

### IEAGHG Information Paper; 2013-IP27; Geoengineering in the London Convention (2013)

# **Summary**

The Protocol to the London Convention has formalized its regulation of ocean fertilization and allowed for it to include other marine geoengineering activities in the future. This allows ocean fertilization only for research purposes and requires for all such geoengineering activities that the assessment framework on permitting to be followed.

Australia, Nigeria and Republic of Korea proposed amending the Protocol to effect legally binding regulation of ocean fertilization. The proposal (LC 35/4 2013) is structured to allow other marine geo-engineering activities to be considered in the future if they fall within the scope of the London Protocol and have the potential to cause harm to the marine environment. The proposal is consistent with the policy position adopted by the Contracting Parties in previous resolutions LC-LP.1(2008) and LC-LP.2(2010) that ocean fertilization activities other than legitimate scientific research should not be allowed. It provides for a global, transparent and effective regulatory and control mechanism for ocean fertilization activities and other activities that fall within the scope of the Protocol and have the potential to cause harm to the marine environment.

## **Background**

The Parties of the London Convention and of the London Protocol (LC/LP) have expressed significant concerns about ocean fertilization and other activities with the potential to cause harm to the marine environment since 2007 to the present. Resolution LC-LP.1(2008) provided voluntary controls on ocean fertilization. This agreed that the scope of the London Convention and Protocol included ocean fertilization activities and affirmed that, given the present state of knowledge, ocean fertilization activities other than legitimate scientific research should not be allowed. Continued and expanded concerns resulted in resolution LC-LP.2(2010) that called on Contracting Parties to continue to work towards a global, transparent and effective regulatory and control mechanism for ocean fertilization activities and other activities that fall within the scope of the Convention and the Protocol and have the potential to cause harm to the marine environment. This resolution in 2010 adopted the 'Assessment Framework for Scientific Research Involving Ocean Fertilization' to assist parties in decision-making based upon environmental assessment and to assess whether an activity is for research. This 2010 resolution, and extensive further work that has taken place for the last three years through a number of Intersessional Working Group meetings, have recognized and responded to the growing international concern about the need for effective regulation of ocean fertilization and other marine geoengineering activities.

### The 2013 amendment to the London Protocol

A new Article 6bis states that "Contracting Parties shall not allow the placement of matter into the sea ...... for marine geo-engineering activities listed in annex 4, unless the listing provides that the activity .....may be authorized under a permit".

A new annex 4 to the London Protocol lists the geoengineering techniques that this applies to. The first and only one listed at the moment is ocean fertilization. Ocean fertilization is defined as "any activity undertaken by humans with the principal intention of stimulating primary productivity in the oceans. Ocean fertilization does not include conventional aquaculture, or mariculture, or the creation of artificial reefs".



There is also an amendment to add geoengineering to the definitions in the London Protocol, "Marine geo-engineering means a deliberate intervention in the marine environment to manipulate natural processes, including to counteract anthropogenic climate change and/or its impacts, and that has the potential to result in deleterious effects, especially where those effects may be widespread, long-lasting or severe."

A new annex 5 contains a generic Assessment Framework which stipulates the fundamental aspects of the assessment being conducted before a permit is to be granted. The application of the generic Assessment Framework is mandatory. It is envisaged that the current practice of LC/LP Parties adopting more specific assessment guidelines or frameworks would continue and be even more important given the large potential for marine geo-engineering activities to be very different from each other. Article 6bis also makes it clear that any specific assessment framework(s) adopted for an activity must be taken into account before a permit may be issued. This means that, for ocean fertilization activities, the Ocean Fertilization Assessment Framework adopted in 2010 will continue to apply.

These amendments were adopted on 18<sup>th</sup> October 2013.

Also at this meeting, the US announced that they are creating an online repository of information and references for ocean fertilization. A recent summary of all marine geoengineering techniques is provided Chris Vivian at **CEFAS** by at http://www.cefas.defra.gov.uk/publications/files/20120213-Brief-Summary-Marine-Geoeng-Techs.pdf, and information on recent developments on ocean fertilization is provided in IEAGHG Information Papers <a href="http://www.ieaghg.org/publications/information-">http://www.ieaghg.org/publications/information-</a> papers.

Further general information on the London Convention and its Protocol can be found on the public website <a href="http://www.imo.org/OurWork/Environment/SpecialProgrammesAndInitiatives/Pages/London-Convention-and-Protocol.aspx">http://www.imo.org/OurWork/Environment/SpecialProgrammesAndInitiatives/Pages/London-Convention-and-Protocol.aspx</a>. The secretariat and hosting for the London Convention and the London Protocol is provided by the International Maritime Organisation in London, an agency of the UN. IEAGHG and IEA attend and contribute to the meetings.

### References

Regulation of ocean fertilization and other activities - Proposal to amend the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes or other Matter 1972 to regulate placement of matter for ocean fertilization and other marine geoengineering activities. LC35/4 (2013)

Brief Summary of Marine Geoengineering Techniques, <a href="http://www.cefas.defra.gov.uk/publications/files/20120213-Brief-Summary-Marine-Geoeng-Techs.pdf">http://www.cefas.defra.gov.uk/publications/files/20120213-Brief-Summary-Marine-Geoeng-Techs.pdf</a>

IEAGHG Information Paper; 2012-IP19: Update on Ocean Fertilisation News IEAGHG Information Paper; 2012-IP12: Update on Ocean Fertilisation

Tim Dixon
October 2013