OFFICE OF THE DIRECTOR DIVISION FOR SUSTAINABLE DEVELOPMENT

DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS ROOM S-2620, 405 EAST $42^{\rm ND}$ Street, New York, N.Y. 10017 Telephone: (212) 963-1811 fax: (212) 963-4260 email: seth@un.org

Reference: DSD/2013/181

The Secretariat of the United Nations presents its compliments to the Permanent Missions to the United Nations and has the honour to refer to the General Assembly resolution 65/149 "Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea". In this resolution, the General Assembly "notes the importance of raising awareness of the environmental effects related to waste originating from chemical munitions dumped at sea", and 'invites the Secretary-General to seek the views of Member States and relevant regional and international organizations on issues relating to the environmental effects related to waste originating from chemical munitions dumped at sea, as well as on possible modalities for international cooperation to assess and increase awareness of this issue, and to communicate such views to the General Assembly at its sixty-eighth session for further consideration."

In accordance with the above General Assembly resolution, the attached questionnaire on issues relating to the environmental effects related to waste originating from chemical munitions dumped at sea is being transmitted to all Member States and relevant regional and international organizations. The responses will be communicated by the Secretary-General to the sixty-eighth session of the General Assembly.

Responses could be submitted to the Division for Sustainable Development of Department of Economic and Social Affairs (DESA) (wang24@un.org, copied to zubcevic@un.org) before 20 May 2013. Please note that the questionnaire can also be filled out online by visiting the United Nations Sustainable Development Knowledge Platform at http://sustainabledevelopment. un.org and signing in by clicking "Sign in" at the upper right corner. Once signed in, click on "Questionnaires/Surveys" in the left menu and then on the link of the corresponding questionnaire. Username/password are the same as for the Rio+20 website. For questions and technical support, please contact us at dsd@un.org.

The Secretariat of the United Nations avails itself of this opportunity to renew to the Permanent Missions to the United Nations the assurances of its highest consideration.

22 March 2013

N.S.

All Permanent Missions to the United Nations New York

Questionnaire on issues relating to the environmental effects related to waste originating from chemical munitions dumped at sea

RESPONSE BY INTERNATIONAL DIALOGUES ON UNDERWATER MUNITIONS (IDUM)

The International Dialogue on Underwater Munitions (IDUM) is a non-governmental organization/Society founded in 2004 by Mr. Terrence P. Long a munitions expert following his appearance as a witness on Sea Dumped Weapons (SDW's) at a Canadian Senate Hearing in 2003 at the Senate Standing Committee on Fisheries and Oceans to discuss their human and environmental impacts. One of the two main findings of the Senate Hearings was the need for the United Nations to host a Conference on the issues of Sea Dumped Chemical and Conventional Weapons and the need to develop a stake holders group. The IDUM was formed as a response to SDW's whereas no open stake holder group or United Nations conference was planned in the near future.

The IDUM is an internationally recognized body where all stakeholders (diplomats, government departments including external affairs, environmental protection and fishery departments, industry, fishermen, salvage divers, oil and gas, militaries and others) can come together in an open and transparent forum to discuss underwater munitions, seek solutions, and promote international teamwork on their issues related to underwater munitions. The IDUM promotes constructive engagement with all stakeholders rather than disengagement so that we may learn from one another's situation.

What we have learned is that off-the-shelf-technology, developed by the oil and gas industry and military's unmanned systems programs, does exist to address underwater munitions sites. And there is a "Need to clean" based on the potential human health and environmental impact on our health care systems and fish stocks. Underwater munitions in some form or another will continue to pollute the marine environment over time. It's just a question of "When". Underwater Munitions are "Point Source Emitters of Pollution". In most cases, remove the source and you remove the problem. The IDUM's mission is to promote the creation of an internationally binding treaty on all classes (biological, chemical, conventional, and radiological) of underwater munitions. This treaty would encourage countries to collaborate on underwater munitions policy, research, science, and responses including environmentally-friendly remediation in affected regions.

Munitions can be found in major quantities in every ocean in the world including many of our lakes, rivers and streams. They can be found from a reservoir in Jakarta, Indonesia to the pristine lakes of the Swiss Alps at the foot of the Edger to the Great Lakes of North America. In addition to those dumped at sea, a vast number of munitions have been abandoned in rivers, lakes, reservoirs, and inland seas. Former inland sites remain largely unrecognized, and are today found near many populated areas. In some cases, they share the same waters used by communities for human consumption and irrigation purposes.

The easiest and cheapest way to eliminate chemicals and conventional weapons in the aftermath of World War II was to dump them into the oceans. Sea dumping of chemical weapons took place from 1945 to the mid-1970s in every ocean of the world. The disposal of chemical and biological warfare agents at sea was prohibited internationally by the London Convention in 1972, and implemented by Canada through the Ocean Dumping Control Act in 1975. The Chemical Weapons Convention, which was entered into force in April 1997, bans production, acquisition, stockpiling, transfer and use of chemical weapons, and compels its signatories to get rid of their arsenals. Most recently the OPCW has open their door to SDW's but this process is in the early stages and should be defined over time.

128. The Third Review Conference noted the United Nations General Assembly resolution "Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea", adopted at its 65th session by consensus, and invited States Parties to support voluntary sharing of information, raising awareness and cooperation on this issue.

Most notable are the international efforts of the Government of Lithuania that resulted in the unanimous passing of the United Nations Resolution on Sea Dumped Chemical Weapons in December 2010. IDUM supports the Lithuanian initiative for the UN Resolution on "Cooperative measures to assess and increase awareness of environmental effects related to waste originating from chemical munitions dumped at sea". IDUM believes that the UN Resolution should consider all bodies of water and chemical waste related to each class of munitions (Conventional, Radiological & Chemical) and that in most cases recovery and environmental friendly disposal should be considered as an option.

Also notable is the inaugural meeting of the International Scientific Advisory Board on Sea-Dumped Chemical Weapons was held on 15-16 April 2010 in The Hague. The meeting was opened by Ambassador Vaidotas Verba (Permanent Representative of Lithuania to the Organization for the Prohibition of Chemical Weapons, OPCW) and chaired by Professor Stanislaw Witek of the Wroclaw Institute of Technology. The purpose of the board is to provide independent advice to the Government of Lithuania on scientific, technical and organizational aspects of dumped chemical munitions in the context of Lithuania's efforts to promote dialogue and bilateral and multilateral contacts in this area amongst interested governments and international organizations, including the European Union, the OPCW, other relevant international organizations and the United Nations.

The board consists of 16 members who are scientists, academics and officials representing ten nationalities and who act in their personal capacities. The ISAB in The Hague provides independent advice to the International Dialogues on Underwater Munitions (IDUM).

In 1992, the Helsinki Commission convened a special working group designated to deal with problems related to dumped chemical munitions within the Helsinki Convention Area, and that is in the Baltic Sea. This special working group, consisting of members representing the Baltic States and Scandinavia, along with others from the United Kingdom and the United States, examined the various problems arising from the chemical munitions dumped into the Baltic Sea until 1947. The commission noted that some of the more commonly dumped munitions (conventional) do pose a threat to the photosynthesis of plankton and to the hatching rate of crustacean eggs. Specifically, their report noted that "warfare agents can persist locally in the sediments of elevated concentrations for a long period of time." These agents include those containing arsenic, as well as viscous mustard gas.

Mustard gas, when exposed to seawater, forms a thick outer crust over an inner core, allowing it to be brought to the surface where it can injure fishermen who end up hauling up these crusts of toxic material in their nets. Fishermen today around the world continue to recover mustard gas and munitions of unknown classes in their nets.

Dr. Jennifer Mokos Allon Science and Technology told the Standing Senate Committee on Fisheries and Oceans on June 3, 2003. If a dump site is disturbed enough to cause some sort of release, it could decrease the fish stock by approximately 70 per cent. This is just an example of what some of the outcomes could be. Laurie Chan, a toxicologist from McGill University, believes it is not helpful to offer across-the-board warnings about mercury levels in fish and that it is better to offer advice based on specific species of fish caught in specific bodies of water.

On the east coast of Canada we have 3000 documents site which we believe is only half the number of the site on the east coast of Canada. Many of these sites are in rich fishing grounds and in the local populations are large numbers of unexplained cancers. We have Canadian sites in USA waters and the USA has sites in Canadian Waters. In both in our Atlantic and Pacific Oceans there are large scale chemical plums that releases toxic chemicals into the environment. One such plum in the Pacific Ocean is 1.5 Kilometers long and smaller plums break-away into our environment.

Some examples are in the years immediately following the end of the war, ships carrying mustard gas left regularly from Sydney and Halifax for local dumpsites; in some instances the entire vessel were scuttled. The closure of US military installations in Newfoundland and Labrador, particularly at Argentia and Stephenville, among others, was a source of widespread munitions dumping. It is reported that off Argentia, large boats left every two days to dump munitions in the Cabot Strait, for a five month period. One LSH vessel was specially-retrofitted for ocean bottom dumping of munitions. The HMS Raleigh ran aground at Pt. Armor, Forteau Bay, Labrador on August 8, 1922. Salvage and scuttling operations did not clear all ordnance from the wreck.

As a result, the UXO continues to wash ashore today. Four civilians have been killed along the shore line with munitions from the Raleigh. Not only are Canada's Atlantic waters affected, but also activity occurred in the Pacific. On the West Coast, a 1947 photo from the Victoria Daily Times shows 400 tons of chemical warfare gas, "much of it still on the secret list," being unloaded in nearby Esquimalt, British Columbia, for dumping in the Pacific.

All the Science is done or funded by the Military and the Present Canadian Government does not support the environment and they are not open and transparent. Environment is not one of the top ten priorities under the Canadian Department of National Defence. In Canada following our Senate Hearing DND Unexploded Ordnance (UXO) Unexploded Legacy Site Program was developed. However, the program does not fully understand SDW's and only clean-up SDW's based on the energetic threat and the environment threat is not considered. The program is slow in responding and some known sites have never made it on the official list of sites.

However, the DND have program identify 60 high priority sites for action. Some shipwreck with contains munitions have been remediated and other begun to be remediated in Nova Scotia, Newfoundland and British Colombia. These recovery and disposal operations are also done in lakes and rivers and it should be noted that they are mainly conventional munitions.

Canada does have SDW's capacity to respond country-wide however this capacity is developed more in line with WMD response then an SDW washing up on shore our in a fisherman net. There is an opportunity to develop these capacities in many countries with the NGO's and Private Sector. There is a need to develop a new action plan that includes all the stake holders not just militaries and other government departments.

Our Government does not raise awareness and are disconnect with Canadian Society when it comes to environment protection. The main focus of the Canadian Government is the economy however these SDW's could be an economic stimulus to reduce the negative impact on our oceans, human health and the environment while promoting the friendly transfer of skills and technologies.

With regards to cooperation IDUM hopes and trust the international community will come together and unite to address SDW's. However, the larger concern is there are other classes of munitions in our water besides chemical. For example there are large scale dump sites around the world that contain convention, radiological and biological munitions that are not presently being addresses other than by IDUM or other NGO's. And that many of these sites are mixed with difference classes of munitions and one cannot determine the class without a process. Therefore we need a central focal point for information on all marine munitions related technologies.

IDUM is an internationally recognized body where all stakeholders (diplomats, government departments including external affairs, environmental protection and fishery departments, industry, fishermen, salvage divers, oil and gas, militaries and others) can come together in an open and transparent forum to discuss underwater munitions, seek solutions, and promote international teamwork on their issues related to underwater munitions.

The IDUM is collaborating with international leaders and organizations to better understand the socio-economic impact on both human health and environment from years of decaying underwater munitions. The organization is facilitating this through international diplomacy via national and international programs, dialogues, conferences, workshops, committees, senate hearings, and international commissions.

Some of our involvement on SDW's to better understand the global situation have included but not limited to: Four International Dialogues on SDW's in Halifax, Hawaii, Sopot and San Juan; three international Working Groups on the Science, Technical and Policy of Underwater Munitions; Expert Witness, Canadian Senate Standing Committee on Fishery and Oceans; Expert Witness, Oil and Gas Exploration and Development Hearing Canada-Nova Scotia Offshore Petroleum Board; Observer, Helsinki Commission, HELCOM Ad Hoc Working Group on SDW's; Special Invited Guest on SDW's, OSPAR Commission for protection of the North-East Atlantic Ocean; Key Note Speaker for Minimizing Risks for the Environment in Marine Ammunition Removal in the Baltic and North Seas (MIREMAR); Board of Scientific Committee, Polish Naval Academy, Marine Safety & Security; Board of International Scientific Advisory Board (ISAB) on Sea Dumped Chemical Weapons (SWD's), Lead Associated Partner and Co-Director of Search and Assessment of Chemical Weapons Baltic Sea (CHEMSEA); in 2010 appeared at the United Nations Second Committee on Sea Dumped Weapons, to provide an overview of the strategic, economic, environmental, and social aspects of the UN Resolution: "Cooperative measures to assess and increase awareness of environmental effects related to waste originating from Chemical Munitions Dumped". Chairperson, SDW's Side Event at Organization for the Prohibition of Chemical Weapons, Chemical Weapons Convention, Third Review Conference co-organized in cooperation with the Governments of Lithuania and Poland, and the International Scientific Advisory Board (ISAB) on Sea-Dumped Chemical Weapons; the aim of the Side Event was to promote the development of a practical platform of voluntary cooperation among all the relevant parties involved in the issues sea dumped chemical weapons; our Chairman wrote papers on underwater munitions and is co-editor, provided papers and commentary for the Marine Technology Society Journal Special Issues on The Legacy of Underwater Munitions Worldwide: Policy and the Science of Assessment, Impacts and Potential Responses.

Any tangible approach would require a multilateral response from all stakeholders coordinated by the United Nations to develop Standards, Policy and Procedures including international and regional institutional capacity-building and the creation of an International Donor Trust Fund".

This could be done with a number of conferences with international experts in working groups to define areas such as manual standards for dealing with SDW's during remediation operations to developing a list of sites worldwide, each site provided a score based on the risk to human health and the environment. Most important many groups including IDUM have begun to collect information that could aid any process.

I would propose that all stake holders cooperates and openly shares information with the United Nations, Organisation for the Prohibition of Chemical Weapons (OPCW) and International organizations to further develop a body of knowledge on SDW's. And that consideration is given for IDUM to continue as an international focal point of knowledge on SDW's and that is funded by the international donors in the future.

Further, we hope and trust that State Parties, individual, organizations, private sector and NGO's will participate and join the voluntary platform of cooperation aimed at reducing the environmental impact of sea dumped chemical weapons and the negative economic consequences on our human health and marine resources. This forum seeks international Voluntary Cooperation with a view to create worldwide economic stimulus or investment in the future of our oceans with the international transfer of skill and technologies to remediate sea dumped chemical weapons sites. We would encourage the G8 and G20 member countries to seriously consider a worldwide economic stimulus for the remediation of SDW's at their next meeting.

Lastly, based on the Science collected from many parts of the globe and our professional option, the oceans of the world are not be able to recover if the munitions are left in the water to decompose. In a 1000 years after rush-out the munitions constituents will continue release carcinogens into our marine environment and food web. Throughout the globe large chemical plum continue to release toxins in our oceans. These weapons are strategically placed throughout the globe that will ensure major release in every ocean of the world. Oceans of the world will die from abandoned SDW's in return earth.

Terrance P. Long
Chairman
IDUM
1-902-574-7420
Chair@IDUM.org
www.underwatermunitions.org