



Director of
Central
Intelligence

~~Secret~~

(b)(1)
(b)(3)
(b)(6)

Use of Toxins and Other Lethal Chemicals in Southeast Asia and Afghanistan

Special National Intelligence Estimate
Memorandum to Holders

APPROVED FOR
RELEASE DATE:
16-Dec-2010

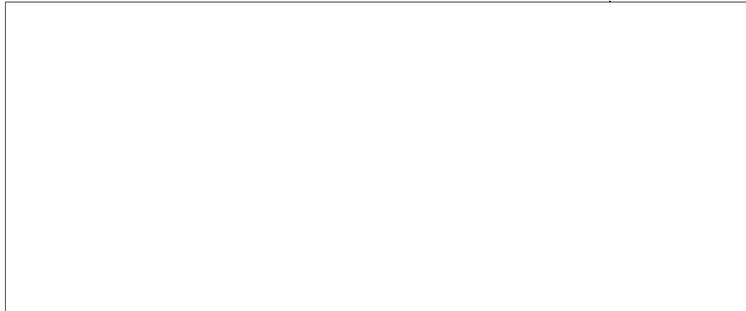
~~Secret~~

SNIE 11/50/37-82
2 March 1983

Copy 371

~~Warning Notice
Sensitive Intelligence Sources and Methods Involved
(WNINTEL)~~

~~NATIONAL SECURITY INFORMATION
Unauthorized Disclosure Subject to Criminal Sanctions~~



~~SECRET~~

MEMORANDUM TO HOLDERS

SNIE 11/50/37-82

USE OF TOXINS AND OTHER LETHAL
CHEMICALS IN SOUTHEAST ASIA
AND AFGHANISTAN

Information available as of 2 March 1983 was
used in the preparation of this Estimate.

~~SECRET~~

~~SECRET~~

THIS ESTIMATE IS ISSUED BY THE DIRECTOR OF CENTRAL INTELLIGENCE.

THE NATIONAL FOREIGN INTELLIGENCE BOARD CONCURS.

The following intelligence organizations participated in the preparation of the Estimate:

The Central Intelligence Agency, the Defense Intelligence Agency, the National Security Agency, and the intelligence organization of the Department of State.

Also Participating:

The Assistant Chief of Staff for Intelligence, Department of the Army

The Director of Naval Intelligence, Department of the Navy

The Assistant Chief of Staff, Intelligence, Department of the Air Force

The Director of Intelligence, Headquarters, Marine Corps

~~SECRET~~

~~SECRET~~

KEY JUDGMENTS

In the year that has elapsed since the publication of SNIE 11/50/37-82, the use of chemical and toxin agents has continued and we have found nothing in the evidence acquired since the beginning of 1982 that would contradict our earlier findings on any of the countries with which we are concerned. The evidence has continued to come from many different sources and has amplified our understanding of events of previous years as well as events occurring during 1982.

In *Afghanistan*, the Soviets have continued to use chemical agents selectively, through at least January 1983. Analyses of physical samples have, for the first time, provided evidence of mycotoxins. Chemical agents other than toxins have also been used, but we have not yet been able to identify them through sample analysis.

In *Laos*, Vietnamese and Lao troops, under Soviet supervision, have continued to use lethal and incapacitating chemicals and toxins against the H'Mong resistance, through at least December 1982.

In *Kampuchea*, the Vietnamese forces have continued to use lethal and incapacitating chemicals and toxins against the DK and KPRLF resistance forces, through at least February 1983.

In *Thailand*, in 1982, Thai villages near the Kampuchean border for the first time became targets of Vietnamese chemical attacks. Samples from these attacks have been analyzed and trichothecene mycotoxins have been identified.

Physical samples from both Laos and Kampuchea provide further confirmation that trichothecene mycotoxins are among the agents used. Our earlier conclusions on this have been reinforced by much better medical data and additional chemical analyses and special intelligence. Toxins have been found in urine, blood, and tissues of victims of "yellow rain" attacks and in samples of material collected from attack sites.

Soviet implication in the provision and use of these weapons continues to be supported by special intelligence and by reporting from defectors, resistance groups, and refugees.

In 1982, independent investigations conducted by other governments—notably those of Canada, the United Kingdom, France, and West Germany—as well as by private groups, yielded evidence and analysis broadly supportive of US conclusions.

1
~~SECRET~~

Page 2

Intentionally Blank

~~SECRET~~

DISCUSSION



~~SECRET~~



analysis of a Soviet protective mask has revealed the presence of T-2 toxin (sample 7, annex D, table D-3), in a quantity of approximately 1 microgram on the area examined (one-fourth of the mask). This finding was confirmed independently by three different laboratories. [redacted]

12. Also for the first time, the United States acquired a large quantity (34 sets) of new (unused) Soviet gas masks, canisters, and complete protective suits captured from a Soviet convoy by Mujahedin forces in August 1982. No information on the location of the attack or intended destination of the convoy is available. It is reasonable to hypothesize that the Soviets would not provide such protective gear to their forces in Afghanistan unless they anticipated a need for it—that is, for use in connection with employment of CW agents and weapons. Comprehensive protective gear of this sort would not be required as protection against the kinds of nonlethal riot control chemicals that the Mujahedin have been accused of using. [redacted]

13. Reporting from Afghanistan had long included descriptions of events similar to the "yellow rain" attacks reported from Southeast Asia. However, because of the remoteness of attack sites and difficulties in sample collection, we have been unable to obtain physical evidence of the presence of mycotoxins in Afghanistan until the recent confirmation of the presence of T-2 on the Soviet gas mask. This now greatly strengthens our previous assessment that "toxins probably have been used since 1980." [redacted]

14. The biggest mystery remains the identification of the other agents being used. Some familiar CW agents can be inferred from descriptions of signs and symptoms. For example, the medical effects resulting from some chemical attacks are consistent with the use of the nerve agent tabun. (Reportedly, tabun is one of the agents present in the CW stocks maintained by Soviet forces in Afghanistan.) Other reports indicate use of an incapacitating agent that causes unconsciousness for several hours. [redacted]

15. As early as 1980 we began receiving reports of Soviet forces dropping or pumping one or more chemical agents into tunnels, caves, and underground waterways where resistance forces and their families take shelter. Reports of those incidents contain descriptions of symptoms that have puzzled the experts. Of particular concern are reports of rapid blackening and decomposition of tissue, a description that fits none of the CW agents known to us. The frequency

In Afghanistan

10. The Soviets have continued selective use of chemical agents throughout the past year against resistance forces and against villages that did not cooperate with the Afghan authorities. Reports during 1982 have amplified and added credibility to our earlier findings. In Afghanistan there is no question that the Soviets themselves are using chemical agents and possibly toxins. In addition, we continue to receive reports that the Soviets have provided chemical agents to the Afghan forces for use against the Mujahedin. [redacted]

11. For the first time we have evidence of the presence of trichothecene mycotoxins in Afghanistan, through the discovery of toxin contamination of a piece of Soviet protective equipment. Laboratory

~~SECRET~~

and consistency of these accounts from many different tribal groups have led us to conclude that they must be taken seriously and that we may be dealing with a new class of chemical or toxin agent or with combinations not previously known to the West. In one case, US intelligence officers interviewed eyewitnesses who reported that gasoline and probably diesel fuel were poured into tunnels and ignited with incendiary powder and shells. The number of deaths and condition of the bodies were consistent with fire and asphyxiation. []

16. There has been no change in the manner of dissemination of the chemical substances. The predominant delivery system still appears to be helicopters firing CW rockets, dropping chemical-loaded bombs or canisters, or spraying chemicals directly. []

Findings From Other Countries

17. There is a growing body of international evidence that supports the US findings of chemical weapons use. Non-US private experts and governments have collected and independently analyzed samples and have obtained testimony from witnesses of attacks and from medical personnel. A few examples follow. []

18. Non-American physicians with good credentials in tropical medicine have testified that they have treated chemical warfare victims. For example, a French physician has provided testimony on his treatment of victims at a Kampuchean hospital. Similar testimony came from a Swedish International Red Cross worker in Kampuchea. A New Zealand doctor and his British associate at the World Vision Hospital at Ban Vinai refugee camp are convinced that H'Mong villagers are victims of repeated chemical warfare attacks in Laos. An increasing number of these physicians have made strong public statements and, to date, not one doctor who has examined victims claiming CW injury has publicly or privately disputed his claims after examination. []

19. Two French physicians who worked in Afghanistan described the unusual wounds caused by what they believe were poisoned bullets. French scientists have found trichothecene toxins in samples from Southeast Asia. Thai scientists have reported finding mycotoxins in their samples. []

20. [] officers acquired portions of gas masks from attack sites in Afghanistan.

The tests conducted on them are as yet incomplete, but early indications and some signs and symptoms of persons handling the contaminated masks suggest that chemical agents were used in the attacks. []

21. Several carefully done epidemiological studies have been prepared by Canadian governmental and academic institutions. Their findings are consistent with ours on all but technically minor points. []

22. The December 1982 report of the UN Experts Group provided as much support as the United States could reasonably expect from such a multilateral entity. The document supported individual US claims in more than a dozen specific technical areas, faulted the Soviet "scientific explanation" in strong language, and declared other hypotheses (other than use of CW) to be remote and inconsistent with the human testimony and the laboratory data at hand. Its failure to support the US charges fully was attributed by most of the world press to the political—not scientific—inhibitions of the Experts Group. []

Implications for Intelligence

23. The fact that chemical and toxin agents continue to be used in Laos, Kampuchea, and Afghanistan despite a highly publicized UN investigation, diplomatic pressure on the Soviet, Vietnamese, and Lao Governments, and growing international acceptance of the evidence suggests that the perpetrating governments do not believe that their activities are as yet sufficiently damaging politically to warrant their termination. This is not to say that Moscow, Hanoi, and Vientiane have ignored the charges being levied against them. But rather than stopping the illegal use of chemical and toxin agents, they have launched a major propaganda counteroffensive. []

24. In May 1982 the Soviets submitted a "scientific" study to the UN blaming the toxin poisoning in Laos and Kampuchea on US use of herbicides during the Vietnam war. The Soviet study claims that widespread use of herbicides allowed toxin-producing fungi to flourish in Vietnam. Winds then allegedly blew the spores into Laos and Kampuchea, contaminating the environment. It is surprising that the Soviet Academy of Sciences would lend its name to the production of such a scientifically indefensible paper. Nevertheless, the overall Soviet counterpropaganda effort has not been without effect in diverting public attention away from the Soviet actions and focusing them on the

~~SECRET~~

proposed US chemical warfare modernization program and on past US use of herbicides in Vietnam. An international scientific conference was held in Ho Chi Minh City (Saigon) in January 1983 to call attention to the long-term effects of herbicide use on nature and man.

25. The comprehensive assessment of the CW evidence that the United States has published and briefed worldwide in classified and unclassified form has helped to persuade many governments that lethal agents, including toxins, are being used and that the

Soviet Union is implicated. There is a reluctance on the part of most governments, however, to levy such charges publicly. Governments are loath to take a public position on the issue because to acknowledge that the USSR has violated its international commitments is to call into question the trustworthiness of the USSR as a party to arms limitation agreements. Even the most conclusive and incontrovertible intelligence evidence is unlikely to galvanize other governments into forceful public positions on an issue that has such politically unpleasant implications.

6
~~SECRET~~

~~SECRET~~

ANNEX A
INCREMENTAL EVIDENCE



A-1
~~SECRET~~

Afghanistan

12. The evidence from Afghanistan is different from that from Southeast Asia. It has been impossible to obtain fresh samples of any type. However, reporting on chemical attacks comes from a wider variety of sources [redacted] throughout the country provides evidence to corroborate HUMINT reporting. [redacted]

13. [redacted] in September 1981 a Soviet helicopter sprayed a yellow mist in Paktia Province (Sheik Amir, 3315N 6949E) that caused 16 deaths. The survivors had bloody tears and noses; extensive bleeding was reported in those who died. [redacted] described a similar attack in Nangarhar Province in the same month, in which four persons were killed. [redacted]

14. Since early 1980 we have had numerous reports of Soviet use of chemical agents on resistance forces and their families who were hiding in caves, tunnels, and underground waterways. A HUMINT source [redacted] [redacted] says that, on 20 September 1982, Soviet soldiers poisoned underground waterways in Lowgar Province south of Kabul where the Mujahedin were hiding. A Mujahedin commander in Pakistan reported a similar event in the same province on 13 September, which resulted in the deaths of 60 men and 13 children. Both sources described a chemical substance being pumped through a hose from an armored vehicle into the waterways. Furthermore, villagers who have witnessed Soviet operations against underground waterways have provided testimony at international meetings describing in detail how the Soviets have used chemical agents and explosives in this way. Moreover, a Cuban emigre

trained in the use of Soviet chemical weapons has previously described a dissemination technique that involves pumping lethal gas through a hose. [redacted]

15. In both of these September attacks, the victims' bodies reportedly decomposed rapidly, and the flesh peeled away when attempts were made to move them.² Since 1979 Mujahedin resistance leaders, refugees, journalists, and Afghan defectors have described chemical attacks that caused almost identical symptoms. Most reports have portrayed the skin as being blue-black after death. Such symptoms seem bizarre, but the large number of reports from a variety of sources suggests they cannot be dismissed as mere propaganda. For example, an Afghan [redacted]

[redacted] observed a victim of what he believes was a chemical attack. The patient had blackened skin, which was very shiny except for a large number of spots all over the body. [redacted]

More recently, a Soviet soldier who defected to the Mujahedin said in a press interview that a Soviet CW agent called "smersh," which is "100 percent lethal," causes the flesh to become very soft. [redacted]

16. The defector also said that the Soviets had stores of "picric acid," "smersh," and an incapacitating agent in Qonduz and Kabul. In a subsequent interview it was determined that the "picric acid" referred to was chloropicrin, an extremely strong irritating agent with an inhalation lethality nine times greater than that of chlorine. The defector said that "smersh" was delivered by rockets fired from a helicopter and that chloropicrin and the incapacitating agent were contained in cylinders and released through a vent in the aircraft. Several Mujahedin have described tanks or cylinders outside helicopters from which chemicals are sprayed. [redacted]

17. Further, the defector reported that chemical agents had been used in June 1982 on a highway between Termez and the Salang Pass north of Kabul. He stated that the Soviets have been preoccupied with protecting the roads and that chemicals were sprayed by planes along the areas adjacent to highways. Chemical grenades reportedly have been used. We suggest that the grenades contain toxic smokes, but the data

² In the late 1960s, the Soviets reportedly tested a chemical agent that killed dogs immediately and decomposed their flesh within a half hour. [redacted]

are inadequate to allow us to hypothesize about the contents beyond that. [redacted]

18. The British journalist who interviewed the Soviet defector cited above also reported on two attacks he had heard about from other sources. One was an attack in the spring of 1982 on Kaiba, where Soviet soldiers shot victims rendered unconscious by a gas. The other was near Herat in the summer of 1982 when Soviets reportedly loaded the bodies of victims of a gas attack on a truck and took them away, possibly for autopsy. [redacted]

19. An Afghan [redacted] told US officials on 5 October 1982 that [redacted] 15 Mujahedin for red skin lesions which he said were caused by Soviet CW attacks in Qandahar Province in May or June 1982. The Mujahedin claimed that Soviet helicopters fired rockets which emitted gases on impact—black, yellow, and white in color. Three Mujahedin died within 12 hours of one attack, in the general area of Maharijat south of Qandahar. [redacted]

20. In early December 1981 a group of 15 refugees attempting escape to Pakistan were attacked by a helicopter using gas that killed four or five of them (youngest and oldest) and rendered the rest unconscious for five or six hours. The attack occurred about 60 kilometers northwest of Jalalabad. [redacted]

21. [redacted] 200 to 300 gas containers at Qandahar Airport that were painted in greens and browns. The containers generally were 35 to 40 inches high and about 26 to 30 inches in diameter. (This size generally matches that of containers known to be used by the Soviets to store CW agents in their chemical depots.) A friend [redacted] [redacted] said that the containers held chemicals used against the Afghan resistance. He described three types. One caused burning in the throat and suffocation, one caused what looked like smallpox and blistering, and the third made victims tired and sleepy so that they could not run or fight. Further, the friend stated that the containers are put into special casings that are dropped from aircraft and explode on impact, emitting a large cloud of smoke, usually yellow, but sometimes other colors. [redacted]

~~SECRET~~

22. Mujahedin sources described tanks firing grenades in August 1981 in the Arghandab Valley which produced a foggy mist that rendered 10 members of the resistance force unconscious. The Soviets carried their lifeless-appearing bodies away in armored vehicles.

23.

A-4

~~SECRET~~

~~SECRET~~

ANNEX B



B-1
~~SECRET~~

~~SECRET~~

ANNEX C

DETAILS OF CHEMICAL ATTACKS

This annex comprises four tables (C-1, C-2, C-3, and C-4) providing detailed information on CW attacks in Laos, Kampuchea, Thailand, and Afghanistan—location of attack, source of information, method of delivery, form of chemical, and number of casualties.



C-1

~~SECRET~~

~~SECRET~~

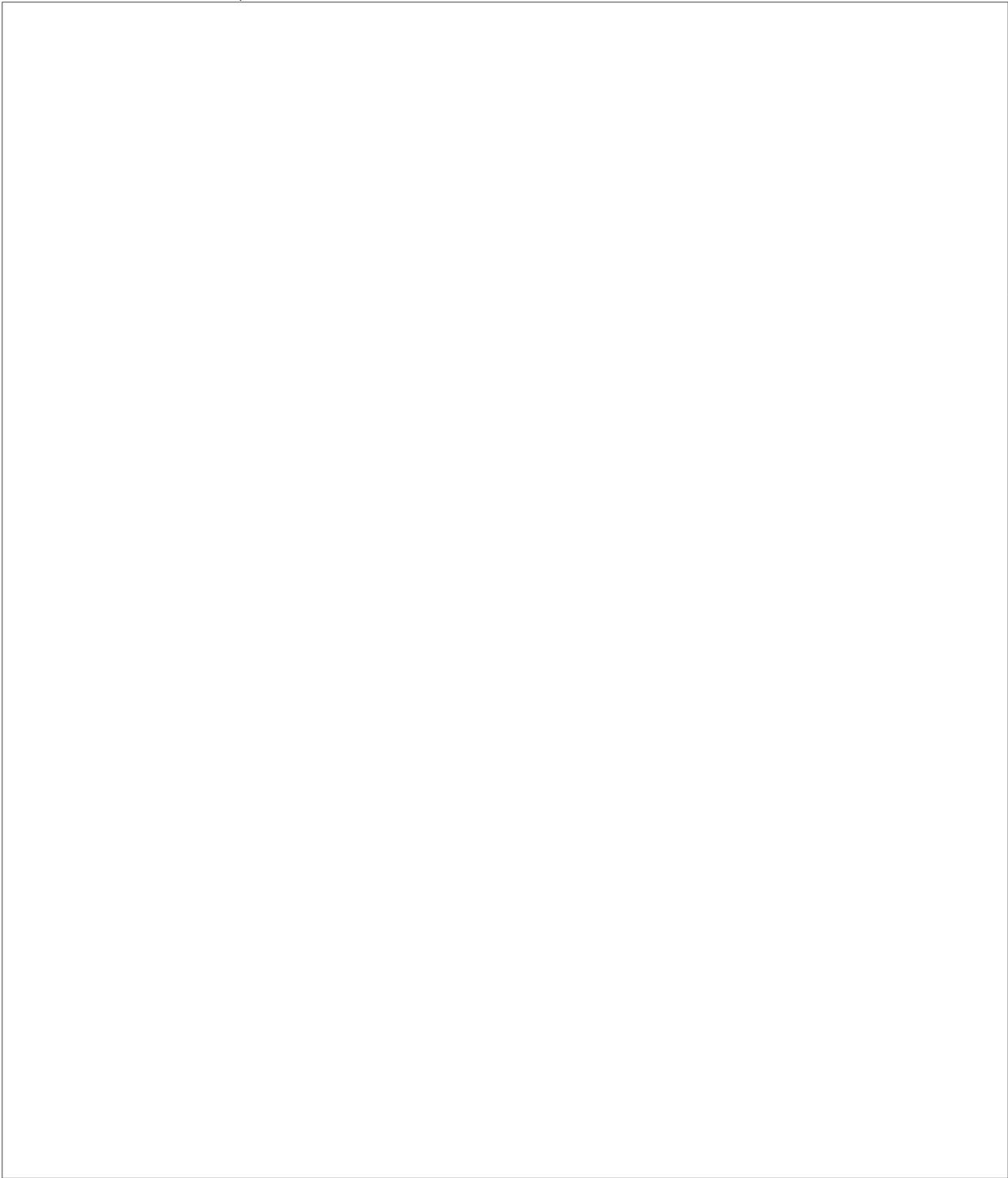
Table C-1



C-2
~~SECRET~~

~~SECRET~~

Table C-2



C-3
~~SECRET~~

~~SECRET~~

Table C-2 (continued)



C-4
~~SECRET~~

~~SECRET~~

Table C-3



C-5
~~SECRET~~

~~SECRET~~

Table C-4

Afghanistan: Summary of Chemical Warfare Attacks, 1982-83

Date of Attack	Location	Source of Information	Delivery Method	Form of Chemical	Persons Killed	Persons Taken Ill
Jan	Lowgar Province	Mujahedin	Helicopter	?	?	?
Early Feb	North of Shindand		Aircraft	Yellow substance	4	?
4, 5 Feb	South of Shindand		Helicopter	Yellow substance	0	0
19 Feb	Badakhshan Province		Aircraft	Yellow substance	0	?
2nd week of Apr	Vardak Province	Afghan exile	Helicopters with bombs	Blue smoke	300	?
May	Badakhshan Province	Mujahedin	Helicopters	Smoke-producing bombs (blue-green)	?	?
May-Jun	Qandahar Province	Mujahedin	Helicopter rockets	Black, yellow, white gases	?	?
5-9 Jun	Lowgar Province	Afghan exile	After military attacks, Soviets used unknown chemicals on bodies killed in action	?	?	?
11 June	Qandahar Province	Mujahedin	Aircraft bombs	Poisonous gas	15	30
Jun	Northern Faryab Province	Pakistani press	Helicopters, bombs	Red, white, black gases	?	Many
Jun	Road between Kabul and Termez	MI-24 pilot (Soviet defector)	Helicopter	?	?	?
Jul	Panjsher Valley	Afghan defector	Aircraft	Tabun nerve gas	?	?
20 Jul	Syed Karom District		?	"Chemical gas"	3	?
13 Sep	Lowgar	Mujahedin	"Chemical gas" pumped from armored vehicle	"Chemical gas"	73	?
18 Sep	Kote Sangi	Mujahedin	Rockets	?	?	?
20 Sep	Lowgar	Afghan observer	Chemicals pumped from armored vehicle	Gas	?	?
Late Sep-early Oct	Baghlan Province	Mujahedin	Aircraft bombs	?	?	?
5 Nov	Near Kabul		Grenades thrown by Soviet soldiers	?	?	?
16 Nov	Dewaghal, in Konar Valley	Afghan observer	Chemical bombs dropped on rebel stronghold	?	?	?
3 Feb 1983	Kandar Province	Afghan military officer	?	?	25	?

C-6
~~SECRET~~

ANNEX D

COLLECTION AND ANALYSIS OF SAMPLES OF CHEMICAL WARFARE AGENTS AND TOXINS

1. Identification of the specific chemical agents being used in conflict areas (such as Laos, Kampuchea, and Afghanistan) depends on collection and analysis of at least one of the following: environmental samples contaminated with agent, the munitions used to deliver agents, or biological specimens from attack victims [redacted]

2. Obtaining contaminated samples that will yield positive traces of specific chemical agents is dependent on a number of factors. These include the persistency of the chemical; the ambient temperature, rainfall, and wind conditions; the media on which the chemical was deposited; and the time, care, and packaging of the sample from collection to analysis in a laboratory. Many standard chemical warfare agents are nonpersistent and disappear from the environment within a few minutes to several hours after being dispersed. These include, for example, the nerve agents sarin and tabun, the blood agents hydrogen cyanide and cyanogen chloride, the choking agents phosgene and diphosgene, and the blistering agent (urticant) phosgene oxime. Other standard CW agents—such as the nerve agents VX and thickened soman, and the blistering agents sulfur mustard, nitrogen mustard, and lewisite—may persist for several days to weeks depending on weather conditions. The trichothecene toxins are persistent but may be diluted to below detectable concentrations by adverse weather conditions. Although the trichothecenes are quite stable under controlled laboratory conditions, in the field they may be subject to microbial degradation. [redacted]

3. To maximize the chances of identification and detection, sample collections should be made as rapidly as possible after a chemical assault, and with many agents this means minutes to hours. Under the circumstances of Southeast Asia and Afghanistan this has simply not been possible; nor has there been hardware specifically developed and disseminated to these areas to aid collection of perishable samples. While numerous samples have been collected, few of them held any

realistic prospect for yielding positive results. Whenever random samples are collected, even under ideal conditions, there is a wide variability in the concentration of agents detected in the samples. This is not surprising when one considers the many factors that can affect sampling. [redacted]

4. Samples have been collected from Southeast Asia since mid-1979 and from Afghanistan since May 1980. To date, about 350 individual samples—of greatly varying types and usefulness for analytical purposes—have been collected and analyzed for the presence of traditional CW agents, none of which have been detected. On the basis of recommendations by medical and toxicological experts and of findings by the US Army Chemical Systems Laboratory (USACSL), many of the samples have been analyzed for the trichothecene group of mycotoxins. Details concerning the samples, including the circumstances of their collection and results of their analysis, are provided in tables D-1, D-2, and D-3. [redacted]

5. All environmental and nonbiological samples are submitted to USACSL for comprehensive analysis for unknowns, to include traditionally recognized chemical warfare agents and other possibly toxic materials. Tissue specimens and body fluids from victims of CW attacks are submitted to the Armed Forces Medical Intelligence Center (AFMIC). Before 1982, AFMIC was known as the US Army Medical Intelligence and Information Agency (USAMIIA).¹ Analyses of biological samples for trichothecene and other mycotoxins are conducted under the sponsorship of AFMIC [redacted]

[redacted] The US Food and Drug Administration has also assisted in analysis, as has a pollen expert from the Smithsonian Institute. [redacted]

¹ Unless otherwise indicated, all human tissue and urine specimens listed in the sample set tables were refrigerated (5-8 degrees C) from the time of collection until they were received by the analytical laboratories. [redacted]

~~SECRET~~

Table D-1



D-2
~~SECRET~~

~~SECRET~~

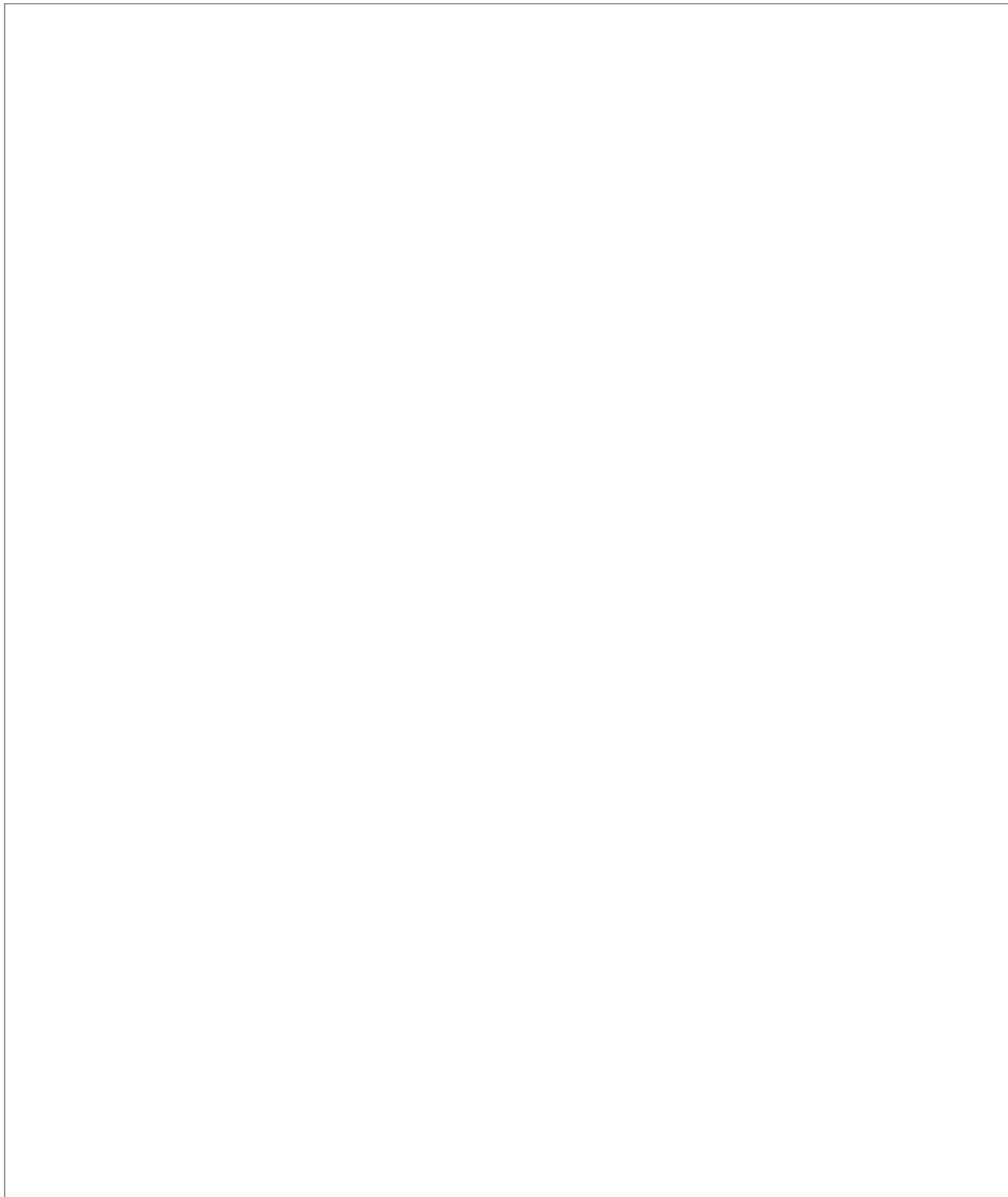
Table D-1 (continued)



D-3
~~SECRET~~

~~SECRET~~

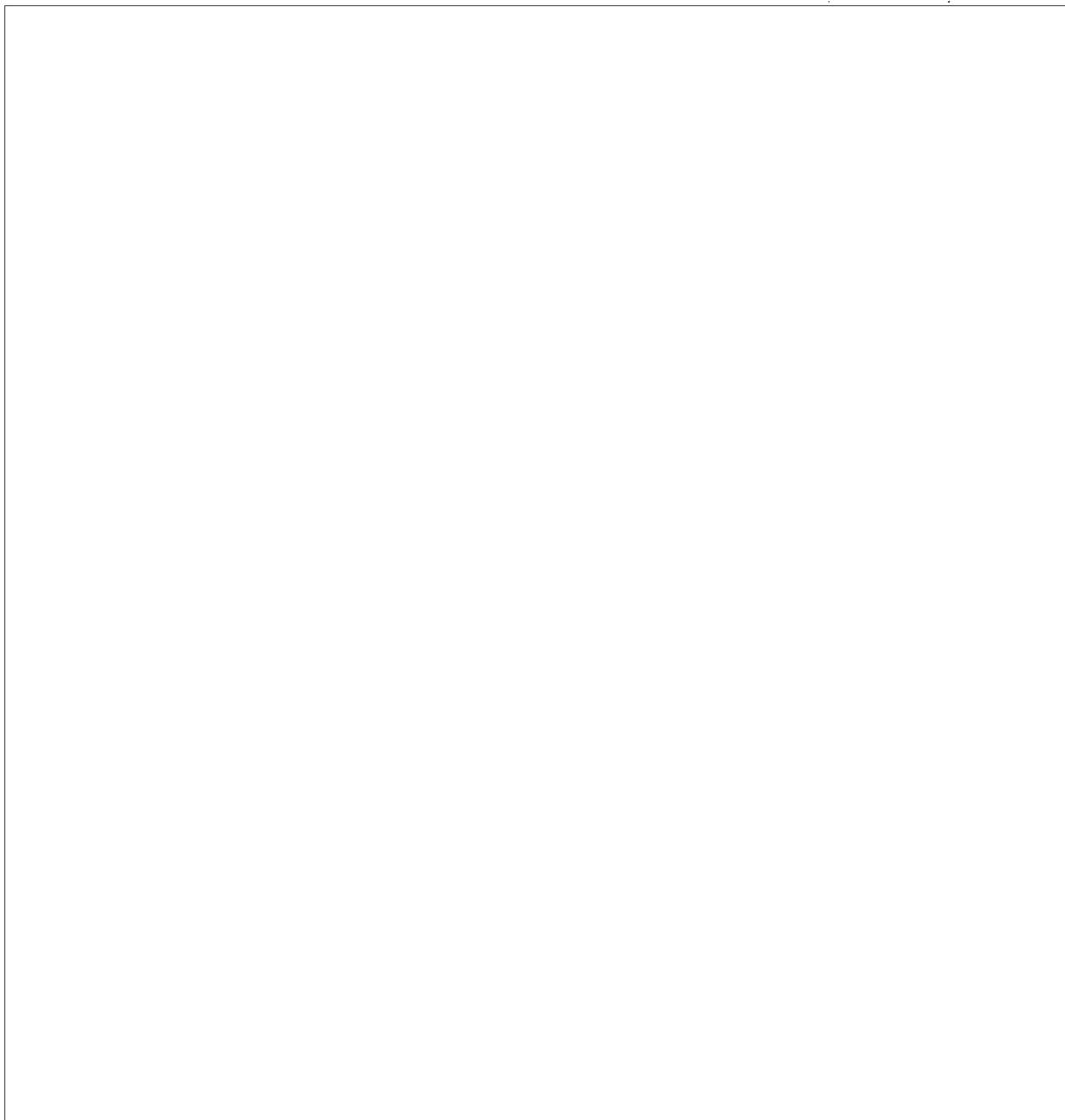
Table D-1 (continued)



D-4
~~SECRET~~

~~SECRET~~

Table D-1 (continued)



D-5
~~SECRET~~

~~SECRET~~

Table D-1 (continued)

D-6
~~SECRET~~

~~SECRET~~

Table D-2



D-7
~~SECRET~~

~~SECRET~~

Table D-2 (continued)

D-8
~~SECRET~~

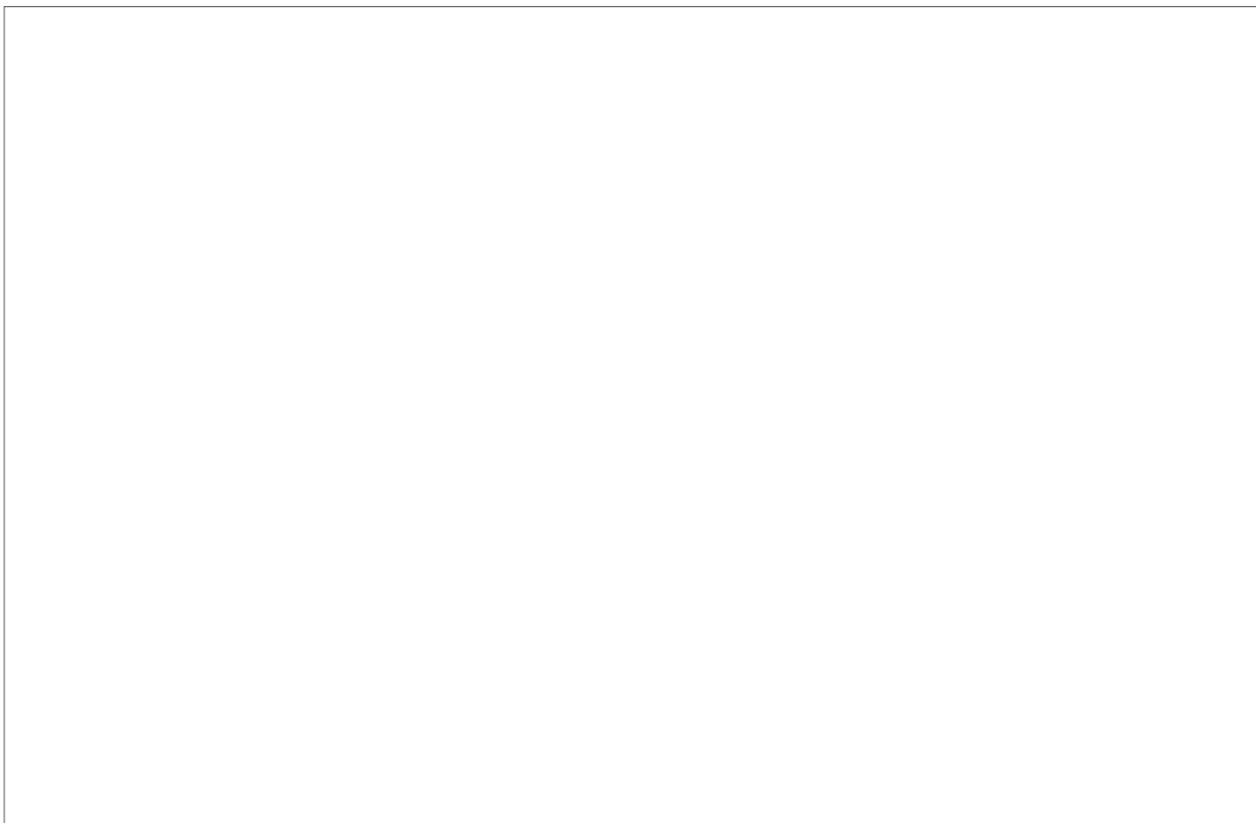
~~SECRET~~

Table D-2 (continued)

D-9
~~SECRET~~

~~SECRET~~

Table D-2 (continued)



D-10

~~SECRET~~

~~SECRET~~

Table D-2 (continued)



D-11
~~SECRET~~

~~SECRET~~

Table D-2 (continued)



D-12
~~SECRET~~

~~SECRET~~

Table D-3

Afghanistan: Sample Collection and Analysis for Presence of Chemical Warfare Agents

Sample No.	Sample Description	History of Sample	Analytical Results
1	Rocket and bomb fragments with Soviet markings	Fragments were obtained in Konarha Province, sent to USACSL on 18 April 1980.	No evidence of standard CW agents.
2	Soviet gas mask and canister	Purchased in Kabul. Sent to USACSL on 18 September 1980.	No evidence of standard CW agents. Dioctylphthalate, which probably was used to test gas mask filter, was identified.
3	Knit polyester cap, a polyester knit jacket, badly worn shirt, which appeared to be recently washed.	Obtained in Islamabad, Pakistan, from an Afghan refugee, who claimed he was subjected to a gas attack. Collected on 2 November 1980, shipped from field on 19 November 1980, received by USACSL on 8 December 1980.	Analysis showed no evidence of any known CW agent but detected a high molecular weight ester, which could be indicative of a trichothecene, and adipic acid esters. Also detected malathion, an organic phosphate insecticide.
4	Human tissue (two bottles)	Same as sample 3.	Not analyzed because of deterioration of sample enroute.
5	7.62-mm cartridges	The cartridges, which reputedly were coated with a poison, were carried by special Afghan police and some Soviet advisers. Samples were collected in November 1980 and received for analysis at USACSL on 4 February 1981.	No evidence of standard CW agents was found on bullet coating or scrapings from slug. Not analyzed for toxins.
6	Cotton garment and socks	Clothing appeared to be very dirty. Clothing obtained from Afghan refugee in Islamabad, Pakistan. Refugee reportedly subjected to CW attack. Received by USACSL 12 February 1981. Transferred to USAMIIA for toxin analysis.	No evidence of known CW agents. Results on trichothecene pending completion of analysis.
7	Soviet Shlem gas masks	Five masks were procured in Kabul at various times and were sent as received to USACSL for analysis between 24 August 1981 and 21 December 1981. No background information is available with these masks.	No evidence of traditional CW agents. An analytical sample from the external surface of one-quarter of a mask, obtained in September 1982, showed the presence of toxin T-2 (approximately 1 microgram). The result was verified by two independent laboratories.
8	Expendable Soviet 5.45-mm cartridge case	Obtained by Mujahedin about 1980. The bullets had been captured from the Soviets and used by Afghan Islamic insurgents. During a firefight, insurgents using the bullets became ill, with severe vomiting and nausea for several hours. They suspected that the Soviets had contaminated the powder charge. Sent to USACSL on 25 August 1981.	No evidence of any generally recognized agent or toxic compound was found. Was not analyzed for toxins.
9	Soviet gas mask with canister	Item was reportedly taken from a Soviet after a Soviet gas attack in early 1981. Item was collected by an Afghan, who is associated with the Mujahedin and who loaned the item to US personnel for analysis. USACSL received the mask on 18 December 1981.	Preliminary analysis by thin-layer chromatography (TLC) of material from hose connection of the mask indicated the presence of T-2. This could not be confirmed. No evidence of traditional CW agents.

(continued)

D-13

~~SECRET~~

~~SECRET~~

Table D-3 (continued)

Afghanistan: Sample Collection and Analysis for Presence of Chemical Warfare Agents

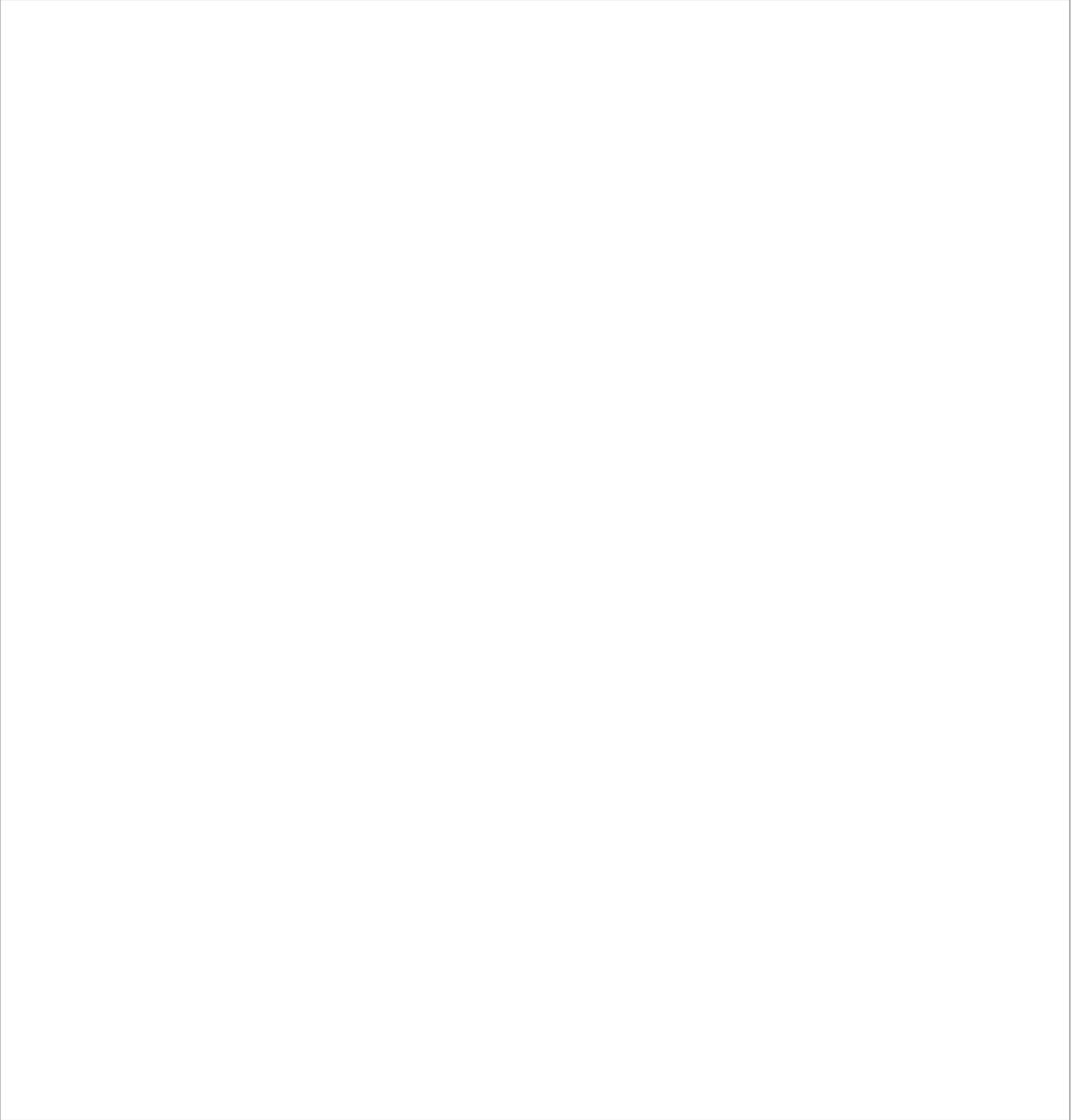
Sample No.	Sample Description	History of Sample	Analytical Results
10	Grain	Sample was collected by [redacted] who reported that it may have been poisoned. USACSL received sample on 24 February 1982. Portion of sample to be analyzed for toxins.	Preliminary analysis by TLC indicated the presence of trichothecene toxins. Three alternate methods of analysis were used but none were confirmatory. No evidence of traditional CW agents.
11	Yellow crystals	Alleged CW sample taken from the site of a 19 February 1982 CW attack on Badakshan. [redacted] provided the sample to the US briefing team during its visits to Pakistan (1-5 April 1982). One-half the sample retained by the UK. Remaining sample given to USACSL for analysis.	High-purity tetryl (trinitrophenyl methylnitramine). Tetryl is a high-velocity initiator used to detonate TNT. It burns at 295°C when unconfined and explodes at 180-190°C when confined. No evidence of traditional CW agents.
12	(1) Wheat (2) Cartridges reputedly poisoned	The samples were received by [redacted] from a [redacted] from a Mujahedin leader. The cartridges reportedly caused discoloration of the face (purple and green), choking sensation, and death within 15 minutes. This occurs even when similar injuries from ordinary cartridges were not lethal. The material was captured during an attack on a Soviet convoy between Ghazni and Zabol Provinces on its way to Qandahar. Sent to USACSL on 31 March 1982 for analysis.	(1) Wheat sample: Vapor analysis showed traces of unidentified compounds (molecular weights 413 and 460) less than 0.26 ppm As, and hydrocarbon carbonyl. No evidence of traditional CW agents. TLC supportive of T-2 toxin or diacetoxyscirpenol. Not confirmed by additional analysis. (2) Cartridges: X-ray identified bullets as tracer type. Analysis showed no evidence of known CW agents or suspect toxins.
13	Wheat	Sample received on 7 July 1982 and submitted to USACSL on 8 July for exploitation.	Vapor sample: biphenyl, dimethylquinoline. Unidentified mass 141. No standard CW agents present. No trichothecenes were present. Analysis complete.
14	Wheat	Afghan recipient of political asylum in [redacted] obtained sample from a relative, who got it from contacts in Nimruz Province. USACSL received August 1982.	Analysis incomplete.
15	Black powder	Insurgent from Panjsher brought powder to Kabul. Powder reportedly was used by Soviets in the Panjsher Valley to contaminate food and water; also dropped from aircraft. USACSL received on 15 July 1982.	Primarily carbon. Vapor sample contained biphenyl, dimethylquinoline, and possible cyclic polysulfides. Also found inorganic salts, possibly perchlorates. Probably residue from munitions. No evidence of CW agents or poisons. TLC was negative for trichothecenes.

~~Secret~~

D-14
~~SECRET~~

~~SECRET~~

ANNEX E



E-1
~~SECRET~~

~~SECRET~~



E-2
~~SECRET~~

DISSEMINATION NOTICE

1. This document was disseminated by the Directorate of Intelligence. This copy is for the information and use of the recipient and of persons under his or her jurisdiction on a need-to-know basis. Additional essential dissemination may be authorized by the following officials within their respective departments:

- a. Director, Bureau of Intelligence and Research, for the Department of State
- b. Director, Defense Intelligence Agency, for the Office of the Secretary of Defense and the organization of the Joint Chiefs of Staff
- c. Assistant Chief of Staff for Intelligence, for the Department of the Army
- d. Director of Naval Intelligence, for the Department of the Navy
- e. Assistant Chief of Staff, Intelligence, for the Department of the Air Force
- f. Director of Intelligence, for Headquarters, Marine Corps
- g. Deputy Assistant Secretary for International Intelligence Analysis, for the Department of Energy
- h. Assistant Director, FBI, for the Federal Bureau of Investigation
- i. Director of NSA, for the National Security Agency
- j. Special Assistant to the Secretary for National Security, for the Department of the Treasury
- k. The Deputy Director for Intelligence for any other Department or Agency

2. This document may be retained, or destroyed in accordance with applicable security regulations, or returned to the Directorate of Intelligence.

3. When this document is disseminated overseas, the overseas recipients may retain it for a period not in excess of one year. At the end of this period, the document should be destroyed or returned to the forwarding agency, or permission should be requested of the forwarding agency to retain it in accordance with IAC-D-69/2, 22 June 1953.

4. The title of this document when used separately from the text is unclassified.