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News release

Dumping on Gaia

Claiming to protect the planet from greenhouse gases, geo-engineer, Planktos, Inc., is poised to dump iron in waters off the Galapagos Islands and thumbing its nose at the International Maritime Organization and the US government

The US Environmental Protection Agency (EPA) and the International Maritime Organization's (IMO) London Convention (dealing with ocean dumping) should urgently launch investigations into the activities of Planktos, Inc., a private climate-engineering firm, according to ETC Group (Ottawa, Canada) and the International Center for Technology Assessment (ICTA - Washington, DC). The two civil society organizations believe that the company may soon begin dumping iron particles in an 100 km. by 100 km. expanse of ocean near the Galapagos islands – if it has not already begun. Planktos may also have violated the U.S. Ocean Dumping Act during iron dumping experiments carried out in 2002. ICTA and ETC Group submitted a formal request to the U.S. Environmental Protection Agency early today even as IMO member governments meet in Spain to consider the legality of such high-risk geoengineering experiments. The letter to EPA is available [here](#).

“There is a law against dumping material into the ocean without permits. Yet, this is exactly what Planktos plans on doing,” explains George Kimbrell of ICTA, a staff attorney based in Washington D.C. “We are today asking EPA to launch an immediate and full investigation into Planktos’ ocean dumping activities.” Simultaneously, the two organizations are working with environmental groups to press the international meeting in Spain to take action.

Planktos Inc., a for-profit geoengineering company with offices in the U.S. and Canada, announced that it will dump 100 tons of iron particles in the Pacific Ocean west of the Galapagos islands – an act that critics believe may violate national and international ocean protection laws, and potentially cause serious damage to the ocean ecosystem.

Planktos is in the business of selling “carbon credits” to individuals who want to “offset” their personal climate change impact. The company claims that iron particles dumped in the ocean will stimulate growth of phytoplankton and draw carbon dioxide (a climate changing gas) out of the atmosphere, a scheme that will allow the company to make money from carbon trading.

The United States government is also concerned about Planktos' plans, and is advising the London Convention, the international body (under the International Maritime Organization) responsible for regulating dumping at sea, that the companies proposed activities "should be evaluated carefully."¹ An intergovernmental scientific committee of the London Convention is meeting this week in Spain, 18-22 June. According to a submission by the U.S. government, Planktos has not received any authorizing permits from the applicable U.S. authorities nor undertaken any environmental impact assessment.

Planktos' website says that the company will dump iron into the ocean near the Ecuadorian Galapagos Islands in mid-June 2007 from its ship, the Weatherbird II, a US flagged vessel. However, according to documents submitted by the U.S. government to the London Convention, Planktos informed the EPA on 23 May that, "the company will use a non-United States flagged vessel for releasing the iron so as not to be subject to regulation under the United States' Ocean Dumping Act."

"It is rank hypocrisy that Planktos, which claims to be a 'green' company, is now planning to 'outsource' their dumping to a foreign ship in order to evade U.S. environmental oversight," says Jim Thomas of the ETC Group, a Canadian-based civil society organization that has been monitoring Planktos' activities. "Clearly the only 'green' that Planktos cares about is the money they hope to make by selling carbon credits."

"Planktos' website still claims that it will be dumping nano-scale particles of iron, and we know they're looking for a new flag, so we suggest the company sail under a nano-hazard warning flag," said Hope Shand of ETC Group, which sponsored a design competition earlier this year to come up with a nano-hazard warning symbol to label engineered nanomaterials. A study by a scientific body in the UK warns that environmental release of nanoparticles – which are not adequately regulated by any government body – should be prohibited until more is known about their health and environmental impacts.

The U.S. authorities are not alone in their concern for Planktos' dumping experiment. In a news release issued on 23 May 2007, the Galapagos National Park authorities expressed concerns about the proposed dump by Planktos, asserting that it is "scientifically dubious, environmentally dangerous and capable of altering marine food chains." The Galapagos National Park authorities said they had not been able to talk to Planktos directly despite concerns that currents from the dumping site could allow pollutants to enter the national park area.

According to Pablo Barriga, Project Coordinator of FUNDAR Galapagos, a non-profit organization that supports sustainable development and conservation of the islands, "It is imperative that the impacts and legitimacy of Planktos' experiment are carefully scrutinized by the international community, including the London Convention meeting in Spain this week. For us it is clearly immoral for a company in pursuit of profits to conduct this kind of experiment so close to a World Heritage site. This is absolutely unacceptable," said Barriga.

Although Planktos would not tell the EPA which vessel or flag they now intend to fly under, Planktos may still be in violation of the U.S. Ocean Dumping Act if they attempt to export their iron particles from the US without a permit. ETC and ICTA called on EPA to investigate and

take urgent oversight actions on Planktos' current activities and the company's previous iron dumping expedition as possible Ocean Dumping Act violations. The company's previous iron dump occurred on June 22, 2002 just east of Hawaii and took place without any authorizing EPA permit. It involved a U.S. registered yacht, the WN Ragland – which the company claims was loaned to Planktos by the singer Neil Young. Photos of the 2002 dump on Planktos' website clearly show the US flag flying as the iron is dumped in the ocean.

Geoengineering for Profit

“Iron fertilization” is one of a number of large-scale “geoengineering” schemes that seek technological fixes to counteract climate change. Last year, for example, Nobel laureate Paul Crutzen called for more research on a plan to blast sulfate-based aerosols into the stratosphere to deflect sunlight. Others have proposed sucking excess carbon dioxide out into space. The president of the U.S. National Academy of Sciences, Ralph J. Cisero, has said that such proposals should be taken seriously. Last month, the United Nations Inter-Governmental Panel on Climate Change, the leading international scientific authority on climate change, criticized geoengineering projects as short-sighted, potentially harmful and unlikely to succeed. Since 1993 at least nine national governments and the European Union have supported “iron fertilization” experiments in the ocean to nurture plankton and sequester carbon dioxide. In April 2007 forty-seven ocean scientists writing in the journal *Nature* concluded that attempts to artificially seed the ocean to sequester carbon will not work.²

Planktos is not the only company hoping to profit from commercial-scale iron dumping. GreenSea Ventures, Inc. conducted two early experiments on ocean fertilization in the Gulf of Mexico in 1998. Michael Markels, a board member of GreenSea Ventures, holds at least 5 patents and patent applications related to iron fertilization for sequestering CO₂. A new company, San Francisco-based Climos, will also reportedly work on ocean fertilization for controlling atmospheric carbon.

“The overwhelming scientific conclusion based upon the numerous governmental and intergovernmental experiments is that iron seeding is risky and may only temporarily sequester carbon dioxide,” concludes Jim Thomas, “leaving the CO₂ below the surface just long enough for private geo-engineers to cash their cheques.”

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Notes to Editors:

To view copy of the letter submitted by ICTA and ETC Group to the U.S. EPA: “Letter of Concern Regarding Imminent Violations of the Ocean Dumping Act by Planktos, Inc.” go here: http://www.icta.org/doc/EPA_planktos_geo-engineering_letter%20of%20concern.pdf

For more background on Planktos' iron dumping expedition to the Galapagos see previous ETC Group News Release "Geoengineers to Foul Galapagos Seas – Defying Climate Panel Warning," May 3, 2007 – on the Internet:

http://www.etcgroup.org/en/materials/publications.html?pub_id=617

For more background on iron fertilization and other geoengineering schemes see "Gambling with Gaia" report available at

http://www.etcgroup.org/en/materials/publications.html?pub_id=608

The U.S. governments' submission to the London Convention about Planktos is available here:

http://www.imo.org/includes/blastDataOnly.asp/data_id%3D18837/INF-28.pdf

¹ International Maritime Organization, United States submission to Scientific Group of the London Convention's 30th Meeting, June 1, 2007. Available on the Internet:

http://www.imo.org/includes/blastDataOnly.asp/data_id%3D18837/INF-28.pdf

² Uirin Schiermeier, "Only mother nature knows how to fertilize the ocean - Natural input of nutrients works ten times better than manmade injections" published online in *Nature*, April 23, 2007. Available on the Internet: <http://www.nature.com/news/2007/070423/full/070423-8.html>