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## FOR IMMEDIATE RELEASE

Breaking News for Back to School: Recent Artificial Turf Study Shows Carcinogens and Toxins in Synthetic Fields

North Haven, Conn., August 30, 2010 - Synthetic turf fields have been installed at schools across the country, and the findings of a new artificial turf study show that these fields contain chemical carcinogens, neurotoxins, respiratory toxins and skin and eye irritants. The Synthetic Turf Council says that there are more than 5,500 artificial turf fields installed nationwide.

Due to the tremendous growth of this industry and because so many students play on artificial turf, the Connecticut Department of Environmental Protection (CT DEP) embarked on a study of the fields' potential health effects. Those results were recently released.

Air tests on actual fields show the presence of chemical carcinogens, neurotoxins, respiratory toxins and skin and eye irritants. The concentrations vary among fields and among samples by factors of two to 10 times. Increasing the period of air sampling from two hours to six hours raised the number of different chemicals identified on the fields.

A sampling of just some of the chemicals off-gassing from the fields includes benzothizole - according to the Material Safety Data Sheet (MSDS) is harmful if swallowed or inhaled; toluene - the MSDS says is a skin, eye, and respiratory irritant and can cause headaches; acetone - the MSDS safety sheet says is a skin, eye, and respiratory irritant, and can affect the central nervous system; zinc - a respiratory irritant; acenaphthene - a carcinogen; and naphthalene - which is listed as a possible carcinogen.

After performing a peer review of the CT DEP's Artificial Turf Study, the Conn. Academy of Science and Engineering (CASE) advised that the findings "be softened" to avoid alarming the public. CASE warned, "Parents may be motivated to withdraw their

children from beneficial athletic activities, and schools and towns will consider the financially wasteful removal of existing fields."

The assessment of the findings was modified so not to cause concern among the public, warns Environment and Human Health Inc., a non-profit organization comprised of physicians and public health professionals.

Dr. D. Barry Boyd, Oncologist at the Greenwich Hospital and the Yale Cancer Center, said,"While fear of raising concerns may be an understandable motive for limiting public information about risk, the long recognized goal of limiting childhood exposures to environmental hazards must take precedent. Because artificial turf playing fields are disproportionately used by children and adolescents, these childhood exposures to environmental carcinogens may add to lifelong risk of cancer as well as the exposures to the many respiratory irritants and toxicants found off-gassing from these fields."

The health assessment looked at one chemical at a time for the artificial turf's affect on people's health - yet the data indicates that children are being exposed to a soup of toxins from these fields, and these exposures are experienced all at the same time.

The data also shows that the more people who are playing on a field the more toxins are released -- and thus the greater the exposures to students.

The study indicates a very high variability of the levels of toxins found in each field. Since there are 40,000 used tires in each field, enormous variability of toxins would be expected.

The actual field-testing took place last summer when temperatures were unusually cool, between 70 and 80 degrees. Environment and Human Health, Inc. (EHHI) points out that the temperatures this summer have consistently reached 90 degrees with fields frequently exceeding temperatures over 135 degrees. If the testing had been done this summer, the off-gassing of chemicals would have been higher and health risks shown in the report would have been greater.

The National Center for Catastrophic Sport Injury Research at the University of North Carolina reported that more than 40 football players nationwide have died of heatstroke since 1995 -- 31 of whom were high school athletes.

Dr Boyd stressed that, "it is essential that we have better measurements of individual exposures from artificial turf during periods of high temperatures, as many children participate in sports on these fields throughout the summer months when the high heat causes greater exposures to multiple toxic compounds simultaneously."

Although new fields off-gas more chemicals, all the fields tested were two years old or older.

There is nothing in this press release and executive summary that reduces EHHI's concern about children playing on artificial turf. In fact the data from this study suggests that we all should be more concerned than ever.

The CASE Report shows how concerned CASE was about the study's findings. Their quote, "It is almost certain that the 'headline' conclusion of the CT Department of Public Health (DPH) report will become the focus of media reports and will unnecessarily frighten parents as well as school and municipal supervisors. Parents may be motivated to withdraw their children from beneficial athletic activities, and schools and towns will consider the financially wasteful removal of existing fields. This would be an unfortunate result, one that would likely pose greater risks to the welfare of Connecticut than the continued use of outdoor Artificial Turf Fields."

This was their explanation for urging that the data assessment from the report be "softened."

The report and its executive summary can be found on the Conn. Department of Environmental Protection's website:

http://www.ct.gov/dep/cwp/view.asp?a=2690&Q=463624&depNav\_GID=1511>http://www.ct.gov/dep/cwp/view.asp?a=2690&Q=463624&depNav\_GID=1511

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