




Leaking of radioactively contaminated water at Fukushima Nuclear Plant

A breach of Japan's
international responsibilities

October 2013

GREENPEACE



The continuous leaking of the radioactively contaminated water from Japan's Fukushima Daiichi Nuclear Power Plant is an issue of clear international concern. It is crucial for Japan to establish a cooperative framework, keeping itself fully informed and disclosing all relevant information both nationally and internationally on a timely manner.

Greenpeace reviewed the relevance of several international agreements in regard to the radioactively contaminated water leaking from the nuclear power

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plant to the ocean in the light of obligations of those treaties. While there are no globally applicable regulations which set specific limits for discharges, emissions or losses of radioactive materials from land, allowing the continued release of highly radioactively contaminated water to the marine environment clearly runs contrary to the aims and objectives of a number of international treaties and conventions charged with the protection of the marine environment, legal instruments to which Japan is party.

1. London Convention (LC), 1972 and its 1996 Protocol (LP)

(Convention on the Prevention of Marine Pollution by Dumping Wastes and other Matter: London Convention)

***Japan is Party to both.**

■ Allowing the ongoing leakage of the radioactively contaminated water from the Fukushima Daiichi Nuclear Power Plant is against the aims and the spirit of the LC/LP.

Although the main business of the two instruments relates to their specific provisions regarding the dumping (*Note1) of wastes at sea from vessels, platforms or other

man-made structures at sea, both also place upon parties more general obligations to prevent pollution of the marine environment from all sources:

*Note 1: In the LC and LP dumping and incineration at sea is defined as the deliberate disposal of wastes from ships, aircraft and other vessels. It does not include land-based discharges of wastes into the marine environment from rivers, estuaries and the coast line, nor the so-called operational and accidental discharges from ships.

“Contracting Parties shall individually and collectively promote the effective control of all sources of pollution of the marine environment... ”

[London Convention, Article I]

**“The Contracting Parties pledge themselves to promote, within the competent specialized agencies and other international bodies, measures to protect the marine environment against pollution caused by:
(d) radio-active pollutants from all sources, including vessels; ”**

[London Convention, Article XII]

While the LC/ LP can be seen to have specific regulatory jurisdiction in the case of materials loaded on vessels for dumping at sea, parties are under additional legal obligations to protect the marine environment from all sources of pollution.

Continuing to allow any significant release (deliberate or accidental) of highly contaminated water from the Fukushima Daiichi nuclear plant is contrary to the aims of the LC/LP and in breach of the spirit of these instruments.

Case: Ocean Dumping of Radioactively Contaminated Wastes by Russia



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In addition to these general provisions, there is the more specific issue of the precedents set by the way in which radioactively contaminated wastes have been addressed by the LC/LP in the past two decades.

The dumping at sea of all radioactively contaminated wastes and other materials (including intermediate and low level waste) was prohibited under the LC in 1993, in response to almost universal concerns about the potential for widespread and long-term contamination and impacts on the marine environment.

In 1991 and 1992, Greenpeace revealed that the USSR had secretly been dumping low and high level radioactively contaminated wastes in the Kara and Barents Seas, and the Sea of Japan.

At the time, the Russian Federation was struggling to cope with large volumes of contaminated liquid waste which had originated, in part, from the decommissioning of reactors from its fleet of nuclear-powered ships.

In November of 1993, the Contracting Parties to the LC unanimously adopted amendments banning the dumping of industrial wastes at sea. Russia issued a statement of non-acceptance of the ban on dumping of radioactively contaminated wastes at sea while their liquid waste

problem remained unresolved, though they did commit to a moratorium on any further disposal at sea. Japan was particularly outspoken about Russia's non-acceptance and tried to facilitate the Russian acceptance of the 1993 amendment by providing Russia with technical assistance for a plant that was capable of treating the radioactively contaminated waste on land.

As progress was made on the construction of a facility, with financial and practical assistance from countries including Norway, the US and Japan, the issue of Russia's non-acceptance regularly surfaced at meetings of Parties in the lead up to the final acceptance in 2005. Again, Japan was very vocal on this issue:

1998

...7.21 The Japanese delegation In its view the Russian Federation was primarily responsible for the adequate management and prevention of disposal of radioactively contaminated wastes in the seas of the Far East.The Japanese delegation expressed the view that this processing facility would hopefully bring an end to the disposal of low-level radioactively contaminated wastes in the seas of the Far East.

report of the 20th Consultative Meeting of Parties to the London Convention, December 1998, LC 20/14

1999

6.20 Japan informed the Meeting that the processing facilities constructed under a technical co-operation agreement with the Russian Federation would be completed in December 1999. Japan requested Russia to accept the amendments to Annexes I and II to the Convention regarding radioactively contaminated wastes disposal.

report of the 21st Consultative Meeting of Parties to the London Convention, October 1999, LC 21/13

2005

Russia finally accepted the 1993 amendment

2013

Now Japan has its own problem with large volumes of radioactively contaminated liquid in storage, and yet seems reluctant to accept assistance from other states or to commit to avoiding releases. While there is nothing specific in the legal text of either the LC or LP which says that the release of radioactively contaminated wastes from land is prohibited, it is clear that releases on the scale of the estimated ongoing leakage from Fukushima Daiichi nuclear power plant run entirely contrary to the aims and spirit of LC/LP.

[Argument by the Japanese government on exceptions]

Some Japanese officials have argued that, even if releases of radioactive water from the Fukushima plant would be contrary to the aims of the LC/LP under normal circumstances (i.e. would go against the General Obligations and the spirit of both instruments), these are not normal circumstances, and that both the LC and LP have provisions for exceptions in the case of emergencies. Under the LP, for example, these exceptions are provided for under Article 8 *“A Contracting Party may issue a permit as an exception to articles 4.1* and 5*, in emergencies posing an unacceptable threat to human health, safety, or the marine environment and admitting of no other feasible solution.”* The provision of article 4.1 and 5 shall not apply when it is exceptional situation (i.e. emergency situation ; cases of force majeure). Such exceptional dumping or incineration at sea shall be conducted so as to minimize the likelihood of

damage to human or marine life and shall be reported to the LC/LP Secretariat and Members of Parties.

Even in relation to dumping at sea, such an argument could only be defensible if (1) there is no other feasible solution, (2) consultations had been held on the matter with all parties likely to be affected and then abide by recommendations from the LC-LP and (3) the obligation remains anyway to avoid damage to the marine environment. It is hard to see how the limited and largely unilateral actions taken by Japan to date, actions which have allowed continued leakages of waters contaminated by radioactive elements to the sea, could be consistent with any of these conditions or with Japan’s wider international responsibilities to its neighbours and the global commons.

*Article 4: 1.1 Contracting Parties shall prohibit the dumping of any wastes or other matter with the exception of those listed in Annex 1. 1.2 The dumping of wastes or other matter listed in Annex 1 shall require a permit. Contracting Parties shall adopt administrative or legislative measures to ensure that issuance of permits and permit conditions comply with provisions of Annex 2. Particular attention shall be paid to opportunities to avoid dumping in favour of environmentally preferable alternatives.

*Article 5: Contracting Parties shall prohibit incineration at sea of wastes or other matter.

Important events about Ocean Dumping of Radioactively Contaminated Wastes by Russia

1991, 1992, 1993

Russian Federation dumped low-level liquid radioactively contaminated wastes in the Sea of Japan. As the result of the robust response from many parties to the LC, the Russian government aborted a second planned operation in 1993 and pledged to stop the practice altogether.

The Russian government refused to accept the formal ban on dumping of radioactively contaminated wastes at sea by issuing a statement of non-acceptance, though it did commit to a moratorium on the practice.

During the early years of this century, the Russian government accepted financial and practical assistance from Norway, the US and Japan in order to treat the wastes and make it possible for them to lift their non-acceptance.



1994, 1995, 1996

A field sampling and observation study was conducted twice in 1994 and 1995 at the request of Japan asking for a fact-finding marine-radioactivity survey at the Russian dumping sites .

The results were widely circulated through publication in international journals.

A technical co-operation agreement was signed in August 1994, and the Japanese Government commenced construction of a processing facility in January 1996.



1999

Japan informed the Meeting that the processing facilities would be completed in December 1999. Japan requested Russia to accept the amendments to the LC regarding radioactively contaminated wastes disposal.



2002, 2003, 2004

Japan expressed that she was disappointed that Russia was not yet in a position to accept the amendments.



2005

The Russian Federation finally lifted the non-acceptance of the 1993 amendment.

2. UN Convention on Law of the Sea, 1982 (UNCLOS):

*Japan is Party.

■ The discharge is against the aims and the spirit of UNCLOS.

The general provisions under UNCLOS, i.e. Article 194. and 207, are broad aims and principles covering all sources of pollution:

“*The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible*

(a) The release of toxic, harmful or noxious substances, especially those which are persistent, from land –based sources, from or through the atmosphere or by dumping. ”

[Article 194]

“*1. States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures. ”*

[Article 207-1]

“*2. States shall take other measures as may be necessary to prevent, reduce and control such pollution ”*

[Article 207-2]

3. Convention on the High Seas 1958

*Japan is Party.

■ Japan should be more open to international assistance and more transparent.

“*All States shall co-operate with the competent international organizations in taking measures for the prevention of pollution of the seas or air space above, resulting from any activities with radio-active materials or other harmful agents*”

[Article 25.2]

Conclusion:

In the oceans, impacts may be hard to predict and even harder to document and for these reasons, regulatory approaches which aim to protect the marine environment from dumping of wastes have had to be precautionary in nature, i.e. to rely on the setting of strict rules which must be followed without the need first to demonstrate that harm is otherwise being caused. Unfortunately, in most parts of the world, the same approach has not been taken for land-based sources.

With regard to the types of radioactively contaminated

wastes stored at the Fukushima plant, some of the radionuclides are very long-lived, may therefore spread far and wide in the marine environment and, even at levels which may not be considered to be immediately harmful to marine life, may nonetheless accumulate and lead to exceedance of food safety limits and closure of fisheries. These sorts of concerns have led to a renewed focus on the Fukushima nuclear disaster problem from the Republic of Korea, China and other countries in the region.

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Published in October 2013 by

Greenpeace Japan

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