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**Update on Environmental Aspects of the
Earthquake in Indonesia**

Joint UNEP/OCHA Environment Unit

Update 1

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1. General

The Joint UNEP/OCHA Environment Unit (Joint Environment Unit), based within the OCHA Emergency Services Branch, mobilizes and coordinates emergency assistance to countries facing natural disasters and impacts from environmental emergencies.

Earthquakes such as the one that occurred in Indonesia can cause severe environmental consequences that directly impact the lives and livelihoods of affected populations in the immediate and longer term. The Joint Environment Unit is working with partners to identify and address any acute environmental problems that have immediate relevance to human lives and welfare.

2. Context

On Saturday, May 27, at 0553 local time, an earthquake with a magnitude of 5.9 on the Richter scale occurred in Yogyakarta Province on the Indonesian island of Java. This is approximately 450 km east of the capital Jakarta. The epicenter was located about 25 kilometers south of the city of Yogyakarta at a depth of 33 km. According to the latest figures, more than 5,100 people died in the earthquake, between 8,500 and 20,000 were injured, and around 60,000 houses were either destroyed or damaged, leaving around 200,000 people homeless.

All OCHA Situation Reports, together with the information on contributions and other ongoing emergencies, are also available on the OCHA Internet Website at <http://www.reliefweb.int>

3. Preliminary environmental findings and measures

A preliminary environmental assessment to identify any acute environmental issues arising from the earthquake was carried out by an environmental expert of the Swiss Agency for Development and Cooperation (SDC), in cooperation with the Joint Environment Unit. The expert was on-site with an SDC humanitarian assessment mission and was able to travel about 200 km in the vicinity of Yogyakarta and Bantul, visit approximately 20 villages, and conduct a number of meetings. Initial findings include:

- Local authorities report no major secondary effects or risks from industrial facilities and/or hazardous materials in the affected area. However, other reports have indicated that leather tanneries exist in Bantul, and while there are no reports of damage, these should receive follow-up assessment. UNIDO will undertake an assessment of industrial activities.
- Asbestos use in buildings is reported to be limited in the affected area. To the extent that asbestos is present, humidity is assumed to help to mitigate risks. Caution should be exercised when cleaning up debris.
- Health care waste management, particularly at field clinics, will need to be monitored. The Joint Environment Unit has shared with the UNDAC team and others a set of simple 'do's and don'ts' for health care to help ensure adequate management of waste from the estimated 20,000 injured people.
- According to the Inter-Agency Needs Assessment of 27 May, Bantul has 12 water treatment plants with capacities ranging from 5 to 40 litres per second. Only 3 of them are currently working, due to lack of electricity. There have been no reports of chlorine storages being damaged. In addition, in Yogyakarta a small piped sewerage system exists which might have ruptured, and as it is laid parallel to the water mains, there is a risk of contamination if the latter should have been ruptured as well.
- There is a build-up of volcanic ash on the Mount Merapi volcano, which may have been destabilized by the recent rainfalls and may therefore pose as a serious risk for landslides, mudslides or ash flows. Residents cited this as a major concern during the assessment.
- There is a nuclear research reactor used for training of operators and university students in the general vicinity of the earthquake. The International Atomic Energy Agency reports that no problems are identified with the reactor.

4. Next steps / other issues

- An UNDAC environmental expert is on standby to join the UNDAC team if required.
- The Joint Environment Unit will explore further the possible risks associated with ash from the volcano, including exploring options to deploy experts if required.
- This update will also be shared with the cluster lead agencies for water and sanitation and health to inform them of the findings and possible follow-up.
- Appropriate waste management will be a key recovery issue, as in most earthquake disasters. A loss and damage assessment led by Bappenas (the National Development Planning Agency of Indonesia) will reportedly cover this and other environmental recovery issues.

5. Contact information

For more information, please contact:

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