
The Soviet Union, Russia, and the Biological and Toxin Weapons Convention

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The Biological and Toxin Weapons Convention (BWC) opened for signature in 1972 and entered into force in 1975. Article I of the BWC prohibits development, production, and stockpiling of “microbial or other biological agents, or toxin whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purpose.” It also bans “weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.”¹

For 20 years—beginning almost from the moment Moscow signed the BWC—the Soviet Union sponsored a clandestine program in violation of these obligations. The United States and other countries had suspicions regarding the program, and Washington publicly alleged Soviet noncompliance with the BWC throughout much of the 1980s. It was not until the defection of a scientist

involved in the program in the late 1980s, however, that the United States realized the size and scope of the Soviet program and elevated the issue of Soviet noncompliance into a major political issue. Although some progress was made toward resolution of the problem in the early days of the new Russian Federation, concerns about the program remain. At the present time, however, no one either in Washington or Moscow appears greatly interested in bringing the question to closure.

This article raises several questions regarding how the United States and other countries should approach the issue of arms control noncompliance in the future. Those questions relate to the effectiveness of certain strategies to resolve disputes over noncompliance, the ability to mobilize the international community, and the gap that sometimes exists between publicly articulated policy and governmental action.

THE SOVIET PROGRAM

Soviet work on biological weapons (BW) began in the early 1930s under the direction of the Red Army.² Some of the program's initial research and development work allegedly pursued studies in cholera, anthrax, malaria, and tetanus, and included experiments with live prisoners.³ Following World War II, the program picked up steam when the Virology Center of the Scientific Research Institute for Microbiology of the Ministry of Defense was established in the early 1950s. Research and development was done on anthrax, tularemia, brucellosis, plague, Venezuelan equine encephalitis, typhus, Q fever, and botulinum toxin. During the 1950s, the Soviet Union also established a top-secret open-air test site on Vozrozhdeniye Island in the Aral Sea. By the 1970s, U.S. and British intelligence agencies identified possible Soviet BW facilities at several military installations including Aksu, Berdsk, Omutninsk, Pokrov, Sverdlovsk, and Zagorsk.⁴ The Soviet Ministry of Defense also controlled several microbiological laboratories, including the Institute of Military Medicine in Leningrad, the Scientific Research Institutes of Microbiology in Kirov and Sverdlovsk, the Scientific Research Institute of Sanitation in Zagorsk, and an additional facility at Aralsk in Kazakhstan. In 1991, the U.S. Department of Defense alleged that activities in these facilities were "not consistent with any reasonable standard of what could be justified on the basis of prophylactic, protective, or peaceful purposes."⁵

In the early 1970s, the Kremlin leadership decided to initiate a second BW program in parallel with the one conducted by the Soviet military. Its goals would be to exploit the coming advances in biotechnology, conduct further BW research, and create a dual infrastructure that, while producing civilian products, could also be mobilized at any time to produce BW. The new organization, which came to be called "Biopreparat," was begun with a top-secret decree in 1973, less than a year after Moscow signed the BWC. Although Biopreparat was funded by the Ministry of Defense, it operated under the Main Administration of Microbiology Industry (Glavmikrobioprom) and had close links to the Soviet Ministries of Health and Agriculture.⁶ At its height, the program involved hundreds of research facilities and production plants, employed tens of thousands of people, and operated on a budget of 100 to 200 million rubles per year.⁷ Despite its size and scope, Biopreparat was described in 1993 by Deputy Foreign Minister Grigori

Berdennikov as "the best kept secret in the Soviet Union."⁸

According to Ken Alibek, Biopreparat's former deputy director, the major goal of the Biopreparat program was development of BW capabilities that could be used in a "strategic/operational" mode against the United States.⁹ Moscow apparently believed that the United States was pursuing its own offensive BW program, despite having signed the BWC. "The notion that the Americans had given up their biological weapons was thought of as the great American lie," according to a British intelligence officer.¹⁰ Moscow apparently considered the Biopreparat program a "response-in-kind."

Despite the size and scope of the Biopreparat operation, Western intelligence knew little about it. It was only after the defection of Vladimir Pasechnik to the United Kingdom in the late 1980s that the enormity of the effort was realized. According to one British government report, "The information was stunning; a whole ministry exposed; billions of rubles spent; a complete organization shown to be a front; and there was the clear involvement of Gorbachev, this friend of the West. It just went on and on."¹¹ It was the defection of Pasechnik that set in motion major efforts by the United States and Great Britain to bring the illegal effort to a halt and bring the Soviet Union back into compliance with its treaty obligations.

The Sverdlovsk Incident

Prior to Pasechnik's defection, Western intelligence, however, had not been completely unfamiliar with Soviet BW efforts. The issue already had received considerable attention, particularly after an accident at Sverdlovsk in 1979.¹² In that incident, a containment failure at the military microbiology facility allowed a small amount of dry anthrax spores into the atmosphere. The cloud drifted several kilometers downwind, infecting at least 77 people, of which 66 to 68 died. Livestock were infected as far as 50 kilometers downwind.

The initial report of the accident occurred in a Russian-language Frankfurt-based magazine. This story was then picked up by the German publication *Bild Zeitung*, which reported the presence of a cloud of bacteria that had been produced by an explosion.¹³ The United States alleged that the deaths were caused by an accident stemming from illicit work on BW. The Soviets rejected this allegation, however, arguing instead that the fatalities

were the result of the victims consuming tainted meat. It was not until 1992 that Russian President Boris Yeltsin acknowledged that the U.S. allegation had been correct.

U.S. ALLEGATIONS OF AN ILLICIT SOVIET BW PROGRAM

U.S. government allegations at the time of the Sverdlovsk incident were not the first time the United States had expressed concern over a Soviet BW program. Between 1975 and 1977, the *Boston Globe*, the *Los Angeles Times*, and the Associated Press carried a number of accounts citing U.S. government officials who suggested that the Soviet Union was building facilities that possibly were capable of producing BW. Facilities at Zagorsk, Omutninsk, Sverdlovsk, Berdsk, Pokrov, and Aksu were all specifically mentioned. The reports were based on satellite imagery, but their information was highly ambiguous.¹⁴

The U.S. government finally went public with its allegations in 1984. In January 1984, a presidential report to Congress noted concern about a possible Soviet BW program. In the 1984 edition of *Soviet Military Power*, the Department of Defense (DOD) was more explicit, arguing that: “The Soviet Union has an active research and development program to investigate and evaluate the utility of biological weapons and their impact on the combat environment...[which] violates the Biological and Toxin Weapons Convention of 1972.”¹⁵

The U.S. Defense Intelligence Agency (DIA) presented a similar conclusion in 1986. In its publication, *Soviet Biological Warfare Threat*, the DIA concluded “that the Soviets have and are developing and producing biological weapons agents. They are continuing to test and evaluate delivery and dissemination systems for these agents.” The report argued:

We believe that the Soviets have gone far beyond what is allowed by the treaties for the following reasons:

- The size and scope of their efforts are not consistent with any reasonable standard of what could be justified on the basis of prophylactic, protective, or peaceful purposes.
- The Soviets continue to evaluate the military utility of biological and toxin weapons.
- The Soviets are rapidly incorporating biotechnological developments into their of-

fensive BW program to improve agent utility on the tactical battlefield.¹⁶

The report also detailed U.S. allegations regarding the accident at Sverdlovsk. It argued that a series of events contradicted the Soviet explanation of the outbreak as a public health problem. In particular, it noted:

- extraordinary efforts to “clean up” following the accident;
- the number of cases of respiratory anthrax which could not be contracted if the agent was ingested;
- the number of cases reported which were about 100 or more times the annual incidence of inhalation and intestinal anthrax for the whole Soviet Union; and
- the heavy military involvement immediately after the accident.¹⁷

These assessments reflected the concern of the DOD in particular regarding the Soviet BW program. Not surprisingly, the DOD promoted awareness of the issue in light of its potential implications for military operations. At this time, however, it appears that not much attention was given to the problem at the political level.

This changed with Pasechnik’s revelations regarding Biopreparat in the late 1980s. Following his debriefing, a number of diplomatic representations were made by the United States and the United Kingdom calling on the Soviets to terminate their program. They were met with complete denials. Both U.S. President George Bush and British Prime Minister Margaret Thatcher raised the issue with Soviet President Mikhail Gorbachev. The extent of Gorbachev’s knowledge of the program is not clear. Some analysts suggest that he knew about the program, at least in general and perhaps in detail, and that he “ducked” the issue when confronted by the president and prime minister.¹⁸ Ken Alibek suggests that following the U.S. and British representations, Gorbachev tried to stop the program, but was thwarted because he signed a poorly drafted memorandum that left enough room for the program to continue.¹⁹

The high-level political exchanges between U.S., British, and Russian leaders in 1989 were followed by publication in February of 1990 of the congressionally mandated *Report of Soviet Noncompliance with Arms Control Treaties*. That report alleged Moscow’s violation of the BWC, a charge that was to be reiterated in the U.S. plenary statement to the Third Review Conference of the BWC in September 1991.

1992: Critical Developments

Developments in 1992 are critical in the unfolding events related to the Soviet BW program. In many ways they changed the terms of the debate on the issue, and they set the stage for efforts to bring the issue to closure. As yet, however, those efforts have been unsuccessful.

On January 29, 1992, President Yeltsin acknowledged in a television speech that the Soviet Union had experienced a “lag in implementing” the BWC. Meeting with President Bush at Camp David in February, he provided additional details regarding the Soviet program based on a report prepared at his direction by General Anatoly Kuntsevich, the head of his new commission to deal with chemical and biological weapons issues. According to the Kuntsevich report, the Soviet military had illegally developed prototypes of aerial bombs and rocket warheads capable of carrying anthrax, tularemia, and Q fever.²⁰ President Yeltsin promised President Bush that he would end funding for any BW research.

President Yeltsin’s promises, however, did not end the U.S. allegations and expressions of concern over the Soviet program. In its 1992 report on Soviet treaty violations, the United States argued that “the former Soviet Union’s extensive and ongoing offensive biological weapons program violates the BWC....The United States judges the Soviet capability may include advanced biological agents and toxins of which the US has no knowledge, and against which the US has no defense.”²¹

Despite this remarkable evaluation, the U.S. administration certified to the Congress on April 8, 1992, that Russia was making efforts to comply with the BWC. This certification was a precondition for the release of funds earmarked by the Congress under the “Nunn-Lugar” legislation for helping the former Soviet Union to tackle the proliferation potential inherent in its nuclear, chemical, and biological weapons programs. At the time, such assistance was deemed one of the nation’s highest priorities. As a result, even given the concerns expressed in some government quarters regarding the ongoing BW program, certification was forthcoming since it only had to acknowledge that the new Russian leadership was trying to come to grips with the problem, not that it had resolved it.

The view that Russia was trying was reinforced by President Yeltsin’s decree of April 11, 1992 calling for an end to any offensive BW work and for a commitment

to fulfill Russia’s BWC obligations, and providing for monitoring over compliance efforts. One month later, President Yeltsin acknowledged in a newspaper interview that the 1979 anthrax outbreak in Sverdlovsk had not been a natural event but an accidental release from a BW facility.²²

Whether President Yeltsin’s efforts were having any impact on the actual program remained of concern to both the United States and the United Kingdom. On August 24, 1992, U.S. Secretary of State Lawrence Eagleburger and British Foreign Secretary Douglas Hurd wrote to Andrei Kozyrev, the Russian foreign minister, expressing their anxiety:

We are very concerned that some aspects of the offensive biological warfare program, which President Yeltsin acknowledged as having existed and which he then banned in April, are in fact being continued covertly and without his knowledge. This issue could undermine the confidence in the U.S. and UK’s bilateral relationships with Russia.²³

One week later, State Department spokesman Richard Boucher stated the U.S. concern publicly, saying that “to date, we do not have the kind of concrete actions that would indicate that the Russian government has effectively terminated the illegal Soviet offensive biological weapons program.”²⁴

The Trilateral Agreement and Continuing Allegations

Under intense pressure from the United States and the United Kingdom, Russia agreed to negotiate a means to resolve U.S. and U.K. compliance concerns about ongoing BW-related activities. In September 1992, a Trilateral Agreement was concluded which, according to a joint statement, confirmed the commitment of the three governments “to full compliance with the Biological Weapons Convention.” It also “confirmed the termination of offensive research, the dismantlement of experimental technological lines for the production of biological agents, and the closure of the biological weapons testing facility” in the Aral Sea. In addition, the agreement provided for a series of visits to non-military sites in all three countries. It also created a number of working groups to address such issues as defining agreed modalities for visits to military sites, the identification of additional measures to enhance confidence in com-

pliance with the BWC, cooperation in biological defense, and exchange of information on past programs.²⁵

The Trilateral Agreement was designed to provide the framework within which continuing U.S. and British concerns about the BW program in Russia could be addressed and resolved. Unfortunately, it was unable to do so. In early 1994, the *Washington Post* quoted a U.S. official who contended that, "We have evidence that leads us to understand that there is still an offensive program underway."²⁶ Three months later, the *Washington Times* cited a U.S. Central Intelligence Agency (CIA) report alleging that Russia was continuing to develop BW, a report denied by the Russian Ministry of Foreign Affairs.²⁷ In May 1995, DIA Director General James Clapper testified before the Senate Select Committee on Intelligence that Russia's BW program was ongoing and involved at least 20 facilities. In July, Arms Control and Disarmament Agency (ACDA) Director John Holum in a press interview expressed U.S. dissatisfaction with Russia's BWC compliance.²⁸

U.S. expressions of concern continued throughout 1996 and 1997. The April 1996 edition of the DOD's *Proliferation: Threat and Response* stated that the "United States continues to have concerns about Russian compliance with the BWC....Russia may be retaining capability for the production of biological warfare agents."²⁹ This view was echoed in the ACDA's annual report to the Congress on arms control compliance, released in July 1996, which noted "some facilities, in addition to being engaged in legitimate activity, may be maintaining the capability to produce biological warfare agents." In a press conference at the Fourth Review Conference for the BWC in Geneva in November 1996, ACDA Director Holum named Russia as one of seven countries which ACDA suspected "with varying degrees of conviction, of implementing BW programs," a claim denied by a Russian Federation spokesman.³⁰ The August 1997 ACDA compliance report repeated the concern that Russia might be maintaining the capability to produce BW, a concern repeated in the 1998 report.³¹ A second edition of DOD's *Proliferation: Threat and Response* claimed that "Key components of the former Soviet program remain largely intact and may support a possible future mobilization capability....[W]ork outside the scope of legitimate biological defense activity may be occurring now at selected facilities within Russia."³²

These last statements reflect a distinct shift in the nature of the concerns expressed by the United States about Russian compliance with the BWC. Following the Trilateral Agreement, in particular, U.S. statements were careful not to claim that Russia was engaged in producing or weaponizing biological agents. Some statements suggested ongoing research, but U.S. concerns were stated primarily in terms of Russia's maintenance of a BW production capability that could be mobilized if Kremlin leaders so decided. To a large extent, these statements reflected the frustrations arising from the lack of implementation of the visits, agreed to under the Trilateral Agreement, which could have shed light on activities at key facilities.

VISITS

The United States and Britain used visits to facilities of potential concern to try to determine the issue of Soviet/Russian compliance with the BWC. The visits did not work as expected.

The first set of U.S./U.K. visits occurred in early 1991 after Soviet President Gorbachev, perhaps feeling the heat from the pressure applied by President Bush and Prime Minister Thatcher, invited a team to four Biopreparat facilities. The impact of the visits, from January 7-20, was probably not what President Gorbachev anticipated when he extended the invitation. In fact, they only reinforced the visitors' concerns about the Soviet BW program. According to one British participant in the visit, "This was clearly the most successful BW program on earth. These people just sat there and lied to us, and lied, and lied."³³ The U.S./U.K. team "met with denials, evasions, and large rooms that had been stripped of equipment and cleaned up."³⁴ According to one press report of a defector's version of events from the host side, "In every facility that had been opened for inspection...the Russians had established convincing cover stories that made it appear as if each site had been converted to research and manufacture of vaccines. The secret work continued in parts of the sites that were never visited."³⁵

In late 1991, the Russians made a similar series of visits to U.S. facilities. They included the U.S. Army Research Institute on Infectious Diseases (USAMRIID) at Fort Detrick in Frederick, Maryland, a key component of the DOD's biological defense program, and the facility at Pine Bluff, Arkansas, a former BW produc-

tion facility in the 1950s when the United States had an offensive BW program. Not surprisingly, the Russians came away suggesting that their concerns about an ongoing U.S. offensive BW program had not been ameliorated. Ken Alibek, who was part of the visiting team, was personally convinced by what he saw and heard in his exchanges with U.S. interlocutors that the United States was not engaged in offensive BW work.³⁶ Nevertheless, his views were dismissed in the final Russian report, which stated that evidence of an ongoing U.S. program had been discovered.³⁷ Rather than building confidence, the visits program quickly devolved into a political tit-for-tat trade of accusations.

Frustration rather than satisfaction was to become the leitmotif of further visits over the next several years. In November 1992, following President Yeltsin's acknowledgment of the past program and his decree banning further BW work, the Russians themselves conducted an investigation of the State Scientific Institute of Ultra-Pure Biological Preparations in St. Petersburg. The United States and Britain were invited to send participants, but only as observers with no real role in reaching conclusions about the facility's activities. To no one's surprise, the Russian investigation found no evidence of an ongoing program.³⁸

In October 1993, under the terms of the Trilateral Agreement, a U.S./U.K. team visited facilities at Pokrov and Berdsk, described in the press as two "large vaccine production complexes." A similar team went to Omutninsk and Oblensk three months later, in January 1994. By April, the press was reporting U.S. officials' claims that "we have evidence that leads us to understand that there is still an offensive BW program underway.... Yeltsin's decrees have not filtered down to the working level." They went on to argue that the Russians maintained "specialized equipment at non-military sites that ought to be dismantled...." and that the visits "demonstrated that a substantial infrastructure with no commercial purpose" and with links to the Russian military remained largely intact.³⁹

Once again, the Russians responded in kind. In February 1994, a Russian team visited a production facility of the Pfizer Corporation in Vigo, Indiana, a Pfizer research facility in Groton, Connecticut, and a research facility on Plum Island in New York. In April, perhaps in response to public expressions of U.S. concerns over the Russian program, Radio Moscow repeated a claim that had appeared earlier in *Izvestia* that Pfizer was "pro-

ducing biological weapons" and that it "not only preserved, but was modernizing the equipment designed earlier to produce biological warfare formulas."⁴⁰ Russian officials elaborated on these charges in 1995, claiming that U.S. commercial pharmaceutical plants were providing a standby capacity to enable the U.S. government to renew BW production—a mirror image of the expressed U.S. concerns.⁴¹ Once again, a process established to ameliorate a problem only intensified it.

The component of the Trilateral Agreement providing for visits to non-military facilities clearly had not accomplished the goals the United States had hoped it would. The efforts of the working group created by the agreement to negotiate modalities for visits to military facilities fared just as badly. In October 1994, "rules of the road" were agreed for visits to military facilities. No visits, however, were ever conducted. The ostensible reason for the inaction was a disagreement over which facilities should be included in the visits program. In particular, Russia insisted that it be allowed to visit U.S. military facilities outside the United States conducting research on problems such as infectious diseases. The United States refused. With this impasse the Trilateral Agreement process came to a complete stop.

CBM DECLARATIONS AND REVIEW CONFERENCES

At the Second BWC Review Conference in 1986, states parties to the convention agreed on a series of confidence-building measures (CBMs) that provided for exchange of information regarding biological-related research and other activities. These CBMs were supplemented by an additional set of information exchange measures agreed to at the Third Review Conference in September 1991. Among the second set of agreed measures was one calling for states parties to provide information about past offensive BW programs.⁴² Some of the frustration expressed by the United States over Russian compliance with the BWC stemmed from its view of the inadequacy of the information Moscow provided in these declarations.

Following the Third Review Conference, the United States requested in mid-June 1992 that Moscow give it the opportunity to review the draft of the report Moscow would submit to the United Nations to implement this CBM. Unfortunately, the United States found three drafts of the Russian submission either incomplete or unclear. Moscow did little to respond to the U.S. com-

plaint that its information was inadequate, thus reinforcing U.S. suspicions. In 1994, the United States was dismayed that there were “no additions to Russia’s 1992 declaration.” Again in 1996, Washington contended that the Russian BWC declaration was “incomplete and misleading in certain areas,” a claim that was reiterated in 1997 and 1998.⁴³

The United States has made public its concerns regarding Russian handling of the BW question at the BWC Review Conferences themselves. The approaches of the Bush and Clinton administrations in 1991 and 1996 respectively, however, were notably different in tone. In 1991, making the initial intervention for the United States in the opening plenary session of the Third Review Conference, ACDA Director Ronald F. Lehman, II stated: “We believe the Soviet Union and other states have extensive biological weapons programs in violation of the BW Convention. We insist that those signatories and parties not in compliance with their obligations ‘get their house in order’ and take steps necessary toward full compliance.”⁴⁴ John Holum, the ACDA director during the Fourth Review Conference in 1996, made the following comment in his plenary speech on behalf of the United States: “In 1992...President Yeltsin publicly and bravely acknowledged and then renounced the massive offensive biological weapons program Russia had inherited from the Soviet Union. The challenge to demonstrate full eradication of that program still remains.”⁴⁵

Each of these statements reflects U.S. priorities with Moscow at the time they were made. But they also suggest a difference in approach to the problem of compliance. When Director Lehman made his statement, the Soviet Union had not yet collapsed, and the major goal of the United States was to bring an end to the relatively recently discovered Biopreparat program whose size and scope had been both surprising and deeply disturbing. The United States and the United Kingdom—which also publicly alleged in its plenary statement that the Soviet Union was not in compliance with its treaty obligations—were using whatever means they had at their disposal to exert pressure to that end. Indeed, Soviet representatives to the 1991 Review Conference were worried that Washington might insist that the Soviet Union be singled out and named for noncompliance in the meeting’s final declaration.

Through its strong language, the United States demonstrated the seriousness with which it wanted to pursue the matter, including going public in a way that could generate additional pressure from the broader international community to ensure compliance. The United States and United Kingdom, for example, were joined in expressions of concern by France and other countries. Although Paris did not explicitly name the Soviet Union in its plenary intervention, nevertheless France left little room for doubt about its concerns regarding Moscow’s compliance with its BWC obligations.⁴⁶ The call by Director Lehman for states violating those obligations to come back into compliance was very explicit and direct. It made clear what the United States wanted.

The 1996 statement of Director Holum reflected the fact that Washington was now dealing with Russia and not the Soviet Union, and a relatively weak Russia at that. The conference was held almost two years after the Trilateral Agreement process had virtually stopped without answering U.S. and British questions about BWC compliance. Nevertheless, despite Director Holum’s press conference statement alleging a possible Russian BW program, the language in this official plenary statement implies a somewhat softer approach. It could suggest, as pointed out earlier, that the nature of the U.S. concern shifted from worries about BW production to uncertainty about ongoing research activities and Russia’s maintenance of a deployable production capability. It also suggests Washington believed that it had other, more important issues on which cooperation with Moscow was critical, and that it was not going to allow the question of BWC compliance to complicate the positive relationship it needed with the Kremlin to deal with those other issues. Finally, Washington may have been concerned that a more assertive statement would prompt a Russian reply alleging U.S. violations, a claim that the Russians were making in their media.

CONTINUING ALLEGATIONS

In 1998, a number of additional questions were added to the list of outstanding issues about the status of the Russian BW program. Some of these questions were provoked by public presentations of Ken Alibek, the former deputy director of Biopreparat who noted a number of things that did not seem to be consistent with claims that Russia had fully relinquished its interest in offensive BW. These included uncertainty that Yeltsin had fired the generals involved in the offensive program

as he had promised to do. Alibek also asked why the decision had been taken to store all of the documentation regarding the offensive programs rather than destroy it as unnecessary. In addition, he suggested that current activities in Russia might be designed to exploit the ambiguity in the BWC regarding offensive and defensive efforts.⁴⁷

Additional concerns were raised regarding continuing Russian interest in genetic engineering. In early December 1997, an article in the British journal *Vaccine*, for example, by researchers at Obolensk reported on their success in genetically engineering a strain of anthrax resistant to vaccine, thereby feeding press speculation about novel forms of Russian anthrax weapons.⁴⁸ Finally, in an interview with *Time* magazine, Yevgeni Tulykin, the former head of personnel at the Center for Military and Technical Problems of Anti-Bacteriological Defense, known as "Compound 19," at Sverdlovsk, alleged that the facility was discretely being rebuilt and re-equipped with the aim of resuming offensive BW production.⁴⁹ Compound 19 is a facility the United States has never been allowed to visit.

Alibek's concerns as well as the other questions received national attention in the spring of 1998. ABC News, for example, devoted a full hour of its news magazine, *Prime Time*, to biological weapons issues, highlighting Alibek and the Soviet/Russian program. Major stories on the issue appeared in the *Washington Post*, *The New Yorker*, and elsewhere.⁵⁰ Curiously, in response to these stories, the Clinton administration was virtually silent, making no public comment on the allegations, the U.S. assessment of the situation, or on efforts to find answers to ongoing concerns.

Some of the allegations or suggestions may not have been true. Some of the developments may have been perfectly innocent. In the context of the unresolved questions about the status of the Russian program, however, they were sufficient to maintain a level of anxiety about that program. In that light, the silence of the administration was both surprising and disturbing.

COMPLIANCE ISSUES

The U.S. handling of the problem of Soviet and Russian compliance with the BWC raises a number of questions with important implications for how the United States approaches compliance issues in the future.

First, a review of the U.S. response to Soviet violations of its arms control obligations suggests that although Washington was not reluctant to make allegations, it also was not necessarily inclined to take decisive action to resolve the issue. What action it did take was usually done behind the scenes, focusing on quiet diplomacy. Even after Vladimir Pasechnik defected to the United Kingdom, Washington and London sought to deal with the problem through diplomatic means, albeit at the highest level. Washington did not, for example, take the issue to the United Nations Security Council as it could have under the BWC.⁵¹ Nor did it avail itself of the additional provisions to explore allegations of noncompliance agreed to at the Third Review Conference in 1991.

The Trilateral Agreement process was intended to be the means by which U.S. and British concerns about noncompliant activity in Russia would be resolved. Although Washington and London did not always agree on how the process should be implemented, they did share the desire to keep others out of the process. The Trilateral Agreement process, however, not only did not achieve its objective, but a strong argument could be made that it actually worsened the situation. First, it led to more intense suspicions about the Russian program among U.S. and British participants. Those participants did not always agree on the implications of everything they saw during their visits, but they did share the view of the basic problem and Russia's need to alleviate their concerns. The visits did not do the job for either London or Washington.

Second, the agreement allowed the issue to become politicized in very unhelpful ways. It allowed Moscow, for example, to insist on reciprocal activity, which was a major Kremlin goal. This reciprocity gave Moscow the opportunity to portray the issue as something other than an exercise to address concerns about its noncompliance, which, from the U.S. perspective, was all that it was about. It also gave Moscow the opportunity to allege U.S. noncompliance in a tit-for-tat fashion.

Following the virtual collapse of the Trilateral Process, the United States continued to raise the issue with Russia, in the forum for ongoing dialogue led by Vice President Al Gore and then Russian Prime Minister Viktor Chernomyrdin, for example. Again, this was done in private, and it appears that the United States never gave the issue as high a priority as other issues shaping the U.S.-Russian relationship. The U.S. view seemed to

be that the BW issue would only contribute a sour note that would be counterproductive when the United States was seeking Russian cooperation on a number of other matters (such as missile and nuclear sales to Iran) and when the Russian political situation was deemed highly fragile.

The one time the United States broke out of its quiet diplomacy was at the 1991 Third BWC Review Conference. At that time, the United States used strong language regarding noncompliance before the whole international community. Its discussions in the corridor conveyed that the issue was receiving priority attention, and the Soviet representatives perceived some risks if they were not cooperative. This approach seemed to promote a more cooperative attitude on Moscow's part. The Kremlin agreed, for example, to the new CBM calling for information exchange on past offensive BW programs. Ultimately, however, this approach was also not sufficient to resolve the matter.

The lack of success of the combination of public accusations or expressions of concern and quiet diplomacy raises the question whether a higher profile approach would have been more successful. Taking such a course, however, was likely to have put the U.S.-Russian relationship under greater strain. The decision was made that the cost of doing so could have been too high since it might have jeopardized other interests at play in that relationship deemed more important. A similar judgment could be the reason for the Clinton administration's silence despite the media play the issue received in the spring of 1998.

Not making the issue of Russian noncompliance with the BWC the highest priority issue with Moscow begs the question of what priority it did have. Ongoing expressions of concern suggest that the issue mattered, at least to some policymakers, but apparently not enough that they or others were willing to spend political capital to do anything about it.

In a similar vein, was limiting the interlocutors with Moscow to just Washington and London the most effective approach? It is not clear what the United States was asking the rest of the international community to do with regard to the noncompliance issue. Creating an international coalition to increase pressure on the Kremlin to resolve the problem did not seem part of the strategy, particularly as little of the information regarding the details of the Biopreparat program provided by the

defectors was shared with friends and allies. Other countries might not have been willing to jeopardize their relations with the Kremlin and thus would not have responded as the United States wished had it asked something of them. But by not asking, the United States ensured that they would do nothing. The United States did not give them a stake in the issue. It should not be surprising that the rest of the international community took little interest.

A third question relating to the future U.S. approach to arms control noncompliance relates to the goals of noncompliance. In this case, the United States demonstrated no interest in penalizing or punishing the Soviet Union or Russia for noncompliant behavior. Once noncompliance was identified, the overriding goal became restoration of compliance. If this situation is characteristic of the U.S. approach to noncompliance more generally, what is the risk perceived by those states who might be considering violating their treaty obligations? What price do they believe they will be required to pay for inappropriate behavior?

The Soviet Union initiated the largest, most robust, and most sophisticated BW program in the world in violation of its obligations as a party to the BWC. But when found guilty, it paid no price. Clearly, how the international community enforces arms control treaties cannot be compared to law enforcement within a state where a party found guilty of violating a law is made to pay a penalty with the size of the punishment determined by the seriousness of the violation. Yet, on the international level, is past unacceptable behavior to be tolerated once the miscreant stops it, or just promises to do so without providing any proof that he has? Should some sense of penalty or punishment become a more prominent feature in states' thinking about noncompliance and their response to it?

The difficulties of implementing such an approach are significant, especially establishing a coalition of states both willing to and capable of doing something. Perhaps restoration of compliance is the most that can be asked. However, if the instances of noncompliance without penalty multiply and unpunished violations (even if discovered) become an accepted feature of arms control in the future, the risk to the treaties is significant. Treaties' value as the embodiment of the international norms regarding acceptable and unacceptable international behavior would be badly eroded, creating a more conducive environment for the further spread of these weapons.

The manner in which the United States has expressed its concerns about the Russian BW program have been carefully couched. In part, this results from the fact that formal administration statements have implications for other aspects of the U.S. relationship with Russia. In particular, in order for Russia to qualify for funds under the Cooperative Threat Reduction (CTR) program, the administration must certify to the Congress that Russia is in compliance with all of its arms control obligations. The CTR program was initiated by Senators Sam Nunn and Richard Lugar to provide assistance to Russia in securing and safeguarding, as well as destroying, its weapons of mass destruction. The United States has provided millions of dollars in such assistance over the years, and the program remains an important priority for the administration.

While the program's priority has been given to dealing with the potential "loose nukes" problem in Russia, it is also being used to promote transparency in Russia's biological-related activities, particularly at some of the former Biopreparat laboratories.⁵² In a sense, the CTR program and related efforts have emerged as a more acceptable alternative to the Trilateral Agreement process for Washington for dealing with the Russian BW issue. Through efforts of the DOD, Health and Human Services, and others promoted through the CTR program and related programs, considerable access has been secured to former Biopreparat facilities. Indeed, it appears that even some limited access could be gained to military biological-related facilities by the prospect of CTR funding.

If the administration were to claim, however, not just that it had concerns about the BW mobilization potential in Russia, but that Moscow was in noncompliance with the BWC, then it would be impossible to provide the necessary CTR certification. This problem of CTR certification highlights the problem of confronting consequences of alleging a state's noncompliance. In this case, the consequence runs directly contrary to another important U.S. interest. It demonstrates once again that responding to noncompliance is not given as high a priority as other objectives.

This ordering of priorities may be appropriate. Indeed, making a response to noncompliance an important policy matter would demand some kind of action. As often as not, the required action is likely to cause problems with the state whose noncompliance has been alleged. If that

state is important to the United States for other reasons, as Russia obviously is, then the tension among competing priorities could become intense. If responding to noncompliance prevails as the preferred policy option, it may jeopardize other policy priorities. As a result, if this case study is any indication, compliance is not likely to move to the top of the agenda.

Such an approach, however, is not without risks and costs. In particular, it creates the danger that the international norms embodied in multilateral agreements will erode and behavior deemed inconsistent with those norms will increase. The impact will be to prompt greater interest in developing military capabilities the world community has deemed unacceptable. The result could be a more dangerous world.

The foregoing suggestion could be deemed an unrealistically bleak assessment of the consequences of the approach taken by the United States in the case of its response to the Soviet, and perhaps Russian violation of the BWC. That may be. But the potential for such a result should not be totally dismissed. The United States, and the international community as a whole, has devoted far more attention to negotiating arms control agreements than to implementing and enforcing them. The impact of how those agreements are implemented and enforced will only be felt over time as results accumulate. Prudence suggests that some greater attention and evaluation should be given to the potential consequences of noncompliance. Doing so may prevent the worst.

¹ U.S. Arms Control and Disarmament Agency, "Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction," *Arms Control and Disarmament Agreements: Texts and Histories of the Negotiations* (Washington, D.C.: U.S. Government Printing Office, 1966), p. 98.

² For a history of the Soviet program through the end of World War II, see Valentin Bojtsov and Erhard Geissler, "Military Biology in the USSR, 1920-45," in Erhard Geissler and John Ellis van Courtland Moon, eds., *Biological and Toxin Weapons: Research, Development and Use from the Middle Ages to 1945* (Oxford: Oxford University Press for the Stockholm International Peace Research Institute, 1999), pp. 153-189.

³ Claude Wachtel, "The Biological Strategic Defense Initiative in the USSR," unpublished paper.

⁴ Jonathan Tucker, "Biological Weapons Proliferation Concerns," in Malcolm R. Dando, Graham S. Pearson, and Tibor Toth, eds., *Verification of the Biological and Toxin Weapons Convention* (Dordrecht, The Netherlands and Boston: Kluwer Academic Publishers, 2000), p. 43.

⁵ U.S. Department of Defense, *Soviet Military Forces in Transition* (Washington, D.C.: U.S. Government Printing Office, September 1991).

⁶ Its administrative personnel apparently were taken from the Ministry of

Medium Machine Building, which acted as the intermediary for funding and for the supply of resources. See Milton Leitenberg, *Biological Weapons Arms Control*, PRAC Paper No. 16, Center for International and Security Studies at Maryland, School of Public Affairs, University of Maryland, May 1996, p. 9.

⁷ For a detailed discussion of the activities of Biopreparat, see Ken Alibek with Stephen Handleman, *Biohazard* (New York: Random House, 1999). Alibek has an M.D. in epidemiology and infectious diseases and a Ph.D. in microbiology. Before arriving in the United States in 1992, he served as the First Deputy Chief of the Soviet offensive biological weapons program. A retired Soviet Army colonel, Alibek was involved in a number of efforts including large-scale microbial bioprocessing, antibacterial and antiviral drug development, development of regimens for urgent prophylaxis and treatment of diseases caused by BW, and mass casualty handling. After arriving in the United States, he has served as consultant to numerous U.S. government agencies. For more information on the agents and diseases on which Biopreparat focused, see ANSER, "Interview with Serguei Popov," *Journal of Homeland Defense*, November 13, 2000, <www.homelanddefense.org>. Popov, a biochemist, served as a division head for the State Research Center of Virology and Biotechnology (Vector) and the State Research Center for Applied Microbiology in Obolensk, branches of the Soviet program dedicated to developing genetically enhanced weapons. He defected in 1992 and is currently working in the United States.

⁸ John Barry, "Planning a Plague?" *Newsweek*, February 1, 1993.

⁹ "Biological Weapons in the Former Soviet Union: An Interview with Dr. Kenneth Alibek," *The Nonproliferation Review* 6 (Spring-Summer 1999), pp. 2-3.

¹⁰ Richard Preston, "The Bioweaponers," *The New Yorker*, March 9, 1998, p. 57.

¹¹ James Adams, *The New Spies: Exploring the Frontiers of Espionage* (London: Hutchinson, 1994) pp. 270-283.

¹² One of the best analyses of the events at Sverdlovsk are in Matthew Meselson, Jeanne Guilemin, Martin Hugh-Jones, Alexander Langmuir, Ilona Popova, Alexis Shelokov, and Olga Yampolskaya, "The Sverdlovsk Anthrax Outbreak of 1979," *Science* 266 (November 18, 1994), pp. 1202-1208.

¹³ "Sverdlovsk Outbreak: A Portent of Disaster," *Jane's Intelligence Review*, May 1988, p. 37.

¹⁴ Milton Leitenberg, "Conversion of BW R&D Facilities," in Erhard Geissler and John P. Woodall, eds., *Control of Dual Threat Agents: The Vaccines for Peace Programme* (London: Oxford University Press for the Stockholm International Peace Research Institute, 1994), p. 90.

¹⁵ *Ibid.*, p. 91.

¹⁶ U.S. Defense Intelligence Agency, *Soviet Biological Warfare Threat*, DST-1610F-057-86, 1986, p. v.

¹⁷ *Ibid.*, pp. 5-7.

¹⁸ Russell Disvik, "Russia Commits to End Bioweapons Program," United States Information Agency, <<http://www.fas.org/nuke/control/bwc/news/920914-242819.htm>>.

¹⁹ "The Soviet Biological Warfare Program: A Historical Perspective and Current Issues," in the Seminar Series on Responding to the Biological Weapons Challenge, sponsored by the Chemical and Biological Arms Control Institute, May 19, 1998.

²⁰ Tucker, "Biological Weapons Proliferation Concerns," p. 47.

²¹ "Biological Weapons Convention Chronology," *Arms Control Reporter*, March 30, 1992, p. 701.B.89.

²² *Ibid.*, May 23, 1992, p. 701.B.94.

²³ Tucker, "Biological Weapons Proliferation Concerns," p. 48.

²⁴ *Ibid.*

²⁵ U.S. Department of State, "Joint UK/US/Russian Statement on Biological Weapons," September 14, 1992.

²⁶ "U.S. Officials Allege that Russians Are Working on Biological Arms," *Washington Post*, April 8, 1994, p. A28.

²⁷ *Washington Times*, September 27, 1994.

²⁸ "Biological Weapons Convention Chronology," *Arms Control Reporter*, July 19, 1995, p. 701.B.146.

²⁹ U.S. Department of Defense, *Proliferation: Threat and Response* (Washington, D.C.: U.S. Government Printing Office, April 1996), p. 32.

³⁰ Permanent Mission of the Russian Federation, "Press Release by the Russian Delegation to the IV Review Conference of the 1972 Biological Weapons Convention," Geneva, November 12, 1996. In this statement, the Russians declared that Russia "considers compliance with its international obligations in the field of biological weapons as one of its state policy priorities." It could not help taking a swipe at the United States, however, noting, "We would also like to be sure that the United States is not involved in any activity prohibited by the Convention. The Russian side has demonstrated a positive approach to the removal of mutual concerns within the framework of the process based on the 1992 Joint Declaration by Russia, the USA and the United Kingdom."

³¹ U.S. Arms Control and Disarmament Agency, "Adherence to and Compliance with Arms Control Agreements, 1998," p. 6.

³² Department of Defense, *Proliferation: Threat and Response* (Washington, D.C.: U.S. Government Printing Office, December 1997), <<http://www.defenselink.mil/pubs/prolif97/fsu.html>>, p. 7.

³³ Preston, "The Bioweaponers," p. 59.

³⁴ *Ibid.*

³⁵ James Adams, "The Red Death: The Untold Story of Russia's Secret Biological Weapons," *Sunday Times*, March 27, 1994, Section 4, pp. 1-2.

³⁶ "Biological Weapons in the Former Soviet Union: An Interview with Dr. Kenneth Alibek," p. 8.

³⁷ Preston, "The Bioweaponers," p. 59.

³⁸ "Biological Weapons Convention Chronology," *Arms Control Reporter*, November 18-21, 1992, p. 701.B.103.

³⁹ "U.S. Officials Allege that Russians Are Working on Biological Arms," *Washington Post*, April 8, 1994, p. A28.

⁴⁰ Radio Moscow World Service, April 12, 1994, cited in Milton Leitenberg, *Biological Weapons Arms Control*, fn. 17, p. 11.

⁴¹ *Ibid.*

⁴² For discussion of the other CBMs, see Michael Moodie, "Arms Control Programs and Biological Weapons," in Brad Roberts, ed., *Biological Weapons: Weapons of the Future?* (Washington, D.C.: Center for Strategic and International Studies, 1993), pp. 47-58.

⁴³ U.S. Arms Control and Disarmament Agency, "Adherence To and Compliance With Arms Control Agreements: 1996 Report submitted to the Congress," Washington, D.C., p. 6. See also reports of the same title for 1997 and 1998.

⁴⁴ U.S. Arms Control and Disarmament Agency, "Official Text: Speech by Ronald F. Lehman, II, Director, U.S. ACDA, to the Third Review Conference of the Biological Weapons Convention," Geneva, September 10, 1991.

⁴⁵ U.S. Arms Control and Disarmament Agency, "Remarks of the Honorable John D. Holum, Director, U.S. ACDA, to the Fourth Review Conference of the Biological Weapons Convention," Geneva, November 26, 1996.

⁴⁶ The characterization of the posture taken by the French is based on the recollection of the author, who was present at the meeting as a senior member of the U.S. delegation.

⁴⁷ Many of these observations were made in a presentation, "The Soviet Biological Warfare Program: A Historical Perspective and Current Issues," in the Seminar Series on Responding to the Biological Weapons Challenge, sponsored by the Chemical and Biological Arms Control Institute, May 19, 1998.

⁴⁸ "News Chronology," *The CBW Conventions Bulletin*, 39, March 1998, p. 28.

⁴⁹ Paul Quinn-Judge, "The Breeding of Death," *Time*, February 16, 1998, <www.pathfinder.com/time/mag...216/europe.the_breeding_of_d6.html>..

⁵⁰ See for example, Preston, "The Bioweaponers."

⁵¹ Article VI (1) of the BWC states: "Any State Party to this Convention which finds that any other State Party is acting in breach of obligations deriving from the provisions of this Convention may lodge a complaint with the Security Council of the United Nations. Such a complaint should include all possible evidence confirming its validity, as well as a request for its consideration by the Security Council."

⁵² For information on CTR activities in the BW area, see Jonathan B. Tucker and Kathleen Vogel, "Preventing the Proliferation of Chemical and Biological Weapon Materials and Know-How," *The Nonproliferation Review* 7 (Spring 2000), pp. 88-97.