Context

Natural disasters and conflicts often have secondary impacts, including damage to infrastructure and industrial installations. These so-called environmental emergencies may pose a threat to the health, security and welfare of the affected population and the emergency responders. It is essential that information on the location of the hazardous facilities and the potential impacts is made available to relevant authorities and emergency responders at a very early stage of the disaster response or even prior to the onset of a disaster.

The Advisory Group on Environmental Emergencies (AGEE) is one of the most important cooperation and support mechanism for the response to environmental disasters. During the AGEE assembly in June 2007 the meeting took the decision to form the Rosersberg Initiative Working Group with participation from a wide range of countries that were represented during the meeting. Both Kenya and Sweden joined the Working Group.

As part of the Rosersberg Initiative – which aims at strengthening the international response to environmental emergencies – and in order to address the need of identifying environmental risks at an early stage in a disaster situation, the Hazard Identification Tool (HIT) has been developed by the Joint UNEP/OCHA Environment Unit (JEU) in close cooperation with the Swedish Rescue Services Agency (SRSA). The Swedish Defence Research Institute (FOI) has also taken an active interest to specifically develop the HIT as the organisation has worked in a similar approach to map environmental and health risks for international deployment of Swedish Peace-keeping forces. Kenya, as a member of the Rosersberg Initiative Working Group, has shown an interest to partake to develop the HIT and further explore how it can be utilized in a national context.

Hazard Identification Tool (HIT)

Level 1: Response tool

At present the HIT is a tool for mapping secondary environmental risks, focussing on “the Big and Obvious”. This activity is carried out as a desktop exercise where, in a matter a few hours after the disaster, open sources are used to map environmental hazards in the disaster affected area. The HIT provides a list with potential secondary risks in the affected area, such as large infrastructure, nuclear facilities, and industrial facilities. The HIT lists the hazardous materials such a facility may contain and translates this information into ‘humanitarian language’ by indicating the related hazards and possible impacts. Efforts are made to locate the sites as detailed as possible. The format has been developed over the past two years and it is
mainstreamed into the coordinated multilateral response to environmental emergencies. The primary audience is the OCHA Regional office and the UN Country Team. HITs are also made public through V-OSOCC, ReliefWeb and GDACS.

The HIT has been well received by emergency responders and has been found to provide very useful guidance for assessments in the disaster affected area. However, being a response tool, it has certain limitations regarding timeframe, scope and validation.

**Level 2: Response preparedness tool**

Building further on the methodology of the HIT as a response tool, a next step is to identify environmental risks before a disaster takes place. The objective is to better inform emergency responders, but also national authorities, UN agencies and other relevant stakeholders on the location and threat of environmental risks. The outcome of providing such information depends on three axes: the amount of facilities that are identified – ideally this should be all –, the environmental hazards related to these facilities, and the available time before a disaster happens – ideally this should be as much time as required to take the desired preparedness action. This way, emergency responders and/or other relevant stakeholders can be better prepared to address secondary risks, and reduce the risk of death and injuries among the population and emergency responders due to environmental emergencies. In addition, if a disaster occurred, information on secondary risks would be readily available in a user-friendly format ensuring that no time is lost in gathering this data. This would improve the speed as well as the quality of response.

**Level 3: Disaster Risk Reduction Activities**

HIT-data, once compiled from several sources, can be used/inserted by national authorities and/or internal mechanism to serve as a basis for disaster risk reduction and/or capacity building activities. This allows for more reaction time, while at the same time the level of knowledge on environmental risks can be upgraded by linking it to impact assessment, population density, quantities of hazardous materials, etc. Additional expertise can provide this more detailed dimension of importance, by for example applying the FEAT methodology. The FEAT is a field assessment methodology to rapidly identify urgent/acute environmental risks from disasters in the period immediately following a disaster.

**Level 4: Prevention**

Lessons learned out of all these phases can be used by national authorities to better plan prevention measures, where to build facilities, safety measures etc.
Joint study between the Kenya ministry of Health, Swedish Rescue Services Agency (SRSA) and the Joint UNEP/OCHA Environment Unit (JEU) to pilot the HIT in Kenya

Scope of the mission

The mission will be organized in close collaboration with the Kenyan Ministry of Health and the Ministry of State of Special Programmes and in consultation with relevant UN agencies. The mission will focus on validation of desk top-identified, disaster-related Environmental Hazards as well as identification in-country of additional potential Hazards.

Mission Goals, Objectives and Outputs

The overall goal of the study mission is to validate the level of accuracy of desk-top identified Kenyan Environmental Hazards, assess how useful the information is as a response tool in the National context and give directions and ideas on how to develop the HIT as a national disaster preparedness tool.

Specific objectives/outcomes are as follows:

1. Map of Kenya with potentially hazardous facilities;
2. Validation of HIT as a response tool (methodology + information sources);
3. Checking national interest (UN agencies) to ensure national ownership.

Meeting partners:

- Ministry of Health
- Ministry of State for Special Programmes
- Ministry of the Environment?
- UNEP
- OCHA
- UNDP

Sites to be visited:

- Mombassa port
- Coastal strip
- Nairobi
- Rift Valley

Mission Team members

The mission will include the following personnel:

- Ms. Birgitta Liljedahl (Swedish Rescue Services Agency)
- Mr. Rune Berglind (Swedish Rescue Services Agency)
- Ms. Mirja Peters (Joint UNEP/OCHA Environment Unit)
Itinerary

The mission will tentatively take place between 30 November 2008 and 12 December 2008 and consist of the following activities:

Sunday 30 November
17:05 Arrival

Monday 1 December
Security briefing
Meetings

Tuesday 2 December
Meetings

Wednesday 3 December
Meetings
SRSA: Travel to Mombassa
JEU departure

Thursday 4 December – Monday 10 December
On-site visits Mombassa + coastal strip

Tuesday 11 December
Return to Nairobi
Debriefings in Nairobi

Wednesday 12 December
Departure SRSA