August 24, 2007

To: Department Safety Representatives

From: Office of UCSB Environmental Health and Safety

RE: Laser Printers in the Media

A recent story on laser printer particle emissions was given wide attention in the media in early August. The Office of Environmental Health & Safety (EH&S) has drafted this assessment and we ask that you disseminate this information in your department.

Early this month, several newspapers, radio and television, referred to a research study in Australia that measured small airborne particles emitted by common laser printers. The stories seemed to indicate the study had determined that there were health effects associated with exposure to these particles; despite the fact that the research was strictly about particle emissions and did not directly study their health effects.

The Australian researchers studied particle levels in an office environment and came to the conclusion that the primary particulate source was laser printers. The study makes no mention of whether other sources of particle emissions were considered that could have also contributed to the total particle count. These particles are not specific to printers and are also generated by several other sources including furnaces, fires, cooking, candles, toaster ovens, combustion engines, and many others.

Only three of the many printers listed in the Australian survey were tested under controlled laboratory conditions. The rest of the printers listed in this study were tested in an office environment where other contributing particle sources could not be controlled (or the degree of contribution from other particle sources couldn't be determined).

An unfortunate and perhaps irresponsible comparison to cigarette smoke particles made in some media stories has expectedly caused some alarm. While cigarette smoke consists of similarly sized particles, there are also hundreds of different chemicals in cigarette smoke, many of them with known health effects. The chemical composition of the particles described in the printer study are not yet clear, and the study did not examine any health effects associated with exposure to the particles emitted by those printers.

The scientific community is still in the process of evaluating the potential health impacts associated with exposure to such particles. Agencies such as the US Environmental Protection Agency (EPA) that have established extensive guidelines on indoor air quality are closely monitoring these types of studies.

As no tie to health impacts has been determined, neither federal nor state health agencies have established rules limiting exposures to the particles measured by this study. Given this current information, there is no reason to suggest that immediate action is required in the workplace.

If you have specific concerns or questions regarding this issue please contact Kevin Kaboli at Environmental Health & Safety, Tel: 893-8787.