



Evaluating Claims of Nuclear Waste Dumping in Somalia/Somaliland Initial Scoping of Open Sources in English

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November 2016

Introduction

This document contains initial research into evidence of nuclear waste dumping in Somalia/Somaliland and a survey of open source claims available in English on the internet. The validity of this material cannot be confirmed at this point- instead the document gives a sense of what information and claims are currently in the public domain. We have found widespread reports of toxic waste dumping both on land and off the coast of Somalia since the 1980s. There are claims that some of this waste may contain nuclear material. However, at this time there is no concrete evidence of such material. Media interest has been sporadic, tending to peak around events such as the 2004 tsunami which brought ashore potentially toxic barrels. This being said, the repeated claims and possible signs of nuclear material, such as reported illnesses among local populations, give weight to calls for scientific evaluation of those claims and possible signs.

Evidence of Nuclear Waste Dumping

Key points:

Background Information on toxic waste dumping

- The dumping of general 'toxic waste' has occurred since the 1980s (Greenpeace, 2010)
- There are numerous reports that it continues to occur from Greenpeace and many online articles
- German, French and Italian nuclear power plants and hospitals are suspected of involvement late in the 1980s-2000s, along with some of the Italian Mafia (Greenpeace, 2010)
- In 2006 the UN published a report in which it argued that the 2004 tsunami seems to have washed ashore many of the toxic barrels previously dumped in the sea (UNEP, 2006)

Claims of nuclear waste dumping

- The UN has said that nuclear waste has been dumped, but appears to have little concrete evidence (UNEP, 2006)
- Greenpeace also argues that nuclear waste was dumped (Greenpeace, 2010)
- The NGO Daryeel Bulsho Guud claims to have found '15 containers of 'confirmed nuclear and chemical wastes' in eight coastal areas' (The Ecologist, 2009)
- Some of the health problems suffered by Somalis, particularly post 2004, point to hazardous and potentially nuclear waste having entered their local environment (The Ecologist, 2009)

Summary of claims

Greenpeace Report 'The Toxic Ships' June 2010

- Greenpeace began investigating Italian 'toxic ships' headed for Africa in early 1987
- They have evidence that nuclear and chemical waste was dumped in the ocean, deliberately sunk with ships, and buried on land in many developing countries 1987-9
- EU laws were tightened around 1990 but Greenpeace believes that they have 'clear evidence of the converging paths of environmental crime and other, classical forms of organised crime' (Greenpeace, 2010: 12). In the 1980s and 90s Swiss bank accounts and lawyers were used by European countries to have their waste disposed of at the cheapest price- usually in Africa.
- The report notes that after the collapse of Said Barre's regime in 1991 there were numerous accusations that foreign governments and companies were using the chaos to dump waste there, including nuclear waste.
- 'In 2008, the UN special envoy for Somalia, Ahmedou Ould Abdallah, repeatedly sounded the alarm about illegal fishing and toxic dumping off Somalia by European firms. Abdullah said that his organisation has "reliable information" that European and Asian companies are dumping waste - including nuclear waste - in this region. The European Union has responded to these allegations with silence.' (Greenpeace, 2010: 21)
- In the 1990s there were numerous attempts by Italian companies to sign deals with Somali warlords and 'representatives' regarding the exportation of their nuclear waste. There have been accusations that Italian journalists Ilaria Alpi and Miran Hrovatin, killed in Mogadishu in March 1994, were killed because they had witnessed deals in which toxic waste was dumped by factions in exchange for guns.
- In 2010 Greenpeace investigated whether toxic waste was dumped by Italian companies 1990-97 and concluded that waste was 'likely dumped' during this period (Greenpeace, 2010: 25)
- 'Waste management is extremely lucrative' (Greenpeace, 2010: 29) for big firms, and the disposal of waste is a major problem for most EU countries. This seems to explain why there has been little effort to investigate breaches of law in this area. The Basel Convention (1989) was meant to prevent the shipment of toxic waste from rich countries to poorer ones, but has had limited success. As has the 1998 'Basel Ban' on hazardous waste exports to non-OECD countries. It is assumed that illegal

toxic waste dumping is rising, as the overall amount of waste being produced and exported is also rising.

- 'The only European body promoting cooperation in tackling illegal exports of hazardous waste is ... The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL)' (Greenpeace, 2010: 33)
- 'It is currently not possible to document at EU level what specific kind of hazardous and problematic waste is shipped across boundaries. Indeed, 40% - 50% of waste shipped outside the EU is defined simply as "other waste" according to the meanings of the Basel Convention – that should be household waste and residues from incineration of such waste that should be subject to the same controls as hazardous waste. However, the nature of such waste is largely unknown.' (Greenpeace, 2010: 33)
- Greenpeace believes that toxic waste dumping in Somalia is particularly bad around in the area of the port of Eel Ma'aan (Greenpeace, 2010: 34)

UN Report on Somalia 2006

- 'Starting from the early 1980s and continuing into the civil war, the hazardous waste dumped along Somalia's coast comprised uranium radioactive waste, lead, cadmium, mercury, industrial, hospital, chemical, leather treatment and other toxic waste. Most of the waste was simply dumped on the beaches in containers and disposable leaking barrels which ranged from small to big tanks without regard to the health of the local population and any environmentally devastating impacts.' (UNEP, 2006: 134)
- 'The impact of the tsunami stirred up hazardous waste deposits on the beaches around North Hobyo (South Mudug) and Warsheik (North of Benadir). Contamination from the waste deposits has thus caused health and environmental problems to the surrounding local fishing communities including contamination of groundwater. Many people in these towns have complained of unusual health problems as a result of the tsunami winds blowing towards inland villages. The health problems include acute respiratory infections, dry heavy coughing and mouth bleeding, abdominal haemorrhages, unusual skin chemical reactions, and sudden death after inhaling toxic materials.' (UNEP, 2006: 134)
- 'It has been estimated that it costs as little as \$2.50 per tonne to dump hazardous waste in Africa as opposed to \$250 per tonne in Europe.' (UNEP, 2006: 135)

Piracy

- News reports say that the 'pirates' operating off the coast of Somalia which gained international attention in 2008 have been complaining about the dumping of toxic waste by foreign companies and some claim they are fighting back (Milton, 2009), (Hari, 2009)

Reports of Illness

- 'Nick Nuttall, a UNEP spokesman, told Al Jazeera that.. that since the containers came ashore, hundreds of residents have fallen ill, suffering from mouth and

abdominal bleeding, skin infections and other ailments. "What is most alarming here is that nuclear waste is being dumped. Radioactive uranium waste that is potentially killing Somalis and completely destroying the ocean," he said (Project Censored, 2010).

- 'Field research in Somalia by Zainab Hassan, a former fellow at the University of Minnesota and Environmental Justice Advocate, has brought to light a whole range of chronic and acute illnesses suffered by Somalis. These include severe birth defects, such as the absence of limbs, and widespread cancers. One local doctor said he had treated more cases of cancer in one year than he had in his entire professional career before the tsunami.' (Milton, 2009)
- Mr Nuttal said "These problems range from acute respiratory infections to dry, heavy coughing, mouth bleedings, abdominal hemorrhages, what they described as unusual skin chemical reactions," he noted. "So there's a whole variety of ailments that people are reporting from these villages where we had a chance to look. We need to go much further and farther in finding out the real scale of this problem." (VOA, 2009)

Claims of direct evidence

- 'In 2005, the UN Development Programme (UNDP) concluded its own on-the-ground investigation in Somalia. Despite being stymied by local political interests and finding no tangible proof, it concluded that the 'dumping of toxic and harmful waste is rampant in the sea, on the shores and in the hinterland'. A year later the Somali multi-clan NGO Daryeel Bulsho Guud conducted its own survey. With greater local co-operation, it was able to identify 15 containers of 'confirmed nuclear and chemical wastes' in eight coastal areas. At the same time, the UN and World Bank put together a Joint Needs Assessment (JNA) to plan for Somalia's return to functioning nationhood. Updated in 2008, it recommends \$42.1 million be set aside for environmental activities, including ensuring all 'toxic waste [is] found and removed'. (Milton, 2009)

Timeline of claims

Key points

- 1980s-early 1990s local reports suggest waste is being dumped
- 1991-2 European media picks up the story. There is a scandal surrounding the deal made by a Swiss firm, Achair Partners, an Italian waste broker, Progresso, and Ali Mahdi Mohamed. The deal was for Somalia to accept 10 million tons of toxic waste in exchange for \$80 million (then about £60 million). The waste facility is never built.
- In the late 1990s links between the Italian mafia, powerful public figures and the dumping of waste lead to media interest, particularly that of the Italian newspaper *Famiglia Cristiana*. Its investigations plus investigations by the state lead to a focus on the Italian role in the network.

- Few reports until 2004-6, when the tsunami causes locals to report a rise in toxic waste along the coast, and agencies like the UN to pick up on this issue in the course of its involvement with post-tsunami reconstruction.
- There have been some statements in recent years, for example by UN special envoy for Somalia Mr. Ahmedou Ould Abdallah. In 2009 he said that it is believed nuclear waste is present in Somalia.
- As piracy off Somalia gained international attention in 2008-9 some commentators tried to draw attention to the struggles fishermen are experiencing due to overfishing and the dumping of waste
- There have been few reports on toxic waste dumping since 2008-9, especially by major international news.
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Generally western media reports have peaked around particular events involving other factors (for example Italian crime networks and the 2004 tsunami). The UN and organisations like Greenpeace have put together basic reports over the years. There has been no significant effort to investigate the issue since the 2010 Greenpeace report. Western media reports are generally limited with the information they provide and all appear to be using roughly the same facts/sources.

Timeline

- 1980s-90s the UN has said that during this time ‘Somalia’/ agents within Somalia were reporting the dumping of waste. (UNEP, 2006: 134)
The form these reports took is unclear but they do not seem to have been formally recorded in a manner which makes them currently accessible.
- ‘In the fall of 1992 reports began to appear in the international media concerning unnamed European firms that were illegally dumping hazardous waste in Somalia’. (somwe, 2001). The reports listed in footnotes are: ‘The Guardian (September 11, 1992); European Information Service (September 12 and October 6, 1992); BBC Somalia Branch (September and October 1992); Agence France Presse AFP (September 14, 1992); Inter Press Service (September 10, 11, 24, and 30, 1992); Saudi Gazette (September 13, 1992); Chicago Tribune (September 11, 1992); Reuters Limited (September 11, 1992); Somali Local Newspapers in Mogadishu
- ‘In a statement released on 9th September 1992, in coordination with Greenpeace Switzerland, the Director of Greenpeace Italia Mr. Roberto Ferigno disclosed that some European companies had been involved in an illegal deal with a self-appointed Somali minister to export to Somalia five hundred thousand tons of toxic waste per year over a period of twenty years’ . (Husseini, 2010: 6)
- ‘In a news release statement (Tolba, 1992) by then executive director of the UNEP (United Nations Environment Programme) situated in Nairobi, Dr. Mustafa Kamal Tolba, it became apparent that the European firms was disposing a hazardous waste in Somalia. The UNEP started to investigate the matter five years later in 1997 and hired Mahdi Geddi Qayad[28] as a team leader (for a period of one month) to carry a

field investigation in many areas of Somalia particularly coastal zones. The outcome of the investigation (a report) was not published but an Italian newspaper has succeeded to receive a copy of the report.’ (somwe, 2001)

- ‘Famiglia Cristiana - an Italian Newspaper, has published several articles about the issue during 1998 (Famiglia Cristiana, 1998). Based on the UNEP investigations as well as its own investigation, the newspaper gave relatively a detailed description.’ (somwe, 2001)
- Late 1990s Italian tribunals hear of a power network of mafia, business and political elites who conspired to dump waste, including nuclear waste.
- ‘In November 1999, Mr. Marcello Giannoni, an Italian businessman who was active in the sector of the “Special Wastes” and who had been personally involved in the toxic wastes export to Somalia, told the Italian magistrates investigating these issues that “at the end of the 1980s until the first years of the 1990s, there was a very powerful politician who was involved [in the illegal export to and subsequent dumping of radioactive waste in Somalia].(...) I can’t disclose his name but he was a very powerful politician”. Mr. Giannoni also told the investigators that “the idea was to mix highly toxic waste imported from America (including radioactive waste) with Italian waste and send the whole thing to Somalia”. According to this account, as a matter of fact, this toxic waste had reached Somalia.’ . (Hussein, 2010: 9)
- 2000 ‘In view of these serious waste dumping allegations against the Italian and Swiss firms, the Italian Parliament demanded a study on the issue. A commission has been established. The final report (produced in 2000) of the parliamentary study said the so-called "Eco-Mafia"[29] run companies dealing with 35 million tons of waste a year, making \$US 6.6 million. According to the report, radioactive waste from Italy dumped in Somalia may have affected Italian soldiers based there with a UN force in the mid-1990s.’ (somwe, 2001) [They were largely based in the South, around Mogadishu.]
- ‘On the 22nd of February 2005, the UN agency issued an official statement according to which “Somalia’s coastline has been used as a dumping ground for other countries’ nuclear and hazardous wastes UNEP, Press Release UNEP/268, February 22, 2005. For many years as a result of the long civil war and, thus, the inability of the authorities to police shipments or handle the wastes”’. (Hussein, 2010: 6-7)
- 2006 UN report on the impact of the tsunami (which includes reference to nuclear waste but the waste was not the catalyst for the report)
- ‘as reported by Agence France-Presse AFP in July 2009, the UN special envoy for Somalia Mr. Ahmedou Ould Abdallah has declared: “I’m convinced there is solid waste and probably nuclear waste (...) it is disaster out the Somali coast, a disaster for the Somali people and (their) environment”’. (Hussein, 2010: 8)
- Some western news reports link piracy off Somalia to the struggles faced by Somali fishermen, including the dumping of waste by foreign vessels (The Independent, 2009)

- 2010 Greenpeace report (summary of global toxic waste dumping)

Types of source reporting claims

- Local reports from individuals are often referenced in other sources but there are few records of them
- News media. Reports peaked 1991-2, late 1990s, 2005-6 (in reference to the tsunami), 2008-9 (in reference to piracy)
- UN - has commented on reports since the early 1990s. Unpublished report 1997, published report 2006
- Academic articles. There are a few of these, including useful 2010 one by B. M. Hussein (attached)
- NGOs/ activist organisations like Greenpeace. They have done some of the most detailed reports. Greenpeace has been commenting on the issue since the early 1990s.

Geographical references in the claims

Areas where hazardous/nuclear waste has been reported:

North Hoby (2006), Warsheik (2006)

Areas with health issues associated with nuclear waste:

Bardale (1998), Brawe (1998), Bardere (1998), Merka (1994), Mogadishu (2005), Hobbio and Benadir (2005)

Media references:

- 'dumping of toxic and harmful waste is rampant in the sea, on the shores and in the hinterland.' (UNEP, 2006: 129)
- 'Most of the waste was simply dumped on the beaches in containers and disposable leaking barrels which ranged from small to big tanks without regard to the health of the local population and any environmentally devastating impacts' (UNEP, 2006: 134)
 'Impact of the tsunami stirred up hazardous waste deposits on the beaches around North Hoby (South Mudug) and Warsheik (North of Benadir). Contamination from the waste deposits has thus caused health and environmental problems to the surrounding local fishing communities including contamination of groundwater. Many people in these towns have complained of unusual health problems as a result of the tsunami winds blowing towards inland villages.' (UNEP, 2006: 134)
- South was disproportionately effected (Nuclear Monitor, 2007)
- Central and Southern Somalia is the 'epicentre of the toxic wastes dumping' (Hussein, 2010: 10)

- 'In 1994, a doctor reported an unusually high number of patients suffering from thyroid, tongue and colon cancer as well as malformed newborn babies in the coastal city of Merka. Also, as reported by the Mogadishu-based HornAfrik radio in March 2005, the doctors working at the SOS hospital in Mogadishu reported an excessive number of malformed babies. According to this account, Dr. Bashir Sheikh Omar, the head of the maternity ward of the hospital attributed this unusual trend to the toxic waste dumping in the coastal areas around the Somali capital. Furthermore, after their fact-finding mission in Somalia in 1998, the journalists of the Famiglia Cristiana, on their way back to Nairobi, met with Dr. Pirko Hononen of UNICEF Somalia who was just back from a field trip in the Somali town of Bardale at the west of Baidoa city. The journalists quoted Dr. Hononen as saying "a new unknown disease is killing people in Bardale in high numbers". She also added that "there were already more than 120 victims in two months (...) and, the symptoms are high fever, trembling, nose and mouth hemorrhage" ' (Hussein, 2010: 12)
- 'The poisonous content contaminated the water sources and the air whereby the adverse effects were felt as far as ten kilometers from the coast into the hinterland.' (Hussein, 2010: 7)
- 'Famiglia Cristiana (1998) showed a map over the country particularly areas where wastes have been dumped and pictures taken from places where signs of the dumping could still be seen. According to the newspaper, waste dumping concentrated both in coastal zones and inland areas' (somwe, 2001)
- 'According to the newspaper (Famiglia Cristiana, 1998), UNEP investigations and local people, the health effects so far identified are enormous. These include (i) the death of fisherman in the town of Brawe after opening a small container collected from the sea' (somwe, 2001)

'Dr. Pirko of the UNICEF said that the town of Bardere experienced unknown disease that caused the death of 120 people after suffering nose bleedings' (somwe, 2001)



(Tentative map of the polluted areas by toxic waste dumping (Famiglia Cristiana, 1998)). (Hussein, 2010)

- ‘An initial UN report says that many people in the areas around the northeastern towns of Hobbio and Benadir, on the Indian Ocean coast, are suffering from far higher than normal cases of respiratory infections, mouth ulcers and bleeding, abdominal haemorrhages and unusual skin infections. ‘ (The Times, 2005)
- ‘In 1997 and 1998, the Italian newspaper *Famiglia Cristiana*, which jointly investigated the allegations with the Italian branch of Greenpeace, published a series of articles detailing the extent of illegal dumping by a Swiss firm, Achair Partners, and an Italian waste broker, Progresso. The European Green Party followed up the revelations by presenting to the press and the European Parliament in Strasbourg copies of contracts signed by the two companies and representatives of the then “President” — Ali Mahdi Mohamed — to accept 10 million tonnes of toxic waste in exchange for \$80 million (then about £60 million)... Mr Ali Mahdi, who then controlled north Mogadishu and who worked closely with the UN during its disastrous 1992-95 humanitarian mission to the country, has always refused to discuss the issue even though an Italian parliamentary report subsequently confirmed many of the allegations.’ There was an investigation and outrage in 1992 and the storage facility was never built. (The Times, 2005)

Common narratives

- Somalia's weak state structure (especially post 1991) was used by Europe and American actors, along with international criminal networks, to cheaply dispose of toxic waste
- These networks perpetuated the civil war by selling arms to factions in exchange for them dumping the waste (in the sea and on land)
- Piracy is connected to the problems caused by external ships dumping waste and over fishing. The pirates are fishermen who have struggled to make a living/are angered by the dumping of waste.
- The South is more effected than the North
- Dumping took place in the sea and on land. The waste has washed up on the coast, especially post the 2004 tsunami

Questions/points of interest

- Which '8 coastal regions' were the ones where the 15 barrels of waste were found by the NGO Daryeel Bulsho Guud? (The Ecologist, 2009)
- The investigations by Famiglia Cristiana and Italian authorities in 1998 seem to have been the most detailed efforts to map the nuclear waste- tracking this down may be useful?
- This may be worth pursuing: <https://somaligenda.com/eu-dumping-nuclear-waste-in-somalia/>
- Most reports, both in the press and to an extent by organisations like Greenpeace, refer to vague claims and non-specific evidence. The impression one gets is that many people knew this was going on (for example UN officials seemed fairly confident it was), but they knew through hearsay and through unofficial contacts rather than through scientific evidence.

Possible NGO partners for further work

- NGOs including Common Community Care (CCC) and Environmental Justice for Somalia (EJS) are interested in this issue and may be useful partners

Conclusion

The sources discussed above have not proven that nuclear or toxic waste dumping has occurred off the shore of Somalia/Somaliland or on shore. However, there are possible leads that could be evaluated scientifically. Considering the potentially serious impact such materials can have on communities and ecosystems, the need to reassure populations where such fears are unfounded and the importance of deterring such dumping due to the possibility of detection and prosecution, scientific investigation is warranted.

References

- Greenpeace Italy, 2010. *The toxic ships*. [online]. Greenpeace. Available at <http://www.greenpeace.org/italy/Global/italy/report/2010/inquinamento/Report-The-toxic-ship.pdf> [accessed 1st April 2016]
- Hari, J. 2009. *Johann Hari: You are being lied to about pirates*. [online]. The Independent. Available at <http://www.independent.co.uk/voices/commentators/johann-hari/johann-hari-you-are-being-lied-to-about-pirates-1225817.html> [accessed April 2nd 2016]
- Hussein, B. 2010. *The Evidence of Toxic and Radioactive Wastes Dumping in Somalia and its Impact on the Enjoyment of Human Rights: A Case Study*. (attached via email)
- Milton, C. 2009. *Somalia used as toxic dumping ground*. [online]. The Ecologist. Available at http://www.theecologist.org/News/news_analysis/268581/somalia_used_as_toxic_dumping_ground.html [accessed 2nd April 2016]
- Mohamed, A. 2001. *Somalia's Degrading Environment: Causes and Effects of Deforestation and Hazardous Waste Dumping in Somalia*. [online] Somali Centre for Water and Environment. Available at <http://www.somwe.com/Essay.html> [accessed 2nd April 2016]
- Nuclear Monitor, 2007. *MAFIA CLAN CONNECTED WITH TRAFFICKING NUCLEAR WASTE*. [online]. Nuclear Monitor. Available at <http://www.nirs.org/wp-content/uploads/mononline/nm661.pdf> [accessed 1st April]
- Project Censored, 2010. *Toxic Waste Behind Somali Pirates*. [online]. Project Censored. Available at <http://projectcensored.org/3-toxic-waste-behind-somali-pirates/> [accessed 1st April 2016]
- The Times, 2005 [link now requires subscription]
(<http://www.timesonline.co.uk/article/0,,18690-1509979,00.html>)
- United Nations Environment Programme, 2006. *National Rapid Environmental Desk Assessment - Somalia*. [online]. UNEP. Available at http://www.unep.org/tsunami/reports/tsunami_somalia_layout.pdf [accessed 2nd April 2016]
- VOA News, 2009. *UN: Nuclear Waste Being Released on Somalia's Shores After Tsunami*. [online]. VOA News. Available at <http://www.voanews.com/a/a-13-2005-02-23-voa23/309291.html> [accessed 2nd April 2016]