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Military waste and the environment

Report[1]
Committee on the Environment, Agriculture and Local and Regional Affairs
Rapporteur: Mr Latchezar TOSHEV, Bulgaria, Group of the European People's Party

Summary

The Assembly's Committee on the Environment, Agriculture and Local and Regional Affairs deplores the fact that the use and management of military waste, which represents a significant threat to the environment, comes under military secrecy. Most of this waste, which has moreover caused human and environmental damage in the last few years, is still chemically active and may bring about disasters on a European scale.

Consequently, the Assembly should encourage the Council of Europe member states to waive the confidentiality of information about military waste, where such confidentiality still exists. It should also invite the member states to create and implement a common European policy and methodology for military waste management and to consider setting up a body with the purpose, in particular, of co-ordinating and supervising national actions.

1. Reference to the committee: Doc. 11462, Reference 3404 of 21 January 2008.

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A. Draft resolution[2]

1. The production of weapons used in war, their detonation and the eventual storage of the hazardous material in military waste disposal sites could cause serious environmental problems. The utilisation and management of military waste is an issue that needs to be addressed by the Council of Europe member states as a serious environmental problem.

2. Many substances present in military waste are still active and can cause problems for nature and human health. Furthermore, only recently evidence has shown that the exposure to detonated material can have disastrous effects. Unfortunately, these problems cannot be solved by simply displacing stored waste, ignoring the dangers of abandoned arsenals or implementing standards on a country-by-country basis.

3. During the last two decades, about ten serious incidents involving military waste were reported, all of which resulted in victims, environmental damage and expense for repairing the damage caused. Such serious incidents affect not only the states in question, but go beyond their frontiers and are in fact a common European problem.

4. Important quantities of weapons dating from the First and Second World Wars and the Cold War are still stored by the military, but competition in weapon production and rapid technological developments have resulted in most of these weapons becoming obsolete.

5. In a special category of hazardous military waste are weapons that have been dumped on the seabed in vast quantities and in some cases on the river beds. Most of this waste is still chemically active and can cause serious environmental problems. The Parliamentary Assembly has already dealt with this particular issue in its Resolution 1612 (2008) on chemical munitions dumped in the Baltic Sea.

6. The Assembly consequently calls upon member states to lift confidentiality on information about military waste, where such confidentiality still exists.

7. In the light of the above, and especially with regard to the negative effects on the environment, the Assembly believes that military waste has become a common problem in all European countries.

8. The Assembly therefore invites the Council of Europe member states to:

8.1. create and implement a common European policy and methodology for military waste management, which also addresses means of recycling a part of this military waste, bearing in mind the shortage of resources and the need for sustainable development;

8.2. adopt mutually acceptable regulations on freedom of information on disposal of military waste in Europe and guarantee the availability of information on the types of waste material and the lifting of any confidentiality in this respect;

8.3. consider creating a new international or European body and European financial instrument to deal with the issue and to co-ordinate the efforts of member states. Such an institution could support member states that face serious difficulties in solving their problem, co-operate with European neighbouring countries on utilisation of their military waste, and establish a joint control mechanism;

8.4. initiate co-operation in this respect with NATO member states, as well with those Council of Europe member states that are not members of NATO, with a view to harmonising policies and methodologies on utilisation of military waste.

2. . Draft resolution adopted by the committee on 24 June 2010.

B. Draft recommendation[3]

1. The Parliamentary Assembly, referring to its Resolution … (2010) on military waste and the environment, reiterates that military waste is a common problem in all European countries.

2. It consequently calls on states to take the necessary steps to set up inter-state co-operation and to ensure greater transparency, particularly where the communication of information is concerned.

3. The Assembly also recommends that the Committee of Ministers draft a set of guidelines to encourage member and non-member states to adopt and implement co-ordinated strategies on dealing with military waste, as called for in the aforementioned resolution.

3. . Draft recommendation adopted by the committee on 24 June 2010.

C. Explanatory memorandum by Mr Toshev, rapporteur

1. Introduction

1. The origin of this report is the motion for a resolution (Doc. 11462) on military waste and the environment, tabled by Mr Ivan Ivanov and others.

2. In order to gather background information for the report, the Committee on the Environment, Agriculture and Local and Regional Affairs organised a hearing in Paris on 23 November 2009. At this hearing, the committee heard a presentation by Lt Colonel Dr Nikolay Nikolov from the Bulgarian Ministry of Defence, who is an expert on problems related to military waste.

3. In December 2009, a questionnaire was distributed to the member states with the following questions:

– What kind and how much non-utilised military waste is stored on the territory of your state?

– Is there any public information as to where military waste (including radioactive, if any) is stored?

– If so, does it include disposal sites on the bed of water basins or deep below ground level?

– Do you co-operate with other states or with international institutions in order to solve the environmental problems raised by military waste management?

– Is there any specific legislation concerning this issue?

4. Replies were received from 20 states (Andorra, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Germany, Greece, the Netherlands, Hungary, Italy, Lithuania, Poland, Portugal, Serbia, Slovak Republic, Slovenia, “the former Yugoslav Republic of Macedonia” and Turkey).

5. Most of the replies about military waste disposal were not very informative, which explains the lack of available information on the issue.

6. Nine of those states that replied reported that they had legislation on the issue. Five states reported that they were co-operating with other states or institutions in solving the problems of military waste. It is very disappointing that 27 states did not provide any information.

7. This lack of information made it impossible to make a comparative study on the legislation of the Council of Europe member states on this issue, although this had been the rapporteur’s initial intention.

8. A very precise reply, which was highly appreciated by the rapporteur, was provided by Germany.

9. The committee authorised a visit of the rapporteur and the secretary of the committee to NATO Headquarters in Brussels. Due to transport complications, the meeting in NATO had to be held in the absence of the rapporteur. The secretary of the committee nevertheless met the following persons:

– Mr Henrik Dam, Head of JAIS (Joint Armaments and Industry Section, Defence Investment Division);

– Mr Osman Tasman, Head of the Land Armaments Unit, JAIS;

– Lt Col Filip Martel, Vice-Chairman of CNAD (Conference of National Armament Directors) Ammunition Safety Group – Subgroup 5 on Logistic Storage and Disposal;

– Ms Marie-Claire Mortier, secretary.

10. He was given the following information:

11. The topic of “military waste” is extremely vast. It would be appropriate to focus on a single aspect, namely conventional ammunition. This would leave aside, of course, nuclear and chemical ammunition.

12. NATO itself has prepared a document on the disposal of conventional ammunition. The paper reviews the best disposal techniques, the “best practices”, with a view to identifying them and spreading knowledge of them (the problems being similar everywhere, one should avoid “reinventing the wheel”).

13. The geographical area covered by the Council of Europe roughly coincides with that covered by NATO’s Partnership for Peace programme.

14. Upon learning that the rapporteur intended to make a study visit to Ukraine, the interlocutors informed the secretary of the committee that Ukraine had a true problem with “leftover ammunition”. NATO supports Ukraine in dealing with this issue through NAMSA expertise (NATO Maintenance and Supply Agency, which has an office in Kyiv). NAMSA is working on disposal contracts for both ammunition and weapons (using only environmental friendly techniques).

1.1. The use of ammunition

15. Lead bullets should be prohibited because of the lead pollution due to firing.

16. Depleted uranium bullets are to be considered as “conventional” ammunition. There are discussions as to whether or not depleted uranium bullets were the cause of soldiers’ sicknesses during the Gulf War.

17. Other discussions concern the cleaning up of battlefields.

18. Cluster ammunition is banned by the Oslo Convention on Cluster Munitions.

1.2. The storage of ammunition

19. Stored ammunition represents a permanent and serious threat to the environment; the question is not “if” it will blow up but “when” it will blow up. That is why ammunition should not be stored close to (or in) residential areas.

1.3. The disposal of ammunition

20. It is very expensive to dispose of ammunition, but, if it is not properly disposed of, it will eventually blow up.

1.4. The transport of ammunition

21. For the transport of ammunition, civil regulations are still in use (which is regrettable).

22. Among questions to be raised could be the following one: for the destruction of conventional ammunition, is burning in the open air still an acceptable solution? A risk analysis should be able to give the answer.

23. Two documents would have been useful in the work on this report:

– STANAG 2510: “Waste management for NATO military activities”;

– STANAG 2545: “NATO glossary on environmental protection”. (STANAG = Standardisation Agreement)

However, these documents could not be given to civilians; they could only obtained by request from a national representation to NATO.

24. In this situation, it was difficult for the rapporteur to prepare a very profound analysis of the situation. Despite his intention that the report be based on information officially provided by member states, a significant part of the sources for the preparation of this report were publications in the media or reports by NGOs.

2. Production and manufacturing consequences

25. Warfare not only elicits large-scale casualties and devastated landscapes, but it also leaves a wake of other serious consequences, which may plague a country long after political problems are resolved. The production of weapons used in war, their detonation and the eventual storage of the hazardous materials involved must be addressed. Many of the substances in military waste are still active and could cause problems for the environment and human health.

26. Furthermore, only recently has evidence shown the long-term effects of exposure to detonated materials, which have proven to be very dangerous. Simply displacing stored waste, ignoring the dangers of abandoned arsenals, or implementing standards on a country-by-country basis will fail to adequately address these challenges. In the last decades, about 10 incidents involving military waste were reported – in Uzbekistan, Albania, Bulgaria, Russia, France, Ukraine, etc. There have been victims, environmental damage and expenses to cover the important problems caused, which have been serious.

27. Important quantities of weapons from the First and Second World Wars and the Cold War are still stored by the military, but competition in weapon production during the Cold War and rapid technological developments have resulted in most of these weapons becoming obsolete.

3. Examples of data collected during the preparation of the report

28. According to the data collected, there are around 2.5 million tonnes of military waste stored in Ukraine since the Soviet era, in about 6 000 storage sites. Part of this military waste is stored without any particular precautionary measures.

29. Special attention should be paid to the problem of burial of radioactive waste.

30. There is a state programme on the utilisation of non-necessary armaments in Ukraine, which covers the period from 2006 to 2017, and there are several regulations concerning practical proceedings for the utilisation and handling of armaments. Ukraine needs help to resolve the problems it has with military waste.

31. Unfortunately, the rapporteur was not able to visit Ukraine to study the situation in more depth. Our data provides information about a series of explosions and incidents between 2004 and 2006 in the Novobohdanivka arsenal. There are reasons to believe that the situation of military waste management and utilisation in Ukraine remains serious and that not much progress has been achieved in the meantime. One of the reasons for this complicated situation is the lack of financial resources to address this problem.

32. In Moldova, at the Cobasna station, on the territory of Transnistria, around 20 000 tonnes of arms and ammunition are stored. No more data was available about this case.[4]

33. An OSCE report of 2007 indicates that in Belarus the utilisation of military waste has caused serious environmental problems, including the need for local authorities to clean up a territory of around 300 000 hectares, the sites of former military bases.

34. According to a paper by Peter Szyszlo,[5] the Russian Yablokov Commission has estimated that, after 1965, the Soviet Union dumped a total of 2.5 million curies of contained and discharged radioactive waste into the ocean – including 16 nuclear submarine and nuclear ice-breaker reactors – in the gulfs near Novaja Zemlja. The same paper stated that between 1964 and 1991, between 11 000 and 17 000 containers of liquid and solid radioactive waste were dumped in the same region. Some of the containers were punctured to facilitate sinking. The areas where this highly dangerous disposal method was used during the Soviet times, causing a risk of radioactive pollution, are, according to this paper, the Barents and Kara seas and the area surrounding Novaja Zemlja. This “nuclear graveyard”, says Peter Szyszlo, was “not only for radioactive waste but also for reactors, decommissioned nuclear-powered vessels and more recently dismantled nuclear weapons”.

35. The rapporteur would like to connect this information with the information about the situation in the Arctic region, provided by the Norwegian authorities during the hearing organised by the Committee on the Environment, Regional Planning and Local Authorities in Tromsø in 1999.

36. The rapporteur considers that it would be of great importance and most welcome if the Russian Federation would accept to co-operate with the Council of Europe, the European Union and the United Nations in solving this problem, which is obviously not only a national one.

37. In the Russian Federation there are currently 27 legal texts regulating the utilisation of military waste, but not a single law on this issue has been adopted. There is a federal programme on the utilisation of armaments and military techniques, which was adopted in 2005 and is in force until the end of 2010. The goal of the programme is to decrease expenditure for storing unnecessary armaments by 70%. In the Russian Federation, there is also a federal law on military technical co-operation with other states, which includes the issue of the utilisation of armaments and military techniques.

38. There was no other information at the disposal of the rapporteur about the commitments of the Russian Federation to the solution of the problems raised by old military waste disposal sites and especially about waste dumped in water basins.

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4. . See also the Assembly’s reports on the functioning of democratic institutions in Moldova (Doc. 9418) of 2002 (paragraphs 107 to 111 of the explanatory memorandum) and on the honouring of obligations and commitments by Moldova (Doc. 11374) of 2007 (paragraphs 223 and 224 of the explanatory memorandum).

5. . Central Europe Review, Vol. 1, No. 21, 15 November 1999.

39. In the British newspaper the *Independent on Sunday* of 22 June 2008, an article by Jonathan Owen entitled “Soldiers dumped munitions with household waste”, reported on about 20 incidents of the dumping of military waste in Great Britain, calling it a “dangerous and highly unprofessional military habit”, subject to sanctions by the Health and Safety Executive and the Environmental Agency. The British House of Commons held a debate on military radioactive waste on 20 May 2008, where this particular issue was addressed.

40. Bulgaria has a national programme, adopted in 2004, for the utilisation and destruction of surplus ammunition on its territory. There are also four main sections of legislation that cover the issue of utilisation.

41. In 2003, there were 59 000 tonnes of surplus ammunition in Bulgaria. After the reform of the army, which in 2005 started to be transformed into a professional army, this quantity increased to 67 000 tonnes. In Bulgaria, there is currently a plan on military waste management, aimed at being fully implemented by 2015.

42. On 3 July 2008, near Sofia, there was a big explosion of surplus ammunition, which caused damage, but fortunately there were no victims.

43. Similar explosions of surplus ammunition took place on 15 March 2008 in the village of Gerdech, near Tirana in Albania, on 17 July 2008 in the missile-artillery warehouses near the town of Kagan in Uzbekistan, on 4 September 2009 in the factory Parvi Partizan near the town of Uzjice in Serbia, on 13 November 2009 in the Arsenal 31 warehouses near the town of Ulianovsk in the Russian Federation, etc.

4. Environmental and health effects of producing weapons

44. Environmental pollution resulting from the manufacturing of weapons and warfare materials is undoubtedly a global issue with which many countries are challenged. Whether by air, water, or soil contamination, the environmental problems caused by weapon production should be the subject of serious consideration, even though the consequences are not as immediately evident as the consequences of actual warfare. These problems are therefore often pushed aside as other seemingly more urgent problems are pushed to the forefront of the environmental debate.

45. The production of nuclear weapons releases carcinogenic and mutagenic materials such as plutonium, uranium, strontium, caesium, benzene, polychlorinated biphenyls (PCBs), mercury and cyanide. These chemicals remain hazardous for thousands, some for tens of thousands, of years. Using the current methods of disposal, these materials are exposed to drinking water, groundwater and soil. Currently, the specific contaminant that has received most attention is perchlorate. Produced at a rate of several million pounds per annum, this chemical is a primary ingredient in propellant and has been used for decades for solid rocket propellant and the manufacturing of rockets and missiles. Perchlorate is easily dissolved and transported in water and has thus been found in drinking water and food products. This compound has been found to affect the thyroid gland and cause developmental delays.

5. Post-detonation emissions

46. Perhaps an even greater oversight in environmental discussions are the long-term effects of hazardous materials, which remain in war-torn countries long after troops have left. These environmental consequences may often be the most difficult to detect if no special attention is paid to this issue. Since the most evidently hazardous chemicals have only been a product of modern warfare, there are few case studies that can provide reliable research on this issue.

6. Hazardous military waste

47. For certain areas of eastern Europe, post-war environmental implications encompass several ecological sectors and continue to pose a grave threat to the water supply, air quality, and safety of the people who live there. Due to the previous Soviet occupation, these countries have been left with abandoned military bases, undetected weapons, hazardous waste and radioactive residue. Furthermore, these problems have been exacerbated by lax regulation. Today, Moldova alone faces the problem that it has to deal with 8 000 tonnes of toxic residues that are stored illegally and in a disorganised manner, leading, *inter alia*, to water contamination. According to the figures at our disposal, there are about 20 000 tonnes of arms and munitions, all stored in Transnistria, that are impossible to transport. An explosion of these munitions would undoubtedly lead to a humanitarian disaster. In Ukraine, 2.5 million tonnes of arms, munitions and military waste are lying unclaimed on a number of sites. Four of these sites include also buried radioactive residues. Moreover, 39%

of used water is contaminated and 25% of it returns into the environment. Belarus is faced with the need to get rid of armaments left by the Soviet military, which are both radioactive and toxic and the authorities must clean up oil products and electromagnetic radiation from a total area of 300 000 hectares of military sites.

7. Treatment and storage of military radioactive waste

48. Many previous recommendations for treating these environmental threats have failed to consider the implications of storing large-scale waste. The storing process in itself may exacerbate many environmental problems and can be costly and ineffective.

49. It is not easy to gather information on military waste in general, and on radioactive military waste in particular.

50. For the United States, Russia and several other nations, the option of simply exporting hazardous waste has become appealing. In Russia's case, the prospect of future revenues from importing waste have outweighed any health and safety considerations for the Russian people. The country plans to import 20 billion tonnes of radioactive waste, store it for a number of years, and then "reprocess it" – a practice as yet only vaguely defined. Russia has propagated this plan by referring to waste as a valuable raw material because it is possible to use extracted plutonium to power a special kind of nuclear reactor. Already, there is a growing problem of extensive dumping in the Russian Arctic of military waste from reactors, which has yet to be properly addressed. Many Third World countries are considering importing waste as a source of revenue; yet simply displacing waste fails to address the problem at a global level. When determining a storage method, one must consider the technical implications of finding safe storage and disposal sites, as well as the financial issues of covering the cost of security, decommissioning, decontamination and cleaning up.

8. Military waste storage

51. Military waste materials that are not destroyed or recycled are stored in ground or underground depositories or on the bed of seas or oceans.

52. In a special category of hazardous military waste are weapons dumped on the seabed or the ocean floor. Most of this waste is still chemically active and could cause not only serious environmental problems, but also economic problems. This particular issue has already been dealt with by the Assembly in its report on chemical munitions dumped in the Baltic Sea (Doc. 11601 and Resolution 1612 (2008)).

9. Lifting confidentiality

53. Member states should provide accurate information about the actual quantities and types of military waste in order to have a real assessment of the problem. This information cannot be treated as confidential. It is obvious that these materials are no longer needed by states. Freedom of access to any information concerning the environment should also be guaranteed.

10. Monitoring

54. Measures for environmental monitoring of the depositories of military waste should be introduced immediately, where it is not already done by the respective state authorities.

11. Conclusions

55. The problem of military waste cannot be treated at national level only; it represents a common European problem. Therefore, a common policy and methodology to tackle this issue should be developed.

56. The opportunities for recycling a part of this military waste should also be considered (especially for metals), due to the shortage of resources and need for sustainable development.

57. There is a need for a new international or European body and financial instrument to deal with the issue, to co-ordinate the efforts of member states and to foster co-operation among neighbouring countries on the utilisation of military waste, and to establish an environmentally safe control mechanism. It would also be useful if this body could co-operate with the environmental branch of NATO and other military alliances in order to harmonise policies and methodologies on the management of military waste.