

# Destroy Chemical Weapons. Now.

The Chemical Weapons Campaign of Green Cross International  
*Overview*

## ***1. Current status of the elimination of chemical weapons worldwide***

### **1.1 Countries which have declared stockpiles of chemical weapons**

India:	Quantity unknown
Russia:	40,000 tons
South Korea:	Quantity unknown
USA	31,500 tons

In addition to those countries with a declared stockpile of chemical weapons, there are a number of states in the Middle East and in the Korean peninsula which are suspected of being in possession of chemical weapons. As these states are not signatories of the Chemical Weapons Convention, they are not obliged to declare any possible stockpiles.

### **1.2 Current status of the elimination of chemical weapons**

India:	Ongoing programme of weapons destruction, current status unknown
Russia:	The first chemical weapons destruction facility will start up in 2002
South Korea:	Ongoing programme of weapons destruction, current status unknown
USA	Ongoing programme of weapons destruction, approx. 23% of stockpile destroyed, completion date approx. 2018, 40 years after the start of the programme

## ***2. The exceptional case of Russia***

### **2.1. The Russian chemical weapons stockpile**

According to their own declaration, Russia has the largest stockpile of chemical weapons, which it took over at the collapse of the Soviet Union. The weapons are split between seven sites (see map):

- Gorny, Kambarka; a total of 7,520 tons of obsolete blister (skin) agents of high arsenic content, for the most part stored in 80 ton tanks. A leak from these tanks would mean a serious threat to the environment.
- Shchuch'ye, Kizner, Maradikova, Leonidovka, Pochep: a total of 32,480 tons of nerve gas in live shells. Ammunition inspections have shown that many are in perfect condition and are deployable for the next 10 to 20 years.

In order to get a sense of the size of the stockpiles, here is the inventory from the Shchuch'ye site

- Over 1,970,000 live shells, many with highly-developed weapons technology
- 718 warheads for FROG and SCUD missiles, both missile systems found worldwide
- 42 bomblets for SS-21 missiles. This represents the most modern chemical weapons deployment system in the world. The number of victims after an attack would be similar to those of a small nuclear weapon.

## **2.2 Current status of the Russian chemical weapons destruction programme**

The Russian chemical weapons destruction (CWD) programme was approved by the Russian government on 21<sup>st</sup> March 1996 and at that time, costs were estimated at CHF 9.5 billion (cf USA; CHF 35 billion). The Russian parliament ratified the signing of the Chemical Weapons Convention on 4<sup>th</sup> November 1997, which places the destruction of chemical weapons under international control, after the international community had indicated their willingness to support the Russian CWD programme financially by paying for half of the costs incurred. However, as this support did not materialise quickly and due to the currency crisis of August 1998, the programme ran into serious difficulties.

In August 2000 the responsibility for the carrying out of the Russian CWD programme was handed over to the newly-established Russian Munitions Agency (RMA). The hand-over resulted in the following developments:

- The funding for the Russian CWD programme was increased from US\$ 25 million p.a. to US\$122 million from 2001
- The RMA announced it could not finance the CWD programme developed by the Military and that they were drafting a new weapons destruction concept based on the construction of 3 destruction plants with greater capacity, as opposed to 7, as originally proposed. The goal is to reduce the costs of the destruction programme by a factor of 1.5 to 2, i.e. from the present estimate of CHF9.5 billion to approx. CHF5 billion. Russia would then be able and is willing to pay 50% of these costs. Furthermore, the new concept foresees the limiting of the number of plants to three and for the centralised plant for the destruction of nerve gas to be situated at Shchuch'ye.
- President Putin appointed a governmental commission for chemical weapons on 4<sup>th</sup> May 2001. The president of this commission is the former democratic Prime Minister, Sergey Kirienko. The commission lays down the strategic guidelines for the CWD programme, controls the correct use of both state and international funds and is responsible for providing the population with timely and appropriate information. The members of the commission are representatives of local and national government, the military, the Academy of Science and as the sole member of a non-governmental organisation (NGO), the Green Cross Russia (represented by their President, the academic Sergey Baranovsky).

### **2.3 Current status of international aid**

International aid is concentrated on Gorny and Shchuch'ye.

The USA has promised to provide Russia with CHF1.5 billion in financial aid for the construction of the plant at Shchuch'ye, of which a total of CHF 450 million has already been paid out. However, the USA have made any further payments subject to an increased European contribution.

The European contribution to date stands at CHF 120 million with a further 30 million currently under discussion in various European countries. The countries participating are: Germany, the EU, Finland, Great Britain, the Netherlands, Italy, Canada, Norway, Sweden and (until now in a minor capacity) Switzerland.

### **3. Options for contribution by Switzerland to the aid programme**

#### **3.1 Resolution in the Parliament, accepted by the two chambers: it's objectives**

In collaboration with the chemical industry, Switzerland has trained over the half the inspectors for the OPCW (Organisation for the Prohibition of Chemical Weapons based in the Hague) at its ABC centre in Spiez. Switzerland also carries out international inspections at chemical plants to prevent the production of new chemical weapons. Switzerland's know-how in the destruction of chemical weapons is known worldwide, Switzerland can play an important role as well in enforcing the Chemical Weapons Convention.

To identical motions have been accepted by the two chambers of Swiss parliament. They propose that an overview with a list of options and the relevant financial framework be presented to the Federal Parliament as a paper for discussion. This overview should include the participation of both industry and other civil institutions as these often act more efficiently and economically in questions of mediation and concrete measures on site than government agencies.

#### **3.2 Costs of a contribution by Switzerland to the aid programme**

The motion drawn up by Imhof/Paupe proposes that a contribution by Switzerland to the Russian weapon destruction programme ' should be fixed in accordance with the level of aid given by all participating nations, at 2% of the total contributions' (= 2% of the international share).

New plans are in the process of being drafted which foresee a total cost of approx. CHF 5 billion, of which the international community would provide half i.e. CHF 2.5 billion.

2% of this figure would therefore be CHF 50 million, which Switzerland would have to find and which would be spread over a period of at least 10 years.

#### **3.3 Weapons destruction as a political priority**

The motion states that Switzerland should encourage confidence-building measures and support initiatives which strengthen the engagement by the international community. This includes for example the organisation of a forum of like-minded countries (European states as well as Canada), which could formulate a coordinated strategy to ensure compliance with the Chemical Weapons Convention by the actual destruction of chemical weapons - similar to the way in which Canada and Norway took the lead in the question of condemning the use of landmines while at the same time maintaining a particularly successful relationship with private institutions. The motion takes such initiatives into consideration: "Industry, NGOs and specialists from both the Federal Government and Administration can contribute each in their own way, with bilateral agreements, by participating in multilateral coordinated programmes, with projects for the prevention of disasters and through intensified technical co-operation in areas where chemical weapons are stockpiled. In addition, an independent body should supervise these measures."

Possible initiatives are listed below:

### 3.4 Options for active support in the destruction of chemical weapons

It is highly probable that nerve gas will not be destroyed at the present sites as originally planned but centrally in Shchuch'ye. This necessitates the increase in storage capacity in Shchuch'ye, improvements to the rail transport infrastructure and an action plan for the prevention of potential disasters during transport.

#### Possible forms of support

1. **Increasing the capacity for weapons destruction:** Chemical weapons are first dismantled in so-called 'disassembly lines' and the toxic agent destroyed. The Shchuch'ye weapons destruction plant foresees two such disassembly lines. Should toxic agents from other stockpiles be brought to Shchuch'ye to be destroyed, then the number of disassembly lines must be increased from two to five so that the programme can be completed within an acceptable time frame.

Proposal: The initiation and co-funding, together with other countries, of an additional disassembly line. Cost: approx. CHF 130 million per disassembly line (of which Switzerland would contribute 2% or CHF 2.6 million).

2. **Preparation of the weapons for destruction:** Before transportation to the destruction plant, the weapons must be crated and loaded onto freight trains.

Proposal: Funding of the loading bays and equipment. Cost: not yet determined.

3. **Provision of transport capacity, ensuring transport safety:** Should it be decided to transport the weapons, between 12,000 and 27,000 tons of nerve gas would be transported by rail.

Proposal: Three measures need to be put in hand: the drawing up of a risk analysis for the transportation routes. As a result of this analysis, a possible upgrading of certain stretches of rail track. The funding of a high security carrier (similar to 'Castor'). Cost: not as yet determined.

Confidence-building measures with regard to the transportation (see No. 10)

### 3.5 Options for improving the operational infrastructure

Shchuch'ye is a poor, rural region. The infrastructure for operating the weapons destruction plant is non-existent. In order for the plant to operate, significant investment is needed in energy and water supply as well as in waste water and communications systems

#### Possible forms of support

4. **Investment in operational infrastructure:** A list of high-priority investment projects for a gas supply system, water and waste water systems, access roads and rail tracks, electricity supply and communications has been drawn up. The costs for the nine different projects are in the region of between CHF 7 and 70 million.

Several European countries are currently discussing collaboration in order to coordinate the financing of projects. For example, Italy and Sweden propose to share the financing of a new gas supply.

### 3.6 Options for the benefit of the surrounding population

The local population has three fundamental concerns: Health and Safety, Protection of the Environment and well-organised emergency services should there be an accident at either the plant or weapons depot. Furthermore, accommodation must be provided for the hundreds of Russian specialists working at the plant and their families.

#### Possible forms of support

5. **The setting up of local emergency and civil defence services:** Although an emergency response system is being set up in Shchuch'ye this year, many vital elements are non-existent.

Proposal: The local civil defence could be supported by providing expertise and materials for the setting up of emergency services. Cost: not yet determined.

6. **Improvement in the provision of medical care:** The local population want to be sure that neither the storage nor the destruction of chemical weapons will affect their health. However, the local medical infrastructure is inadequate and cannot guarantee the reliable monitoring of public health.

Proposal: The setting up of a public health organisation to monitor the health of the population in the Shchuch'ye region. Funding of the running costs for example over a period of 10 years. Cost: not yet determined.

7. **Investment in the community infrastructure:** Due to the relocation of hundreds of specialists and their families to Shchuch'ye, the community infrastructure must be extended.

Proposal No. 1.: Investment in the construction of new homes, kindergartens, schools, roads and in the provision of electricity supplies, communications or health services. Cost: not yet determined.

Proposal No. 2.: Creation of a small credit programme to promote initiatives by local industry (similar to the same type of programme set up by Switzerland in Woronesh or Nishni Nowgorod). Cost: not yet determined.

8. **Creation of an environmental monitoring system:** The local population fear that the destruction of chemical weapons will affect the environment.

Proposal: An environmental monitoring body (water, land, air), independent from the government, is a vital factor in building confidence. Such a body can help to dispel rumours and to reduce public anxiety. Accidents or problems at the plant are more difficult to hide. Cost: approx. CHF 8 million

9. **Clean up of open burning sites:** During the extensive chemical weapons destruction campaign in the sixties, non-transportable chemical weapons were simply burnt in the nearest forest. At the time, it was not known that in doing so large quantities of dioxin and furan would be released (this was only discovered 10 years later). A large number of these open burning sites have been identified in the last two years.

Proposal: The drawing up of a contaminated sites register. According to the risk presented to the environment or the local population, either fencing off or clean up of the contaminated site. Cost: CHF 2-20 million

10. **Informing the public along the transport routes:** The local population living in the communities surrounding the storage unit have been reasonably well-informed on the destruction of chemical weapons, by means of a number of public information centres. In the case of a weapons transport, information to those living along the rail track must also be provided for. Without a broadly-based public debate of the risks of transportation, similar reactions to those experienced in connection with 'Castor' risk to occur. Cost: approx. CHF 2 million p.a.