s a State Party to the Chemical Weapons Convention (CWC), Russia is required to destroy its declared 40,000-metric-ton stockpile of chemical weapons (CW). In order to assist Russia with its CW destruction effort, the US government has allocated funds from the Soviet Nuclear Threat Act, other-

wise known as the Cooperative Threat Reduction (CTR) Under program. CTR, the Department of Defense (DOD) has committed to provide monetary and technical assistance for the design, planning, and construction of a pilot CW destruction facil-(CWDF) ity Shchuchie, located in the Kurgan oblast.² In order to better meet the needs of all stake-

VIEWPOINT: TOOLS TO CATALYZE INTERNATIONAL ASSISTANCE FOR RUSSIAN CHEMICAL WEAPONS DESTRUCTION

by Kathleen M. Vogel¹

holders in the CW destruction effort and facilitate greater international assistance, I will argue that the United States should supplement the CTR program with projects supported by other US agencies—in other words, coordinate all the tools in the toolbox.

The cost for total destruction of the Shchuchie CW stockpile is currently projected at \$900 million.³ This figure includes only the amount necessary for the construction of the facility; no monies are included in this sum to cover social infrastructure projects needed in the local community. Social infrastructure includes both resources to facilitate the safe operation of a CWDF, such as emergency response and medical services, and general community development projects, such as construction of new housing units.

For the Shchuchie community, some of the most important social infrastructure needs include an emergency preparedness program, water mains, communications systems, medical services, environmental monitoring, and road upgrades to support the safe operation of the CWDF. At the present time, Shchuchie community residents are deeply concerned that they are unprepared to handle any accidents or environmental pollution stemming from operation of the destruction facility and dis-

posal of its waste products. As a result, many local residents and administrators are mounting protests against the construction of any future CWDF until these safety features are established.⁴

Unfortunately, due to the country's poor economic situation, the Russian government can barely meet its

funding responsibilities for construction of the CWDF, let alone fund these social infrastructure components.5 The US Congress, however, has specifically mandated that no CTR monies ever be used for social infrastructure improvements.6 These legislative restrictions were placed in order to reinforce the main missions of the

CTR program, which are to fund the safe transportation, storage, and elimination of weapons of mass destruction in the former Soviet Union (FSU). To date, the CTR program has obligated over \$130 million to Russian CW demilitarization activities.⁷

Recently, however, congressional support for the Shchuchie CWDF has nosedived. In response to a General Accounting Office report, a House-Senate Conference Committee agreed to slash CTR funding for the Shchuchie CWDF in fiscal year (FY) 2000.8 The Conference Committee decision arose from uncertainty about the cost of the facility, doubts about Russia's ability to meet its own financial obligations to the effort, and a shortage of international assistance to the program.

Outside of US assistance, no international dollars are currently targeted to the proposed CWDF at Shchuchie or any of its supporting infrastructures. Instead, several

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countries have donated limited funds, equipment, and technical assistance to the other six CW stockpiles in Russia, even though these sites are not yet ready to support a destruction program. Since the Shchuchie CWDF is furthest along in the design and planning process, it will most likely serve as the test case for Russia's CW destruction effort. Failure at Shchuchie would constitute a severe, if not fatal, blow to the larger Russian CW destruction program.

Several articles have made a case for why the United States should continue to assist Russia in construction of the Shchuchie CWDF.¹⁰ They emphasize the proliferation risks from the stockpiles, as well as the importance of helping start Russia's CW program in order to maintain the integrity of the CWC. Since Russia's CW destruction program is almost entirely dependent on US support, it is likely that debates will emerge on reconsidering future US funding to the Shchuchie facility. If the United States should decide to reinstate funding for the CWDF, one serious obstacle will remain—social infrastructure demands by the Shchuchie community. This controversial subject is not likely to disappear and will merit serious attention if a future CW destruction effort is to go forth.

In recent years the CTR office, in partnership with the Defense Threat Reduction Agency and US embassies, has worked to drum up international assistance to the Shchuchie effort. This approach, however, has not yielded tangible contributions; international support continues to be meager and uncoordinated. There exists a need for an alternative mechanism by which to attract widespread international assistance. Acquiring and sustaining such support will be crucial for not only the Shchuchie CWDF, but also for the larger, multi-year Russian CW destruction program. ¹²

Many have proposed general ways in which the United States and the international community could address the dilemma over funding for social infrastructure at Shchuchie.¹³ As a point of departure, however, this viewpoint will outline a specific mechanism by which the US government could coordinate its existing resources to spearhead larger international assistance to Shchuchie. This could be effectively accomplished by using an alternative US funding source, the 1992 Freedom Support Act, to catalyze new interagency and international partnership programs, and complement a future CW-CTR program at Shchuchie.

COMMUNITY OPPOSITION TO CW DESTRUCTION IN RUSSIA

A major political obstacle to the start of CW destruction in Russia stems from communities near the planned destruction sites. These communities are located in some of the most underdeveloped, impoverished, and environmentally contaminated regions in Russia. Although a CW destruction program would bring sorely needed jobs to these areas, community residents and the local administrations hesitate to support the effort. Regional environmental disasters in the past, coupled with the secrecy with which the Soviet government handled these incidents, have made the CW communities suspicious and hesitant to comply with the CW destruction effort. Many of the local CW communities are thus mounting strong campaigns of public opposition to destruction.

Over the past ten years, regional and local communities have begun to organize environmental campaigns in response to military activities. Prior to this time, the Soviet government kept such activities (including their CW program) hidden, even to the local communities where chemical weapons were produced or stored. However, starting in the days of *glasnost*, public awareness rose about military activities and this resulted in debates at the regional and local levels.

The community of Chapayevsk, in the Samara oblast, serves as a key example of this rise in public protests against military activities.14 In 1985 the federal government began constructing a large CWDF in the city of Chapayevsk. The objective of this facility was to begin destroying old and outdated Soviet chemical munitions. Fifty million rubles and three years of construction went into this project.¹⁵ Unfortunately, the military conducted the construction effort in total secrecy with no public information about the nature of future materials to be processed at the new plant. When construction entered the final stages, Chapayevsk citizens learned of the CW processing plans and reacted with heated protests. Seventeen local factories simultaneously went on strike and thousands of local citizens blocked the front gates of a military base to protest the secretive opening of the facility.16 The intensity of the protests was so severe that the government ultimately abandoned the plan for CW destruction at the facility. Instead, the plant has since been restructured into a center for training CW destruction personnel.

There is reason to believe that a similar fate may befall a future Shchuchie CWDF if local community concerns are not addressed. The Shchuchie CW storage depot is close to the Chelyabinsk oblast, which has experienced several nuclear accidents, resulting in environmental and health disasters. As a result, the nearby Shchuchie community fears a "chemical Chernobyl." Coupled with these fears, local and regional communities throughout Russia are experiencing a growth in autonomy and power. As Russia's political structure continues to evolve, the federal government is relaxing its control over regional governments. These regional governments, such as the Kurgan oblast, are becoming more and more responsive to the views of the local residents.¹⁷ The town of Shchuchie is now demanding a larger say in the CW destruction effort. In light of previous CW protests, any future US assistance provided may be in vain if the Shchuchie citizens mount a determined and organized protest. Russian expert Dr. Igor Khripunov relates that, "without the full cooperation of affected regions and local communities, even the best technologies, and most generous funding and Western assistance are useless and futile."18

THE US EXPERIENCE

The fact that CW destruction has alarmed local Russian communities should not come as a surprise. The US CW destruction effort has also faced severe public opposition in local communities. By and large the protests stemmed from suspicions about US Army activities. This distrust mainly revolved around the Army's lack of communication with the local populations about its CW destruction plans, as well as its poor environmental track record. Opposition in Lexington, Kentucky, to a CW depot began "...after local residents learned, ten years after the fact, of the Army's chemical weapon stockpiling activities in the 1950s."19 The community felt the Army had sneaked in these weapons to destroy them without considering the health and safety of the local population. Citizens of the Umatilla CW stockpile in Oregon were also suspicious, "having been subjected to unannounced releases of radioactive material from the Hanford nuclear facilities during the height of the arms race."20 The Army's initial choice of incineration technology brought resistance from citizens due to concerns about release of toxic air pollutants.²¹ Such "not-in-my backyard," or "NIMBY," protests were common in the early days of the US CW destruction program.

In response to this intense opposition, Congress and the Department of Defense realized the need to repair the Army's relationship with the CW communities to ensure the future of the US CW destruction program. Thus, Congress established Citizen's Advisory Commissions (CACs) to provide an official forum for expressing citizen and state concerns. In addition, the Chemical Stockpile Emergency Preparedness Program (CSEPP) was established to help the Army and local communities respond to a chemical emergency. The CSEPP program consists of funds provided to local communities to improve emergency preparedness and response plans, provide risk information, educate the public about emergency response, train emergency response personnel, upgrade public alert and warning systems, stockpile medical antidotes, and conduct emergency exercises.²² It is generally believed that such training and resources were needed to allay local public concerns about a potential CW accident. As former US Program Manager for Chemical Demilitarization Charles Baronian has stated, "If I were living in that community—whether incineration, neutralization, or sending it on a rocket to the sun was the method chosen—I would say that emergency preparedness was needed."23

THE CURRENT SITUATION AT SHCHUCHIE

In Shchuchie, the CW depot is located only about 100 yards from high-rise apartment buildings and day-care centers.²⁴ However, in contrast to US CW communities, Shchuchie has no formalized emergency preparedness program. The only fire department service available in Shchuchie operates from an old and dilapidated truck.²⁵ Additionally, since there is no public water system, it is unclear how large quantities of water would be obtained in the event of a large-scale fire at the depot. Frequently, the only fire-fighting supplies outside of the CW storage depots are axes, buckets of sand, and buckets for bailing water.²⁶ Given the poor quality of basic fire-fighting equipment, it is also unlikely that the local fire response personnel would possess the requisite protective chemical gear and training to deal with a chemical accident. The CW arsenal itself is not equipped with an automatic alarm system for detection of leaking CW agents.²⁷ Even if a chemical leak were detected, there are currently no communication or warning systems installed to alert the Shchuchie community to a chemical accident.28

Limited medical care for the Shchuchie area is provided by the Central Area Hospital, which contains 200 beds. This local hospital is also connected to three smaller area clinics in Kayasan, Chumlyak, and Peschanka.²⁹ In recent years, however, the number of hospital beds and physicians and other health care providers has diminished, and there is a lack of proper diagnostic equipment and medicines. As a result, the local medical community and its resources can barely address routine health problems, let alone respond adequately to a CW accident. During a public hearing on CW destruction, N. P. Porvatova, head of the Central Area Hospital of Shchuchie, stated, "Given the deficiencies in our hospital's equipment...I maintain that we must upgrade our hospital equipment before the beginning of the chemical weapons demilitarization project."30 From the description of the poor emergency response conditions within the Shchuchie community, one can understand the reluctance of residents to agree to yet another environmentally risky activity, and their mounting demands for some social infrastructure developments prior to construction of the CWDF.

SHCHUCHIE PETITIONS

Shehuchie residents and administrators have drawn up a list of requested social infrastructure projects consisting of upgrades in emergency response services as well as basic community improvements, including:³¹

- A fire station:
- Communication lines between the CW facility and Shchuchie, including an automated local warning system;
- · A hospital and pharmaceuticals;
- Water intake wells and a pump station to supply the town with potable water;
- Transformer substations to supply residential and public buildings with power; and
- Highway construction.

More controversial requests include new schools, a community center, a gym, swimming pools, a sauna, a laundromat, and dry cleaning facilities.

Many US congressional opponents of foreign aid point to the swimming pool and sauna requests as yet another example of how Russians are using the CWDF project as a cash cow. Truth be told, there are surely some elements of this in the Shchuchie petitions. US CW communities have also been notorious for pushing

for greater social infrastructure developments, increased CSEPP costs, and impact fees, all of which continue to be a source of controversy.³²

The recreational requests notwithstanding, the items bulleted above are reasonable petitions for a community unknowingly saddled with a CW arsenal. For instance, emergency response programs are standard items in US CW communities. One could not even imagine a US CW community without a proper fire department. Expecting that Russians would be willing to forgo such basic amenities is shortsighted. The need for some social infrastructure improvements in Shchuchie to ensure safety to the local population is clear: the only question remaining is how that need will be addressed.

USING OTHER TOOLS: DEFENSE BY OTHER MEANS

There has been much debate over whether the existing Cooperative Threat Reduction program should be amended to include provisions for social infrastructure. This proposal, however, has met heavy fire from both the CTR program and Congress. Opponents feel that CTR was not created to be a handout to Russia—its mandated missions are specifically to secure and dismantle weapons of mass destruction and prevent weapons proliferation in order to protect US defense interests. They worry that losing sight of the original CTR mission by introducing elements of humanitarian assistance could set dangerous precedents, jeopardizing the entire CTR program in the long run.

The CTR program is but one avenue available to the US government to address proliferation-related concerns in the former Soviet Union (FSU). There remain unused tools in the administration's toolbox that could be used to begin catalyzing crucial social infrastructure assistance to the Shchuchie CW destruction program. Several of these tools lie within programs funded under the Freedom Support Act (FSA).³³ In 1992, former President George Bush signed the FSA into law to "authorize a range of programs to support free market and democratic reforms being undertaken in Russia, Ukraine, Armenia, and other states of the former Soviet Union."³⁴

Under FSA, FSU assistance programs were established to foster security, stability, and prosperity; develop constructive relationships with the region; and prevent the emergence of new threats to US national security.³⁵ The FSA provided the legal authority and

funding mechanism by which US government agencies could work on FSU assistance projects and thereby complement existing US foreign policy objectives.³⁶ As President Bush emphasized, "We undertake these programs of assistance out of a commitment to increased security for ourselves, our allies, and the peoples of the newly independent states. These programs will enhance our security through demilitarization and humanitarian and technical assistance."³⁷ In FY 1998, congressional FSA appropriations to Russia totaled \$152.5 million.³⁸

Under the FSA, a variety of US government agencies have sponsored a number of nonproliferation, social, environmental, and humanitarian assistance programs in Russia.³⁹ However, none of these programs have been targeted to address the crucial social infrastructure needs of the Shchuchie community. If future CW-CTR funding is re-appropriated, certain interagency programs and FSA funds should be redirected towards Shchuchie. In this way, FSA-supported programs would work with the CW-CTR program to complement the Shchuchie destruction effort. Since these FSA-funded programs would support the national security objective of Russian CW destruction, the government—and ultimately the taxpayers—would benefit from a more effective use of US dollars.

More importantly, this FSA-funded initiative would be specifically designed to provide a focal point through which to attract international donors. Under this initiative, specific projects would be designed by which technical and monetary assistance could be solicited. In this way, although the United States would take the leadership role in formulating the initiative and providing some up-front seed money, Shchuchie and the international donors would ultimately take over responsibility (funding and direction) for the projects in the future.

AN EFFECTIVE PARTNERING MODEL

Partnering the DOD with other FSA-funded projects at Shchuchie would provide a more coordinated US response to the challenge of CW destruction in Russia. As many in the government are aware, however, interagency programs have the potential to fail miserably. Therefore, it is important to identify the components that have made current and prior US interagency partnering programs effective. One successful model for US interagency programs in Russia uses small-scale, project-oriented initiatives. In these programs, a lead

agency, such as the DOD, partners with other US agencies to tackle specific projects.

In the Shchuchie case, since the projects would center around social infrastructure, the funds to support these initiatives could be leveraged from the Freedom Support Act budget instead of CTR or DOD monies. In this way, the DOD would be responsible for overall policy oversight, but on-ground project implementation and management would involve the FSA-funded US agencies (such as the Environmental Protection Agency [EPA] and the Agency for International Development [USAID]) with the appropriate expertise. This approach could leave precious CTR dollars for CW demilitarization, while providing some targeted seed money for social infrastructure projects.

Discussions with US government officials involved in FSU programs highlight key elements surrounding successful interagency partnerships.⁴⁰ Tailoring these elements to Shchuchie would involve the following mechanism:

- DOD acts as the lead agency for coordinating a Shchuchie Initiative for social infrastructure assistance:
- DOD campaigns for congressional support for the Shchuchie Initiative:
- DOD works closely with the Office of the Coordinator of US Assistance to the Newly Independent States (NIS) to develop a Shchuchie Initiative interagency working group; and
- The Shchuchie Initiative interagency working group would pull in their affiliated international partners to support specific social infrastructure projects.

At the beginning, it is important for DOD to take the lead in spearheading social infrastructure assistance efforts to Shchuchie. The underlying national security objectives behind the Shchuchie Initiative (i.e., nonproliferation and CWC compliance) call for DOD leadership. In addition, starting the Shchuchie Initiative under DOD leadership would ensure that all social infrastructure projects would complement a future CW-CTR construction effort.

It is also crucial to have an active and open dialogue with key members of Congress and their respective committee staff regarding this new initiative. The DOD should work hard to explain why such an initiative would facilitate and strengthen CTR objectives. Opponents of foreign aid might view this initiative as merely another

way to funnel hard-earned US tax dollars abroad. As such it would be important to explain and emphasize how such an initiative, although needing some targeted seed money up-front, could ultimately usher in larger international assistance to the Shchuchie program.

Should congressional support be secured, the next step would involve close partnering between the CTR office and the Office of the Coordinator of US Assistance to the Newly Independent States (NIS) of the Former Soviet Union, located within the Department of State (DOS). The Coordinator's Office was given a new and expanded presidential mandate in 1995.41 This mandate amplified the Office's roles to include additional oversight responsibilities involving all US government bilateral assistance, trade, and investment programs in the NIS. This new role gives the Coordinator's Office the authority to review agency programs and budgets to ensure that they are consistently meeting US foreign policy objectives. The Coordinator's Office also serves as the gatekeeper for FSA funds and is linked to a variety of international assistance programs.

A partnership between the CTR and the Coordinator's Offices on the Shchuchie Initiative would facilitate identification and coordination of interagency and international resources. For starters, the CTR and Coordinator's Office could work together on a proposal for FSA funds to conduct a detailed assessment of Shchuchie's infrastructure needs. Although Russian officials have cited a figure of \$240 million as the cost for Shchuchie's total social infrastructure development, there has been no in-depth report detailing how this figure was obtained or what these funds would cover.⁴² An FSA-funded assessment would provide a more reasonable evaluation of the existing social infrastructure petitions. Not to be overlooked, a crucial part of this assessment should involve Shchuchie community input. Since local opposition is one of the greatest concerns in the CW destruction effort, it is vital to have active and informed participation of the relevant stakeholders during the assessment process to instill trust and support for the projects. Through recent CTR funding, plans have been underway to establish a Citizen Advisory Committee (CAC) in Shchuchie on CW demilitarization matters.43 Meetings between DOD and DOS officials with CAC representatives could facilitate community input and active involvement in social infrastructure projects.

Based on such an assessment, the CTR and Coordinator's Office could better identify projects recommended for immediate targeted assistance. Particularly in the early stages, it is important to select only short-term, low-cost projects that will rapidly bear fruit. Furthermore, social infrastructure projects should try to use local labor and skills as much as possible. Providing the Shchuchie community with tangible incentives and end products will help prevent the disillusionment and resentment towards US assistance programs that plagued several early CTR efforts.

Once feasible projects have been identified, the CTR and Coordinator's Office should actively campaign for involvement of other appropriate US government agencies. From the panoply of social infrastructure assistance programs to the NIS, a "Shchuchie Initiative working group" could be formed (See Table 1). For instance, the EPA (with FSA funds) could be drawn into the Shchuchie working group to "jump-start" a variety of environmental initiatives related to safe monitoring of the CWDF and community during the destruction process. Current USAID program objectives could also pair well with Shchuchie social infrastructure needs in the areas of environmental, medical, and related development assistance. As an example, USAID has sponsored an industrial environment management project within the Russian city of Nizhnii Tagil.⁴⁴ In 1996 the project awarded twelve grants totaling \$445,000 to introduce pollution abatement systems into local factories and plants. In addition, training and lab equipment was provided to assist in modernization of the local water system. Table 1 reveals only a sampling of potential interagency collaborations; with a little thought, additional partnerships with other US agencies could also be formed.

Furthermore, the main point of partnering other US agencies with the DOD on the Shchuchie Initiative involves not only leveraging their technical knowledge and expertise, but also attracting their international contacts. EPA and USAID already work with a variety of different countries as well as multilateral partners on NIS assistance projects: the World Bank, the Organization for Economic Cooperation and Development (OECD), the European Bank for Reconstruction and Development (EBRD), the European Union (EU), and Technical Assistance for the Commonwealth of Independent States (TACIS). For instance, corresponding with the USAID

Table 1: USAID and EPA Assistance to and Cooperative Activities with the Newly Independent States of the Former Soviet Union and Eastern/Central Europe

AGENCY	PROJECT	ACTIVITIES
USAID	Environmental Education and Public Awareness in the NIS	 Facilitates joint environmental activities and growth of environmental NGO movements in the NIS Promotes environmental education, community clean-up projects, monitoring of industrial pollution, sound natural resource management
	Hospital Partnerships	 US partner hospitals provide technical assistance to Russian hospitals and medical personnel Sponsors exchanges of US and Russian doctors, nurses, administrators, and health educators
	Water Quality, Availability, and Watershed Management	 Assists with monitoring and control of water systems, water filtration and leakage control, watershed management, efficient design and management of irrigation systems, protection of aquifers, integrated water resource planning and management Provides technical assistance and training for construction of wastewater treatment plants, hazardous waste monitoring, and trapping equipment for industries
	Community Development Program	 Funds projects in health, education, social, and cultural development Assists with irrigation, drinking water, sanitation, minor construction projects
	Disease Prevention Program	Promotes mass immunization campaigns of children, health programs to reduce infectious diseases, medical exchanges for education on prevention of infectious diseases, medical equipment support, upgrades in emergency services support, and establishment of emergency assistance training centers
EPA	Environment for Europe Environmental Action Program for Central and Eastern Europe (EAP)	 Helps conduct technical assistance and investment programs to improve environmental conditions in areas experiencing the most acute human health or ecosyste threats Promotes the integration of environmental and economic considerations to ensure sustainable development
	Russia Air Management Program (RAMP)	 Improves air monitoring, emissions inventories and inspections, and air management policies Conducts environmental public outreach and educational activities, including founding a children's environmental education school
	Solid and Hazardous Waste	 Provides equipment and training to help local environmental officials assess the impacts of pollutant exposure on the population and map its principal sources Provides technical support to design a cleanup plan for contaminated soil using cost-effective technologies
	Solid Waste Management	Conducts training and provides technical assistance to improve the ability of local-level waste management officials to develop and carry out more effective policies
	Environmental Assessment	 Provides environmental assessment and planning for the commercial reuse of a former military airfield

Compiled based on data from the Office of the Coordinator of US Assistance to the NIS, US Government Assistance to and Cooperative Activities with the New Independent States of the Former Soviet Union, FY 1998 Annual Report (January 1999).

Nizhnii Tagil project, a successful grant proposal was submitted to the World Bank to support large-scale upgrades for the local drinking water system.

In addition to the EPA and USAID, other members of the "Shchuchie working group" could also reach out to their respective international partners and draw them into providing assistance for specific social infrastructure projects. In this way, international support to the Shchuchie community could be better targeted and coordinated, and match dollar-for-dollar with FSA funds. Pulling international donors onto specific projects at Shchuchie would hopefully catalyze greater foreign assistance to the Russian CW destruction program in the future. A key long-term objective to this proposal would be a decrease in US interagency participation and FSA support, with a corresponding increase in international assistance on these social infrastructure initiatives.

A precedent for an effective interagency partnering program has already been established with Russia involving the EPA and the Departments of Defense, Energy, and State in environmental security initiatives dealing with the decommissioning of Russian submarines in Murmansk, Russia.⁴⁵ In parallel, an expanded effort on radioactive waste issues, called the Arctic Military Environmental Cooperation (AMEC), has led to a trilateral cooperation between the United States, Russia, and Norway. The AMEC initiative, under the Office of the Deputy Undersecretary for Environmental Security, currently involves seven projects to address critical environmental concerns in the Arctic region.⁴⁶ Norway has committed to providing up to \$3 million in FY 1999 for all seven AMEC projects, and has pledged up to \$30 million for future collaborative efforts.⁴⁷ Separately, the Office of the Secretary of Defense (Strategy and Threat Reduction) is spearheading successful interagency programs with teams from the EPA, the US Department of Agriculture, the Centers for Disease Control, the Department of Health and Human Services, and the National Institutes of Health in nonproliferation initiatives engaging former FSU bioweaponeers.⁴⁸

FINAL THOUGHTS

Although Congress has zeroed out FY 1999 CTR funding for the Shchuchie CWDF, it is likely that debates will emerge on reconsidering this stance in the future. The CTR program has made significant strides toward the design and planning of a CWDF at Shchuchie,

and should continue to lead future efforts. The CTR office has also tried to catalyze greater international assistance to the CW destruction effort in the areas of social infrastructure, with limited success. This proposed Shchuchie Initiative is one avenue by which the CTR program could work to garner a more coordinated and successful international assistance effort.

Current DOD-interagency programs, such as the Arctic Military Environmental Cooperation, provide environmental security assistance to the FSU with matching international dollars. This project serves as an example of what could be accomplished with the Shchuchie CW destruction program. Regardless of whether one believes that assisting the Russian CW destruction effort is important from a nonproliferation, CWC, or environmental perspective, a need exists for better coordination of US and international assistance if a future program is to be realized and sustained.

On the Russian side, the Shchuchie community is looking for their voices to be heard, their needs met, and their dangerous CW stockpile safely destroyed. Along with new CTR efforts to increase Shchuchie citizen participation, an effective interagency/international social infrastructure campaign is likely to bring a positive response from the community and continued support for the multi-year destruction effort.

Of course, even in the best-case scenario, there is no guarantee that the Shchuchie project will not fail due to unforeseen and uncontrollable circumstances. The ability to catalyze greater international assistance, however, is within the control of the CTR program and Congress—it merely involves tapping into and coordinating existing resources.

- ¹ The author wishes to thank Jeffrey Knopf, George Parshall, Judith Reppy, Jonathan Tucker, and two anonymous reviewers for their valuable comments regarding this viewpoint. The author would also like to express appreciation to officials from the US Departments of Defense and State for their insights and time, as well as review of this work. The author gratefully acknowledges the assistance of Jennifer Nadeau and Jeffrey Knopf on editorial revisions to the article.
- ² The Shchuchie CW depot houses approximately 14% of the Russian CW stockpile. For more information on the Shchuchie stockpile see *SIPRI Yearbook 1995: Armaments, Disarmaments, and International Security* (Oxford: Oxford University Press, 1995), p. 348. For more information on CTR funding for the Shchuchie CWDF see Igor Khripunov and George Parshall, "US Assistance to Russian Chemical Weapons Destruction: Identifying the Next Steps," *The Nonproliferation Review* 6 (Fall 1999), pp. 112-127.
- ³ US Department of Defense official (name withheld by request), personal communication with the author.
- ⁴ Brig. Gen. Thomas Kuenning, Director of the CW-CTR program, in presentation at "An Update on Russian and American Demilitarization on the Second Anniversary of the Chemical Weapons Convention," A Legacy Program Roundtable, sponsored by Global Green USA, Washington, DC, May 26, 1999; "Chemical Weapons Destruction: Opportunities for Regional Development, Civil Society, and Business," Green Cross Russia and EastWest Institute, Moscow, Russia, May 18, 1999; Monterey-Moscow Study Group on Russian Chemical Disarmament, Eliminating a Deadly Legacy of the Cold War: Overcoming Obstacles to Russian Chemical Disarmament (1998), http://cns.miis.edu/pubs/reports/mmsg.htm; Paul F. Walker, "Implementing the Chemical Weapons Convention: Technical and Political Challenges in the US and Russia," *The CBW Conventions Bulletin*, No. 44 (June 1999), pp. 1-4.
- ⁵ For a description of the financial difficulties involved in the Russian CW Destruction program see Khripunov and Parshall, "US Assistance to Russian Chemical Weapons Destruction", pp. 122-23.
- ⁶ Section 1405 of the National Defense Authorization Act for Fiscal Year 1998 (Public Law 105-85) stipulates that the United States will not pay the costs for infrastructure to support a CWDF. See http://www.stimson.org/cwc/ctr98.htm.
- ⁷ "Cooperative Threat Reduction Funding," http://www.ctr.osd.mil/07frame.htm.
- ⁸ United States General Accounting Office, Weapons of Mass Destruction: Effort to Reduce Russian Arsenals May Cost More, Achieve Less Than Planned, GAO/NSIAD-99-76 (Gaithersburg, MD: US GAO, April 1999); House Armed Services Committee, Press Release, August 5, 1999, "Conferees Reach Agreement on FY2000 Defense Authorization Bill," http://www.house.gov/hasc/press.htm.
- 9 Outside of the US contribution, Germany continues to finance a portion of the Russian CW destruction effort at the Gorny CW stockpile, providing nearly \$11 million worth of assistance, related to providing mobile and stationary laboratories and equipment to ensure the safe transfer of lewisite from its storage containers and for decontamination. See SIPRI Yearbook 1997: Armaments, Disarmament and International Security (Oxford: Oxford University Press, 1997), p. 447. Finland, Italy, Netherlands, Sweden, and the European Union have also made monetary and equipment contributions to other CW communities. Finland has donated 2 million Finnish marks (\$350,000) to provide monitors, including X-ray fluorescence detectors to the Kambarka CW stockpile. See SIPRI Yearbook 1997, pp. 447-448; SIPRI Yearbook 1998: Armaments, Disarmaments, and International Security (Oxford: Oxford University Press, 1998), p. 465. The European Council of the European Union (EU) has offered assistance of 10 million Euros (\$10.4 million) in 1997-1999 for environmental protection and monitoring in Gorny, for safety and health work at Nizhny Novgorod (former CW production facility), and for "micro-projects" this year in civil society and ecological monitoring. The Netherlands signed a December 1998 agreement to work at Kambarka for NLG 10.8 (\$5.1 million). The Dutch assistance will focus on four projects: (a) soil remediation, (b) assistance with treatment of people who come in contact with lewisite, (c) provision of a mobile analytical laboratory to assess the environmental impact of destruction operations, and (d)

- development of the means to transfer lewisite into smaller containers. The Swedish National Defense Research Establishment (FOA) has provided \$125,000 and has pledged up to 2.6 million Swedish crowns (about \$350,000) for assistance to the lewisite storage facility in Kambarka. The FOA project is examining ways to reduce the risk of accidents during storage or destruction. Norway has promised \$190,000 for environmental health monitoring at Gorny. Italy promised at a 1998 Green Cross/Global Green hearing some \$8 million for pipeline development in Kizner. See Walker, "Implementing the Chemical Weapons Convention," p. 3; SIPRI Yearbook 1997, pp. 447-448. At a May 1998 meeting in The Hague, Great Britain, France, and Norway declared their intention to provide financial assistance. See Masha Katsva, "Russian Chemical Demilitarization: One Step Forward, Two Steps Back," The Monitor: Nonproliferation, Demilitarization, and Arms Control 4 (Fall 1998), p. 40.
- ¹⁰ Harold P. Smith, Jr., "Funding CW Demilitarization in Russia: Time to Share the Burden," *Arms Control Today* 28 (November-December 1998); Igor Khripunov and Jonathan B. Tucker, "Don't Downplay Threat From Moscow's Arsenal; The US Should Expand, Not Shelve, Plans to Help Russia Build a Plant to Destroy Chemical Weapons," *Los Angeles Times*, August 18, 1999, p. B7; Khripunov and Parshall, "US Assistance to Russian Chemical Weapons Destruction."
- ¹¹ US Department of Defense official (name withheld by request), personal communications with the author.
- ¹² The Shchuchie CW stockpile is only one of seven CW stockpiles awaiting destruction in Russia. Outside of Shchuchie, the remaining six stockpiles constitute roughly 32,000 metric tons of choking, blister, and nerve agents.
- Derek Averre and Igor Khripunov, "Russian chemdemil: coaxing communities," Jane's Intelligence Review 9 (June 1997), pp. 257-259; Cynthia D. Miller, "Chemical weapon destruction in Russia: prospects for increasing assistance to local communities," in John Hart and Cynthia D. Miller, eds., SIPRI Chemical & Biological Warfare Studies No. 17: Chemical Weapon Destruction in Russia: Political, Legal and Technical Aspects (Oxford: Oxford University Press, 1998), pp. 133-149; Igor Khripunov, "US Assistance to Russia's Chemical Demilitarization Efforts," in Dismantling the Cold War: US and NIS Perspectives on the Nunn-Lugar Cooperative Threat Reduction Program. (Cambridge: MIT Press, 1997), pp. 363-382; Smith, "Funding CW Demilitarization in Russia," pp. 16-20; Monterey-Moscow Study Group, Eliminating a Deadly Legacy, pp. 1-23; Milton E. Blackwood, Jr., "Arsenic and Old Weapons: Chemical Weapons Disposal in Russia," The Nonproliferation Review 6 (Spring-Summer 1999), pp. 89-97.
- ¹⁴ Lois R. Ember, "Chemical Weapons Disposal: Daunting Challenges Still Ahead," *Chemical & Engineering News*, August 13, 1990, pp. 18-19.
- ¹⁵ Col. V. Solovyev, "History of the establishment of the facility for destruction of chemical weapons in Chapayevsk," paper delivered to the International Conference on Banning and Destruction of Chemical Weapons, Moscow, April 9-11, 1989.
- ¹⁶ Paul Walker, "Citizen Advisory Boards and Public Involvement: A Discussion of the Role of Citizens in Public Decision-Making, Post-Cold War Demilitarization, and Environmental Clean-Up," paper delivered to Global Green/Green Cross Workshop, Moscow, March 23-24, 1999.
- ¹⁷ Khripunov and Parshall, "US Assistance to Russian Chemical Weapons Destruction," pp. 118, 122.
- ¹⁸ Igor Khripunov, "The Human Element In Russia's Chemical Weapons Disposal Efforts," Arms Control Today 25 (July-August 1995), p. 21.
- ¹⁹ Amy E. Smithson, *The US Chemical Weapons Destruction Program: Views, Analysis, and Recommendations*, Stimson Center Report No. 13 (September 1994), p. 44.
- ²⁰ Ibid., p. 44.
- ²¹ Some controversy still exists within local US communities by environmental organizations opposed to incineration. Ibid., pp. 28-34.
- ²² Ibid., p. 21.
- ²³ Ibid., pp. 24-25.
- ²⁴ Paul Walker, telephone interview by author, April 1, 1999.
- ²⁵ Former Congressman Glen Browder, interview by author, Monterey, CA, January 19, 1999; Amy E. Smithson, "Improving the Security of Russia's

- Chemical Weapons Stockpile," *Chemical Weapons Disarmament in Russia: Problems and Prospects*, Stimson Center Report No. 17 (October 1995), p. 17.
- ²⁶ Brigadeer General Walter Busbee, interview by author, Crystal City, VA, February 18, 1999; Smithson, "Improving the Security," p. 17.
- ²⁷ Lev Federov, "Chemical Weapons in Russia: History, Ecology, Politics," 1994, in JPRS-TAC-94-008-L (July 27, 1994), p. 25.
- ²⁸ Paul Walker, telephone interview by author, April 1, 1999.
- ²⁹ A.I. Freidin, "Concerning Community Health in Shchuch'ye: Reference to the Population Mortality Rate in Shchuch'ye Area of Kurgan Region for 1994-1996," paper delivered to the Third Public Hearings on Chemical Weapons Destruction, Kurgan and Shchuch'ye, sponsored by Kurgan Administration of Kurgan Region and the National Organization of Green Cross International in Russia, July 7-10, 1997, p. 187.
- ³⁰ N. P. Porvatova, "About Social Support and Compensation for People Living in the Region at Risk," paper delivered to the Third Public Hearings on Chemical Weapons Destruction, Kurgan and Shchuch'ye, sponsored by Kurgan Administration of Kurgan Region and the National Organization of Green Cross International in Russia, July 7-10, 1997, p. 161.
- ³¹ V. B. Kolesnikov and S. A. Plashchinov, "Development of the Shchuchie Infrastructure as a Result of the Chemical Weapons Destruction Facility Construction," paper delivered to the Third Public Hearings on Chemical Weapons Destruction, Kurgan and Shchuch'ye, sponsored by Kurgan Administration of Kurgan Region and the National Organization of Green Cross International in Russia, July 7-10, 1997, pp. 146-153.
- ³² Impact fees are intended to pay for a government or private development's proposed impact on public infrastructure. Impact fees are frequently assessed for items such as transportation, parks, schools, utilities, and fire protection. Impact fees vary and usually represent a significant percentage of total development costs. For more information on US CW communities and CSEPP see Smithson, "The US Chemical Weapons Destruction Program," pp. 21-24; US General Accounting Office, "Chemical Weapons: Army's Emergency Preparedness Program Has Financial Management Weaknesses," GAO/NSIAD-95-94, (Gaithersburg, MD: US GAO, March 1995), pp. 1-23.
 ³³ Freedom for Russia and Emerging Eurasian Democracies and Open Markets Support Act of 1992, Public Law 102-511, http://homas.loc.gov.
- ³⁴ George Bush, "Statement on Signing the Freedom Support Act," (October 24, 1992), http://www.csdl.tamu.edu/bushlib/papers/1992/92102407.html>. Freedom Support Act programs were established to complement CTR objectives since, "CTR advances joint US and Russian security objectives, development of a free market economy in the FSU, as well as stability and democracy throughout the FSU." See http://www.ctr.osd.mil/01frame.htm>
- Office of the Coordinator of US Assistance to the NIS, US Government Assistance to and Cooperative Activities with the New Independent States of the Former Soviet Union, FY 1998 Annual Report, (January 1999), p. 1.
 US Department of State official (name withheld by request), telephone interview by author, April 8, 1999.
- ³⁷ Bush, "Statement on Signing the Freedom Support Act."
- ³⁸ Office of the Coordinator, US Government Assistance,...FY 1998, p. 43.
 ³⁹ Ibid., pp. 42-52.
- ⁴⁰ US Department of Defense official (name withheld by request), telephone interviews by author, March 17 and March 26, 1999; US Department of State official (name withheld by request), telephone interview by author, March 30, 1999.
- ⁴¹ Office of the Coordinator of US Assistance to the NIS, US Government Assistance to and Cooperative Activities with the New Independent States of the Former Soviet Union, FY 1995 Annual Report, (April 1996), p. 7.
- ⁴² Khripunov and Parshall, "US Assistance to Russian Chemical Weapons Destruction," p. 121.
- ⁴³ US Department of Defense official (name withheld by request), interview by author, Aberdeen Proving Grounds, MD, February 16, 1999; Paul Walker, telephone interview by author, April 1, 1999; Walker, "Citizen Advisory Boards and Public Involvement"; Khripunov and Parshall, "US Assistance to Russian Chemical Weapons Destruction," p. 118.
- ⁴⁴ For more information on the Nizhnii Tagil Industrial Environmental Management program see http://www.eni-environment.net/docs/nizhnii.shtml>.

- ⁴⁵ William A. Nitze, "OIA Annual Report for 1998," Office of International Activities, US Environmental Protection Agency, http://www.epa.gov/oia/annrep2.htm>.
- ⁴⁶ US Department of Defense official (name withheld by request), telephone interview by author, April 2, 1999.
- ⁴⁷ US Department of Defense official (name withheld by request), telephone interview by author, April 2, 1999.
- ⁴⁸ US Department of Defense official (name withheld by request), telephone interview by author, January 4, 1999.