

# A HISTORY OF THE SOVIET AND RUSSIAN CHEMICAL WEAPONS PROGRAM

Milton Leitenberg, CISSM, University of Maryland

1. WWI
2. Geneva Protocol of 1925
3. The Soviet CW Program, 1919-1941
4. WW 2
5. 1945
6. The Soviet Post-WW 2 CW Program
7. The Novichok Story
8. Soviet Declared CW Production and Storage: The Soviet CW Stockpile and its Destruction
9. Bilateral and Multilateral CW Arms Control: The Soviet Non-Compliance Statement

## I. WWI

- EVERY PARTICIPATING MAJOR POWER USED CHEMICAL WEAPONS.
- ROUGHLY 10 PERCENT OF CASUALTIES WERE DUE TO CW FOR ALL PARTIES, AND MORTALITY 10 % OF CW CASUALTIES. RUSSIA SLIGHTLY WORSE.

## 2. GENEVA PROTOCOL OF 1925

- PROHIBITS USE OF CW OR BW “IN WAR”.
- THERE WAS NO PROHIBITION AGAINST PRODUCTION OR STOCKPILING.
- SOME COUNTRIES RESERVED THE RIGHT TO USE IN RETALIATION.

### 3. THE SOVIET CW PROGRAM, 1919 TO 1941

1926 TO 1933, COLLABORATION WITH GERMANY, UNDER THE 1922  
USSR-GERMAN TREATY OF RAPALLO

- TOOK PLACE AT THE TOMKA-SHIKANY “POLYGON” OUTDOOR CW TEST SITE. **SHIKANY**, CENTRAL MILITARY CHEMICAL PROVING GROUND (VOLSK REGION, SARATOV OBLAST).

1932 TO 1935, CW INFORMATION EXCHANGES WITH ITALY.

# SOVIET MILITARY CHEMICAL STORAGE SITES, 1918-1945

## Annexe 2. Soviet Military-Chemical Storage Sites (1918–1945)

Soviet military-chemical storage sites (1918–1945) 29 sites - many later to build the post-war prod

Berdsk (Novosibirsk oblast')  
Chita-II  
Gatchinia (Leningrad oblast')  
Gorny (Saratov oblast')  
Il'ino (Nizhegorsk oblast')  
Irkutsk-Batareinaya  
Kambarka (Udmurt Republic)  
Khabarovsk-Krasnaya River  
Knorring (Primorsk krai)  
Lesnaya (Chitinskaya oblast')  
Moscow-Ochakovo  
Novocherkassk (Rostov oblast')  
Omsk  
Pes'yanka (Altai krai)  
Redva (Sverdlovsk oblast')  
Rostov-Yaroslavsky (Yaroslavl oblast')  
Rzhanitsa (Bryansk oblast')  
Shikhany (Saratov oblast')  
Sungach (Primorsk krai)  
Svobodny (Amursk oblast')  
Tver'  
Vozdvizhensky (Primorsk krai)

Source: Fedorov, L. A., *Khimicheskoe Vooruzhenie—Voina s Sobstvennym Narodom: Tragicheskie Rossiiskii Opyt* [Chemical Armaments—War Against One's Own People: the Tragic Russian Experience], vol. 3 (self-published: Moscow, Feb. 2009), pp. 287–88.

## 4. WW2

- NO USE BY ANY PARTY EXCEPT JAPAN IN CHINA: MINIMAL AND TO NO MILITARY EFFECT.
- RUSSIAN WW2 STOCKPILES WERE SAME CW AGENTS AS WWI: MUSTARD, PHOSGENE, LEWISITE
- GERMAN SCIENTISTS DISCOVER “NERVE AGENTS” IN 1939 IN INSECTICIDE RESEARCH. ORGANOPHOSPHORUS ACETYL CHOLINE ESTERASE INHIBITORS LEADS TO THE **G CLASS** OF NERVE AGENTS: **SOMAN, SARIN, ETC.** MANY ANALOGUES.
- NO ALLIED GOVERNMENT HAD DISCOVERED THESE OR KNEW OF THE GERMAN PROGRAM

## 5. 1945

- SOVIET FORCES CAPTURE GERMAN SOMAN PLANT AT DYHERNFURTH. TRANSPORTED THE ENTIRE FACILITY AND ITS SCIENTIFIC AND TECHNICAL STAFF TO RUSSIA TO THE STALINGRAD BRANCH OF THE SCIENTIFIC RESEARCH INSTITUTE #42 [N11-42].
- NEVERTHELESS IT TOOK 10 YEARS FOR PRODUCTION TO BEGIN.
- USSR HELD THE GERMANS UNTIL ~1955, AS IT DID GERMAN NUCLEAR AND ROCKET (V-2) AND AVIATION SCIENTISTS. BASIS OF POST-WAR SOVIET BALLISTIC MISSILE PROGRAM.

## 6. SOVIET POST-WW 2 CW PROGRAM

LIKE THE SOVIET BW PROGRAM, VERY LARGE COMPARED TO THE US A LITTLE LESS LARGE THAN THEIR BW PROGRAM.

- LARGE DISCREPANCIES: RUSSIAN DECLARED LISTS, WHILE FEDEROV CLAIMS “HUNDREDS” OF SITES.
- USSR **DID** DEPLOY SOME CW MUNITIONS FORWARD IN WTO MEMBER STATES , THOUGH IT DENIED THAT IT EVER DID.



## THE MAJOR RESEARCH INSTITUTES IN THE CW PROGRAM

- GOSNIIOKhT: STATE SCIENTIFIC RESEARCH INSTITUTE OF ORGANIC CHEMISTRY AND TECHNOLOGY , WITH BRANCHES AT SHIKANY, VOLGOGRAD, NOVOCHEBOKSARSK.
- EVOLVED FROM SCIENTIFIC INSTITUTE NO. 42 (N11-42; PO BOX M-5125)  
AS WITH BW: CLOSED CITIES, CODE NAMES, PO BOX #'S
- SHIKANY BRANCH EVOLVED INTO THE GITOS: STATE INSTITUTE FOR TECHNOLOGY OF ORGANIC SYNTHESIS () IN VOLSK, NEAR SHIKANY.
  - GOSNIIOKhT/MOSCOW: 3,500 STAFF, 500 PHDs
  - GOSNIIOKhT/VOLGOGRAD: 500-700 STAFF
  - GOSNIIOKhT/SHIKANY: 1,500 STAFF
  - GOSNIIOKhT/NOVOCHEBOKSARSK : ~300 STAFF.

# Declared R.F. CW Stockpile: 40,000 MTs

(7 stockpiles in 5 Oblasts and the Udmurt Republic)



Source: Paul Walker, Green Cross



Source: US Government  
Powerpoint Presentation

# Shchuch'ye Stockpile



Artillery warheads and bombs, VX nerve agent

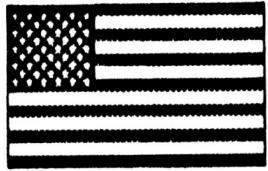
Source: Paul Walker, Green Cross

# Shchuch'ye Chemical Weapons

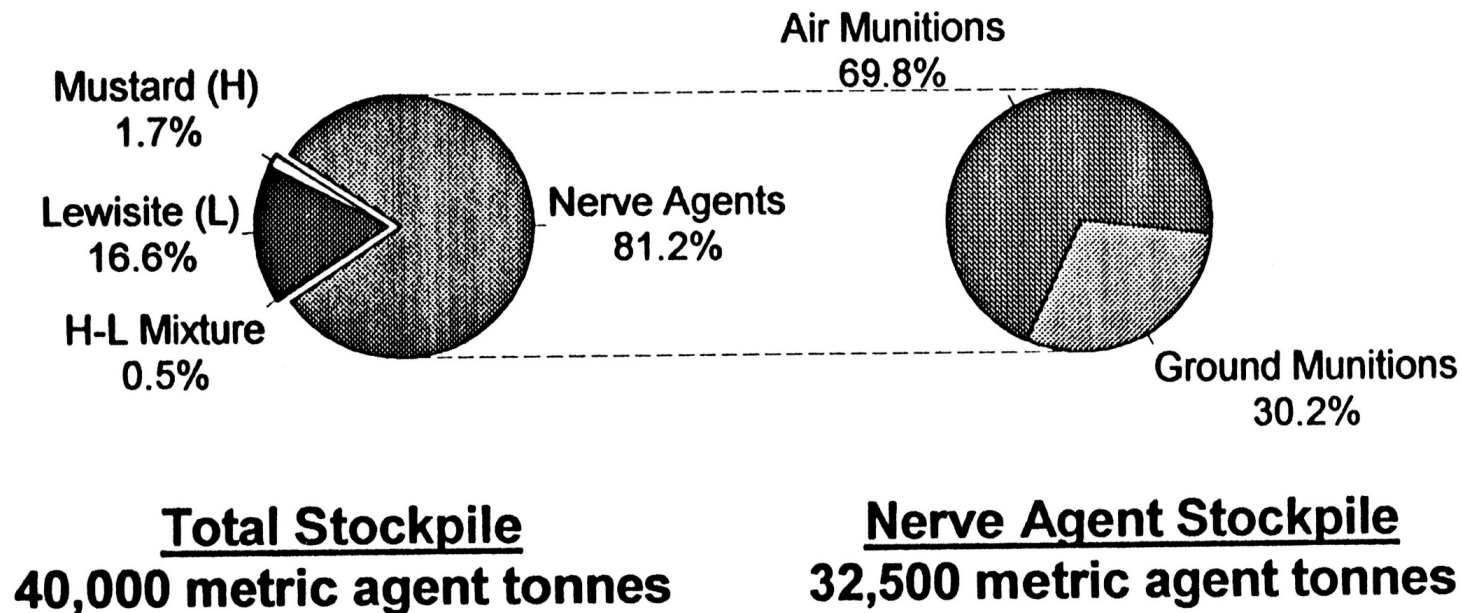
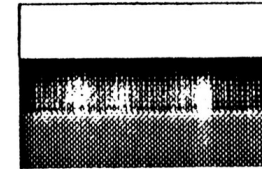


SCUD and  
FROG missile  
warheads, on  
left,  
VX nerve agent

Source: Paul  
Walker, Green Cross



# U.S. Support to the Russian CW Destruction Program Distribution of Declared Stockpile



Ground Munitions: Projectiles & Rocket Warheads  
Air Munitions: Bombs, Spray Tanks & Missile Warheads

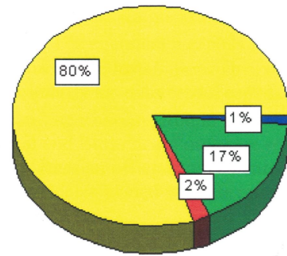
**Table 1. The Soviet CW ammunition displayed at Shikany on the occasion of CCD site visit in October 1987.**

Calibre	filled weight (kg)	Agent fill		Method of dispersion	Fuse
		type	weight (kg)		
<b><u>CHEMICAL HAND GRENADE</u></b>					
	0.25	CS pyromix	0.17	Burning	
<b><u>CHEMICAL ARTILLERY MUNITIONS: Tube-artillery shell</u></b>					
122-mm	23.1	Viscous lewisite	3.3	Explosive	Time
122-mm	22.2	Sarin	1.3	Explosive	Percussion
130-mm	33.4	Sarin	1.6	Explosive	Percussion
130-mm	33.4	VX	1.4	Explosive	Proximity
152-mm	42.5	Viscous lewisite	5.4	Explosive	Time
152-mm	40.0	Sarin	2.8	Explosive	Percussion
<b><u>CHEMICAL ARTILLERY MUNITIONS: Rocket-artillery shell</u></b>					
122-mm	19.3	Sarin	3.1	Explosive	Percussion
122-mm	19.3	VX	2.9	Explosive	Proximity
140-mm	18.3	Sarin	2.2	Explosive	Percussion
240-mm	44.3	Sarin	8.0	Explosive	Percussion
<b><u>CHEMICAL WARHEADS FOR TACTICAL MISSILES</u></b>					
540-mm	436	VX	216	Air inflow	VT
884-mm	985	Viscous VX	555	Air inflow	VT
<b><u>AIR-LAUNCHED CHEMICAL MUNITIONS</u></b>					
100-kg	80	Mustard/lewisite	28	Explosive	Percussion
100-kg	100	Mustard/lewisite	39	Explosive	Percussion
250-kg	233	Sarin	49	Explosive	Inst percussion
250-kg	130	Viscous soman	45	Air inflow	Time
500-kg	280	Mustard/lewisite	164	Air inflow	Time
1500-kg	963	Mustard/lewisite	630	Air inflow	Time

Source: Julian Robinson, University of Sussex, adapted from Shikany visit pamphlet, Novosti Press Agency, 1988.

### Chemical Agents in the Russian Stockpile

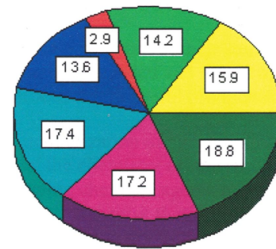
40,000 Metric Tons Total



- Nerve Agents (Sarin, Soman, and VX)
- Mustard
- Lewisite
- Lewisite/Mustard Mixture

### Chemical Weapons Stored in Russia

% of Stockpile at Each Site



- Kambarka
- Gorny
- Maradykovsky
- Pochev
- Kizner
- Shchuhe
- Leonidovka



**TABLE 1. MAIN RUSSIAN CW DEVELOPMENT AND PRODUCTION FACILITIES**

Location	Region	Production	Research	Testing
Barzniki	Perm	H, L, AC, DP, A, DA, DM	x	
Chapayevsk	Kuybyshev	H, L, CG, DP, PS		
Dzerzhinsk	Gorky	H, HNS, AC, C, K, CGDP, A		x
Kineshma*	Ivanovo	DM		
Moscow* (State Union Scientific Research Institute of Organic Chemistry & Technology)	[Moscow Entusiastov]	H, OPs (small scale)	Main CW research centre (Novichok)	Lab-scale testing (Novichok)
Novocheboksarsk*	Chuvashia	V-gas, CS, V(bin)		
Shikhan'y2 (Volok-18)	Saratov			Main test site for Agent Orange, Novichok
Stavropol	Altai	Riot gas		
Ufa	Bashkortostan	Agent orange		
Ustyurt	Uzbekistan			Testing of Novichok
Volgograd (Stalingrad)	Volgograd <i>2 km from</i>	H, L, CG, DA, DG, DM, Sarin, Soman, Novichok	Branch of Moscow centre	
Volok-17 (Shikany-1)	Saratov	Pilot production: H, L, ED, MD, BZ, riot gas, OPs	Branches of Moscow centre	x
Voskresensk*	Tula	H, L, AC, CK, CG, DP		

\* Second World War production only

Agents: Vesicants: H - mustard; L - Lewisite; HNS - Nitrogen mustard; CX - dichlorodimethylamine; A - arsine;  
ED - ethyldichloroarsine; MD - methylchloroarsine  
Blood gases: AC - Hydrogen cyanide; CK - cyanogen chloride  
Choking gases: CG - phosgene; DP - diphosgene; PS - chloropicrin  
Insecticides: DA - diphenylchlorarsine; DG - diphenylcyanoarsine; DM - Adamsite; CN - chloroacetophenone  
Nerve agents: OPs - Organophosphorous; sarin; soman; V-gas; V(bin) - binary chemical; Novichok (new highly toxic OP)

Source: "Jane's  
Intelligence Review,"  
April 1999.

## TABLE 2. MAIN STORAGE AND DESTRUCTION SITES

Location	Region	Agent stored	Quantity (tonnes)	Method of storage
Baku	Azerbaijan	?	?	?
Pochep**	Bryansk	Sarin/Soman, V-gas	2,520 5,000	Air munitions
Buyenka	Far East	?	?	
Chapayevsk*	Kuybyshev	H, L	?	
Gorny**	Saratov	L H H/L	206 690 210	Barrels Tanks Tanks
Kambarka**	Udmurtia	H L	175 6,400	? Tanks
Maradykovskiy**	Kirov	OPs H/L	6,770 150	Air munitions Munitions
Kizner**	Udmurtia	Sarin Soman V-gas L	4,000 1,400 300 75	Artillery munitions
Leonovka**	Penza	OPs	6,880	Air munitions
Shchuchyo**	Kurgan	Sarin Soman V-gas	2,920 1,838 694	Artillery munitions
Shikhary-2 (Volak-1B) (Saratov)		DM, various		

\* CW destruction facility built; closed due to local protest and now training centre

\*\* Sites proposed for new destruction facilities

Agents: Organophosphorous compounds (OPs) — nerve gases: sarin; soman; V-gas  
Vesicants: H — mustard; L — Lewisite; H/L — mustard-Lewisite mix  
Irritants — riot control gases: DM — Adamsite

Source: "Jane's  
Intelligence Review,"  
April 1999.

## 7. FOLIANT: THE “NOVICHOK” PROGRAM

- POSSIBLE RELATION TO THE US MID-1960s TOP HAT DISINFORMATION EFFORT.
- 1971 CENTRAL COMMITTEE DECISION, FOLIANT PROGRAM.

AT THIS TIME THE CW DECISION WAS LEGAL, (VS THE 1972 CENTRAL COMMITTEE DECISION TO BEGIN A RENEWED BW PROGRAM)

*IN MAY 1971, THE CENTRAL COMMITTEE OF THE COMMUNIST PARTY AND THE SOVIET COUNCIL OF MINISTERS APPROVED A NEW EFFORT TO CREATE A “FOURTH-GENERATION” OF CHEMICAL WEAPONS. (WORLD WAR I AGENTS SUCH AS PHOSGENE AND MUSTARD WERE CONSIDERED THE FIRST GENERATION, G AGENTS THE SECOND, AND V AGENTS THE THIRD.) THE KREMLIN SOUGHT TO ACQUIRE A NEW CLASS OF NERVE AGENTS WITH GREATER TOXICITY, STABILITY, PERSISTENCE, EASE OF PRODUCTION, AND OTHER MILITARILY RELEVANT PRIOPERTIES. CODE NAMED “FOLIANT,” THIS RESEARCH-AND-DEVELOPMENT PROGRAM WAS SHROUDED IN THE HIGHEST LEVEL OF SECRECY.*

*[TUCKER, P. 231]*

## MARCH 1983, SECOND FOLIANT CENTRAL COMMITTEE DECISION

*THE CENTRAL COMMITTEE OF THE COMMUNIST PARTY AND THE SOVIET COUNCIL OF MINISTERS ISSUED A SECRET DECREE ON MARCH 25, 1983, DIRECTING GosNIIOKhT TO DEVELOP BINARY VERSIONS OF THE FOURTH-GENERATION AGENTS. THE RATIONALE FOR THIS EFFORT WAS TO CATCH UP WITH THE UNITED STATES, WHICH ALREADY HAD THREE BINARY CHEMICAL MUNITIONS UNDER DEVELOPMENT. IN CONTRAST TO THE US PROGRAM, WHICH CONGRESS HAD DEBATED OPENLY FOR YEARS, SOVIET BINARY DEVELOPMENT WAS CONDUCTED UNDER EXTREME SECRECY. ONE REASON WAS THAT THE SOVIETS SOUGHT TO DEVELOP BINARY NERVE AGENTS WHOSE COMPONENTS RESEMBLED ORDINARY INDUSTRIAL CHEMICAL, WITH A VIEW TO CIRCUMVENTING THE VERIFICATION PROVISIONS OF A FUTURE TREATY BANNING CHEMICAL ARMS.*

CENTRALITY OF GosNIIOKhT AND GITOS TO THE EFFORT.

## “NOVICHOK” IS A FAMILY OF COMPOUNDS

- “NOVICHOK” IS VARIOUSLY TRANSLATED INTO ENGLISH AS “NEW BOY,” “NEWCOMER,” “NOVICE,” “ROOKIE”. THESE ARE NOT V AGENTS.
- MADE HUNDREDS OF ANALOGUES. 5 MAJOR ONES. TWO, A-232 AND A-233, WERE SYNTHESIZED BY PYTOR KIRPICHEV **IN 1972**. [SOVIET PRACTICE FOR LABELLING AGENTS, SAME AS INSTITUTES, LETTER DESIGNATION, A.] A THIRD WAS SYNTHESIZED IN 1976. A FOURTH, NOVICHOK-5, PASSED ACCEPTANCE TESTING AND WAS ACCEPTED FOR USE BY SOVIET MILITARY FORCES.

## 1986, USSR BUILDS NUKUS PILOT PLANT

- THE YEAR BEFORE GORBACHEV'S UN SPEECH ANNOUNCING THE END TO ALL SOVIET CW PRODUCTION – THE USSR BUILDS THE CLOSED CHEMICAL RESEARCH INSITUTE AT NUKUS, UZBEKISTAN, FOR THE PILOT PLANT PRODUCTION OF NOVICHOK AGENTS, MAMMALAIN TEST CHAMBERS AND MUNITIONS FILLING.
- TESTING TAKES PLACE, AND PLANS ARE MADE FOR A PRODUCTION FACILITY TO BE BUILT AT PAVLODAR IN KAZAKHSTAN, PRESUMABLY FOR A-320. NEVER BUILT.

## EVIDENCE OF NOVICHOK AGENTS DEVELOPMENT AND PRODUCTION

IN APRIL 1991, FOUR YEARS AFTER GORBACHEV'S UN SPEECH, GORBACHEV SECRETLY AWARDS THE LENIN PRIZE FOR SUCCESSFUL DEVELOPMENT AND PILOT PLANT PRODUCTION OF NOVICHOK AGENTS TO GosNIIOKhT DIRECTOR VICTOR PETRUNIN, GENERAL ANATOLY KUNTSEVICH, AND GEN. IGOR YEVSTAVYEV

DISCLOSURES BY VIL MIRZAYANOV IN 1991, 1992 IN KURANTY 9/1991; MOSKOVSKIE NOVOSTII [MOSCOW NEWS], 9/1992. IN MIRZAYANOV'S 2008 BOOK, STATE SECRETS. VLADIMIR UGLEV, A NOVICHOK SYNTHESIZER ALSO WENT PUBLIC IN RUSSIA IN 1994. MUCH MORE DETAILED DISCLOSURES IN MARCH 2018 BY MIRZAYANOV, UGLEV AND LEONARD RINK. THEY DISCLOSE ZHELEZNYAKOV'S DEATH DUE TO NOVICHOK LAB EXPOSURE.

**Table 2: Mirzayanov's Account of the Novichok Program**

Name of Agent	Type of Agent	Research Program	Test Site	Production Site	Status
Substance 33	<ul style="list-style-type: none"> <li>Unitary agent</li> <li>Similar to nerve agent VX</li> <li>Novichok precursor</li> </ul>	Site: GosNIIOKhT (Moscow)	Shikhany	Novocheboksarsk	<ul style="list-style-type: none"> <li>15,000 tons produced</li> <li>Declared as VX under terms of Wyoming MOU<sup>a</sup></li> </ul>
A-230	<ul style="list-style-type: none"> <li>Unitary agent</li> <li>Novichok precursor</li> </ul>	Site: GosNIIOKhT (Shikhany) Lead Researcher: Pyotr Kirpichov	Nukus	Shikhany and Volgograd	<ul style="list-style-type: none"> <li>Tested 1988-1989</li> <li>Adopted as chemical weapon 1990</li> <li>Experimental quantities produced (tens of tons)</li> </ul>
A-232	<ul style="list-style-type: none"> <li>Unitary agent</li> <li>Similar to A-230</li> <li>Novichok precursor</li> </ul>	Site: GosNIIOKhT (Shikhany) Lead Developer: Pyotr Kirpichov	Nukus and Shikhany	Shikhany and Volgograd	<ul style="list-style-type: none"> <li>Experimental quantities produced (a few tons)</li> <li>Not approved by the Army</li> </ul>
Novichok-5 <sup>a</sup>	<ul style="list-style-type: none"> <li>Binary agent</li> <li>Based on A-232</li> <li>5-8 times more effective than VX</li> </ul>	Site: GosNIIOKhT (Moscow) Lead Developers: Igor Vasiliev and Andrei Zheleznyakov <sup>b</sup>	Nukus	Shikhany and Volgograd	<ul style="list-style-type: none"> <li>Tested 1989-1990</li> <li>Experimental quantities produced (a few tons)</li> <li>Approved as chemical weapon 1989</li> </ul>
Novichok-#? No established name	<ul style="list-style-type: none"> <li>Binary agent</li> <li>Based on Substance 33</li> </ul>	Site: GosNIIOKhT (Moscow and Shikhany)	Nukus and Shikhany	Novocheboksarsk and Shikhany	<ul style="list-style-type: none"> <li>Tested 1988-1989</li> <li>Adopted as chemical weapon 1990</li> <li>Experimental quantities produced (tens of tons)</li> </ul>
Novichok-7 <sup>c</sup>	<ul style="list-style-type: none"> <li>Binary agent</li> <li>10 times more effective than similar nerve agent soman</li> </ul>	Site: GosNIIOKhT (Moscow) Lead Developer: George Drozd	Shikhany	Shikhany	<ul style="list-style-type: none"> <li>Tested 1993</li> <li>Experimental quantities produced (tens of tons)</li> </ul>

<sup>a</sup> The 1989 Wyoming Memorandum of Understanding is a bilateral confidence-building agreement signed by the United States and the USSR, providing for reciprocal data exchanges and trial on-site inspections.

<sup>b</sup> Andrei Zheleznyakov was mortally wounded in a laboratory accident during the development of novichok-5.

<sup>c</sup> The number of the novichok agent does not necessarily mean that other novichok agents, either numerically before or after this agent, exist.

Source: Dr. Vil Mirzayanov, 1995 Stimson Center monograph



## RUSSIA DIDN'T DECLARE THE NOVICHOK COMPOUNDS IN ITS CWC DECLARATION

RUSSIA HAS NEVER TO THIS DAY ADMITTED TO THE OPCW THAT IT HAD/HAS THESE COMPOUNDS, A PROGRAM FOR THEIR RDT&E – OR THAT ONE OF THE CLASS WAS ACCEPTED BY THE RUSSIAN MILITARY FOR USE. HOWEVER, CONTRARY TO ALL THE RUSSIAN STATEMENTS SINCE THE SALISBURY EVENTS, RUSSIA DID ADMIT TO NOVICHOK DEVELOPMENT IN BILATERAL DISCUSSIONS WITH THE US IN 1994, BUT EXPLAINED THE WORK AS LEGITIMATE. AN APRIL 13, 2018 UK GOVERNMENT STATEMENT SAID THAT “WITHIN THE LAST DECADE RUSSIA HAS PRODUCED AND STOCKPILED SMALL QUANTITIES OF NOVICHOKS”

## WHY THESE COMPOUNDS ARE NOT LISTED IN THE CWC “SCHEDULES”

- THE THREE LISTS OF CW AGENTS AND INTERMEDIARIES.
- THE 6-7 YEAR NEGOTIATIONS ON THE CWC TEXT HAD BEEN COMPLETED IN SEPTEMBER 1992, AND AGREEMENT ON THE LISTS OF CHEMICALS BY THE END OF 1991. THE FIRST INFORMATION ON THE NOVICHOK AGENTS CAME IN OCTOBER 1992 AND NO ONE WANTED TO GO BACK AND REOPEN THE NEGOTIATIONS, ALWAYS A FRAUGHT AFFAIR. IN FACT, THE POSSIBILITY WAS NEVER EVEN DISCUSSED.
- THE SCHEDULES, ESPECIALLY THE FIRST, WAS FOR PURPOSES OF OPCW INSPECTION OF INDUSTRIAL CHEMICAL FACILITIES AND CONSISTED OF WWI AND WW 2 CW AGENTS THAT HAD SEEN MASSIVE PRODUCTION AND WEAPONIZATION BY MANY COUNTRIES.

## 8. SIZE AND DESTRUCTION OF RUSSIAN CW STOCKPILE

- BETWEEN 1960'S AND MID-1980'S US ESTIMATES WERE ~400,000 AGENT TONS AND UK GOVERNMENT ESTIMATES ~300,000 AGENT TONS, BY DIFFERENT ESTIMATING METHODS.
- THE US DECLARED 31,000 METRIC TONS (34,282 TONS) AND ON DECEMBER 26, 1987 THE USSR SAID "NO MORE THAN 50,000 METRIC TONS OF CHEMICAL WARFARE AGENTS". BUT 5-6 YEARS LATER THE USSR DECLARED 39,967 METRIC TONS (~"40,000") TO THE CWC.

## RUSSIAN EFFORTS TO REDUCE STOCKPILE BEFORE CWC ENTRY

1987, GORBACHEV REPORTEDLY ORDERED LARGE-SCALE GATHERING OF SOVIET CW STOCKS INTO SEVEN SITES, AND BURIAL AND OCEAN DUMPING (BLACK SEA) IN ORDER TO REDUCE THE TOTAL TONNAGE TO SOMETHING COMPARABLE TO THAT OF THE US. IN OTHER WORDS – AS IN BW – THE SIZE OF THE PROGRAM, OR AT LEAST ITS OUTPUT IN THIS CASE, WAS AN ORDER OF MAGNITUDE – TEN TIMES – GREATER THAN THAT OF THE US. FEDEROV CLAIMS THAT SOVIET CW STOCKS WERE “AN ORDER OF MAGNITUDE” GREATER THAN THE DECLARED TONNAGE AND “*BURIED IN SEVERAL HUNDREDS [OF] POINTS OF [THE] SOVIET UNION IN AN ORGANIZED WAY.*”

## RUSSIAN EFFORTS TO REDUCE STOCKPILE BEFORE CWC ENTRY

➤ THE CHEMICAL WEAPONS CONVENTION (CWC) WAS SIGNED ON JANUARY 13, 1993 AND RATIFIED/ENTERED INTO FORCE (EIF) ON APRIL 29, 1997. THE CWC “PROHIBITS THE USE, DEVELOPMENT, PRODUCTION, STOCKPILING AND TRANSFER OF CHEMICAL WEAPONS.” UNTIL ENTRY INTO FORCE, PRIOR UNRECORDED AND UNOBSERVED DESTRUCTION WAS LEGITIMATE UNDER THE CWC

- CWC STATES PARTY DID NOT NEED TO DECLARE CW BURIED BEFORE JANUARY 1, 1976.
- CWC STATES PARTY DID NOT NEED TO DECLARE CW DUMPED AT SEA BEFORE JANUARY 1, 1985.
- IN PRACTICE, CWC MEMBER STATES BY AND LARGE DON'T DECLARE ANY BURYING OR DUMPING.

## RUSSIAN CW PRODUCTION SITES AND THEIR DESTRUCTION

- RUSSIA DECLARED 24 CW PRODUCTION FACILITIES. (US, NINE PRODUCTION AND STORAGE SITES.)
- ON SEPTEMBER 27, 2017 RUSSIA DECLARED COMPLETION OF DESTRUCTION – “DEMILITARIZATION” -- OF “CATEGORY 1 CHEMICAL WEAPONS”. (THIS IS “FIRST STAGE NEUTRALIZATION”, ACCEPTED BY THE OPCW, VS US TOTAL DESTRUCTION.)

## RUSSIAN CW DESTRUCTION COST ESTIMATES

- TOTAL COST ESTIMATES ARE ~\$10 BILLION: NO EXACT FIGURES (RUSSIA DIDN'T DISCLOSE THEIR COSTS).
- RUSSIA SPENT ~ 80% AND THE INTERNATIONAL COMMUNITY CONTRIBUTED THE OTHER ~20%.
- US: \$1.2 BILLION (60% OF THE ~\$2 BILLION) VIA NUNN-LUGAR FUNDS
- GERMANY, \$500 MILLION PLUS
- OVER 20 OTHER COUNTRIES CONTRIBUTED THE REMAINING ~\$300 MILLION.

## PUTIN WITHDRAWS FROM US-USSR CW COOPERATION

ON OCTOBER 10, 2012 PUTIN ANNOUNCED THAT RUSSIA WOULD WITHDRAW FROM COOPERATION WITH THE NUNN-LUGAR PROGRAM, AND IT ENDED IN 2013. THE RUSSIAN MILITARY CLAIMED THAT THE US WAS JUST INTERESTED IN STEALING RUSSIAN MILITARY SECRETS: **A THROWBACK TO PRE-1987**. KUNTSEVICH HAD ALSO CLAIMED THAT THE 1987 WYOMING MOU AND THE 1990 BILATERAL DESTRUCTION AGREEMENT, BDA, WERE FOR US SPYING.



## 8. BILATERAL (US-USSR) AND MULTILATERAL CW ARMS CONTROL

- STARTS AT THE ENDC IN GENEVA IN EARLY 1960s. USSR ALWAYS INSISTED ON A JOINT BW/CW TREATY. US UNILATERALLY ENDED ITS OFFENSIVE BW PROGRAM IN 1969 AND DESTROYED ALL STOCKS BY END-1971. THE UK TABLED A BW ONLY TREATY IN GENEVA.. USSR ACCEPTS, AND US-USSR WRITE DRAFT A BW TREATY, SIGNED ON APRIL 10 1972 AND RATIFIED/EIF MARCH 26, 1975. **INTERNATIONAL NEGOTIATION MOVES TO CW**
- **JULY 1974 NIXON-BREZHNEV SUMMIT, “PLEDGE” A “JOINT INITIATIVE ON CW DISARMAMENT.”**
- **1975 FORD-BREZHNEV VLADIVOSTOK SUMMIT, PLEDGE REAFFIRMED**
- **1976-1980, BILATERAL TALKS ALL DURING THE CARTER ADMINISTRATION, BUT USSR REFUSED ANY VERIFICATION.**
- **1984, BILATERAL TALKS BEGIN AGAIN, BUT SOON MULTILATERAL DISCUSSIONS SHIFT TO A CHEMICAL WEAPONS CONVENTION, THE CWC, BUT GET NOWHERE UNTIL GORBACHEV.**

## GORBACHEV YEARS

- ON APRIL 10, 1987 GORBACHEV UN SPEECH ANNOUNCES THAT THE USSR WAS ENDING ALL PRODUCTION OF CHEMICAL WEAPONS AND WOULD CONVERT ITS CW PRODUCTION FACILITIES TO CIVILIAN PURPOSE. CWC NEGOTIATIONS PICK UP MOMENTUM AND FORCE USSR TO UNDERSTAND THAT ON-SITE INSPECTION WOULD BE PART OF ANY EVENTUAL TREATY.
- AUGUST 11, 1987, SHEVARDNADZE STATES IN GENEVA THAT USSR WOULD ACCEPT MANDATORY SHORT NOTICE INSPECTIONS.
- OCTOBER 3-4, 1987 USSR ARRANGES CAREFULLY CONTROLLED VISIT FOR WESTERN OBSERVERS TO PARTS OF SHIKANY AND DISPLAYS OLDER CW WEAPONS. BUT MOD CW GENERALS STILL OPPOSE IN PRINCIPLE, ROLES OF KUNTSEVICH, PETROV, THEIR SUCCESSORS, AND DELAY ANY DESTRUCTION OF CW MUNITIONS AND BULK STOCKS TO AROUND 2003.

## GORBACHEV YEARS, cont'd

- SEPTEMBER 23, 1989, JACKSON HOLE WYOMING, SOV. FOR. MIN. SHEVARDNADZE AND US SEC. STATE BAKER SIGN THE WYOMING MOU, MEMORANDUM OF UNDERSTANDING.
- THE US AND USSR WERE TO EXCHANGE DATA ON THEIR CW STOCKPILES AND FACILITIES AND ALLOW MUTUAL INSPECTIONS TO VERIFY THE DATA. THE MOU INCLUDED MUCH MORE DETAILED PROVISIONS. IT WOULD NEVER HAVE COME TO PASS WITHOUT GORBACHEV, JUST AS FOR ALL THE REST OF THE US-SOVIET BILATERAL ARMS CONTROL AGREEMENTS AFTER 1987. (NEVERTHELESS, GORBACHEV HIDES/DESTROYS CW STOCKS AND PROTECTS/REWARDS "FOLIANT".)
- ON JUNE 1, 1990, THE BILATERAL DESTRUCTION AGREEMENT (BDA) QUICKLY FOLLOWS, SIGNED BY US/USSR. IT CALLED FOR AN END TO ALL CW PRODUCTION, THE DESTRUCTION OF CHEMICAL WEAPONS DOWN TO 5,000 METRIC TONS, WITH DESTRUCTION TO BEGIN BY DECEMBER 1992, BILATERAL WEAPON INSPECTIONS AND CONTINUOUS ON-SITE MONITORING, BY HUMAN INSPECTORS AND BY ON SITE INSTRUMENTATION.

## GORBACHEV-YELTSIN TRANSITION

- BOTH THE W/MOU AND THE BDA OCCUR IN THE BRIEF “GORBACHEV/SHEVARDNADE WINDOW.” NEITHER EVER FULLY COMES TO PASS. NEITHER WAS RATIFIED AND BOTH WERE IMPLEMENTED ONLY IN PART.
- THE MOU, THE BDA AND THE RUSSIAN CWC DECLARATION MARK THE BEGINNING OF MASSIVE RUSSIAN CONCEALMENT, DECEPTION, LYING, AS WITH THE RUSSIAN BW ISSUE, IN USSR/RUSSIA THE GENERALS AGAIN TAKE CHARGE OF CW POLICY AND SAY THAT THE CWC WILL SUFFICE. YELTSIN PLACES KUNTSEVICH IN CHARGE OF THE RUSSIAN “CONVENTIONS [CWC AND BWC] COMMISSION”, AND THE MOD WAS MADE THE LEAD AGENCY FOR CHEMICAL WEAPONS DESTRUCTION. IN 1992 RUSSIA HAD NO FACILITIES AVAILABLE TO DESTROY CW. BETWEEN 1993 AND 1997, THE US STILL TRIES TO GET THE BDA IMPLEMENTED. RUSSIA REFUSES, AND DESTROYS NO CW UNTIL AFTER 2003, 10 YEARS FROM CWC SIGNING.
- IN JANUARY 1994, YELTSIN-CLINTON SUMMIT, US HAD MASSIVE QUESTIONS ABOUT THE RUSSIAN BDA PHASE 2 DECLARATIONS, MASSIVE DECEPTION.

## AUGUST 2011 US COMPLIANCE REPORT ON RUSSIA CW PROGRAM

*“THE UNITED STATES IS UNABLE TO ASCERTAIN WHETHER RUSSIA HAS MET ITS OBLIGATIONS FOR DECLARATION OF ITS CWPFs, [CHEMICAL WEAPON PRODUCTION FACILITIES] CW DEVELOPMENT FACILITIES, AND CW STOCKPILES, AND WHETHER RUSSIA IS COMPLYING WITH THE CWC-ESTABLISHED CRITERIA FOR DESTRUCTION AND VERIFICATION OF ITS CW, ALTHOUGH WE HAVE ASCERTAINED THAT RUSSIA IS NOW DESTROYING CW AGENT HYDROLYSIS REACTION MASSES AT ITS OPERATING CHEMICAL WEAPON DESTRUCTION FACILITIES.”*

BETWEEN SUPPORTING SYRIAN CW USE AND THE SALISBURY AFFAIR, RUSSIA HAS NOW SERIOUSLY DAMAGED THE CWC. IT REMAINS TO BE SEEN IF THEY WANT TO DESTROY THE TREATY ENTIRELY AS THEY DID THE INF TREATY, AND IF NOT, HOW MUCH LASTING DAMAGE RUSSIAN ACTIONS WILL DO TO THE CWC.