar bill has been introduced in the House.

Sen. Allard is outraged that DOD is spending \$150,000 on a study that "is unnecessary." In a floor statement, he noted that the transportation option "has been studied at least three times in the past decade." And, he said he's "already been told by Pentagon officials that the study is going to conclude that [transporting weapons] is not practical."

Allard added: "With the department wasting money on meaningless studies, it's no wonder that this program is over budget and behind schedule." To underscore his point, he mentioned that the Pentagon's recent budget decisions have pushed back the complete destruction of Pueblo's weapons from 2011 to 2021, "nine years after the CWC deadline."

By then, the U.S. would be out of compliance with the treaty, which doesn't allow for an extension beyond 2012. A further extension would mean amending the treaty, which would require the support of 50% of all nations party to the treaty.

Among the cosponsors of S. 186 is [Sen. Mitch McConnell](#) (R-Ky.), who is majority whip and who, along with Allard, sits on the Appropriations Committee. In his floor statement, McConnell said he was "personally insulted by the [Pentagon's] ... suggestion of transporting the weapons elsewhere." That, he said, "will not happen so long as I am a U.S. senator."

With the Pentagon's March 21 deadline for the final alternatives study looming, time is of the essence. Allard and Salazar's bill has to be fast-tracked. Cody Wertz, who is Salazar's spokesman, would only say the senators "are looking for ways to move it." Others have told C&EN that one option under consideration is attaching S. 186 to the DOD \$82 billion supplemental request to support continued operations in Iraq and Afghanistan.

The supplemental request may not be a viable vehicle for S. 186. Vincent, who has been asking around, says, "There's concern among the bill's sponsors that other senators might be opposed to using the supplemental bill."

Even if Allard and his cosponsors are not able to move S. 186, the "only way the Pentagon is ever going to be able to move the stuff from one site to another is by creating a national security emergency and persuading the President that it's imperative to effectively declare martial law," Vincent says.

Simply issuing an executive order without the underpinnings of an emergency might generate "a political mess because Congress might then seek to override the order," says the source familiar with the Army's demilitarization program and U.S. treaty obligations.

So, this source says, "if the Pentagon doesn't ask Congress to amend the law banning transportation of weapons, and if it doesn't go the executive order route, then the only choice is to be in violation of the treaty. Interesting dilemma, isn't it?"

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