



## TEXAS DEPARTMENT OF STATE HEALTH SERVICES

DAVID L. LAKEY, M.D.  
COMMISSIONER

1100 W. 49<sup>th</sup> Street • Austin, Texas 78756  
1-888-963-7111 • <http://www.dshs.state.tx.us>  
TDD: 512-458-7708

July 13, 2007

Dan Switek, P.G.  
Remediation Division  
Texas Commission on Environmental Quality  
12100 Park 35 Circle, MC-136  
Austin, Texas 78753

RE: Public Health Review of Environmental Sampling Data  
Proposed Elementary School #19 (Grandview Hills Elementary)  
12024 Vista Parke Drive  
Austin, Travis County, Texas

Mr. Switek:

In response to a Texas Commission on Environmental Quality (TCEQ) request, the Texas Department of State Health Services (DSHS), Health Assessment and Toxicology Program has conducted a preliminary evaluation of environmental sampling data collected at the Leander Independent School District (ISD) proposed elementary school #19 (also known as Grandview Hills Elementary). A more detailed description of our data analysis will be included in a health consultation that will be prepared in the coming months. The proposed public elementary school will be located at 12024 Vista Parke Drive, Austin, Texas on property formerly owned by Sasol North America, Inc. Classrooms and administrative offices will be housed in buildings that were utilized as a chemical research and testing laboratory from 1989 to 2006. Due to parental concerns, environmental samples were collected February through April 2007 and analyzed by Weston Solutions, Inc.

To provide a preliminary assessment of the potential public health implications associated with exposure to contaminants found in the various media, we used health-based screening values established by the Agency for Toxic Substances and Disease Registry (ATSDR), a federal agency within the Centers for Disease Control and Prevention (CDC). The screening values we used were based both on cancerous and non-cancerous endpoints. It is important to note that exceeding a screening value does not necessarily mean that adverse health effects will occur, only that the contaminant warrants further consideration. It also is important to note that health-based screening values are not available for all contaminants.

### Surface Soil

Several contaminants were found in the soil at levels above the most stringent health-based screening values. These values are based on children who exhibit an unusual appetite for non-food substances such as soil. These children have been known to eat 25 to 250 times more soil than average children. While it has been suggested that most children may occasionally exhibit this type of behavior, chronic behavior of this type is rare and it is the chronic behavior upon which these screening values are based. Polycyclic aromatic hydrocarbons (PAHs) were detected in some soil samples at levels that could cause a low to moderate increased risk for cancer. There also were some contaminants for which health-based screening values were not available. While we would estimate the risks associated with these contaminants to be low, replacing the soil from the contaminated areas, particularly the play areas, with clean fill would remove any potential risk.

### Indoor Air

The indoor air sampling measured what was in the air at that particular time. The contaminants measured in the indoor environment were compared with health-based screening values, but several had no formal values available. A review of the indoor air data indicate residual levels of chemicals associated with detergent formulation, fragrances, or common indoor pollutants from consumer-based products found in private homes, commercial buildings, and schools. Based on the sampling data, we believe that exposure to the indoor air would pose no apparent public health hazard.

### Other Data

We also reviewed data for sub-slab soil/air, sheetrock and wipe samples. There is no direct exposure to contaminants either in the sub-slab base material or air. The indoor air data is a better indicator of what exposure would be due to vapor intrusion from the sub-slab. Weston has recommended that the sub-floor area be vented by pulling a slight vacuum under the slab. The installation of such a system would minimize the potential for chemicals to migrate from the sub-slab through the concrete slab into the building and would eliminate vapor intrusion as a possible exposure pathway. Low levels of chemicals were found in the sheetrock and wipe samples from various surfaces. Because these surfaces will be covered (painted or sealed) or are not accessible to children, there is no exposure pathway thus no public health hazard.

The DSHS Radiation Inspection Unit conducted an on-site survey and found no viable threat from past radioactive material use inside the building. All readings were at typical background levels, thus radioactivity at this site poses no apparent public health hazard.

We did not address the acid neutralization tank as according to documents received from Weston, the tank and its contents will be removed from the site. Because there will be no exposure to the tank or its contents, there is no public health hazard associated with the acid neutralization tank. We also did not address the electric and magnetic fields (EMFs) data as published information is not adequate for addressing public health concerns. Leander ISD is taking steps to reduce EMF exposure by shifting the play area and ball fields away from the power lines.

Conclusions

Based upon our preliminary analysis of the February through April 2007 sampling data, and that Leander ISD will remediate the soil in play areas, we do not expect to see human health effects associated with exposure to chemicals in the proposed elementary school and from areas on the school property. A more detailed description of our data analysis will be included in a health consultation that will be prepared in the coming months. In the event new data become available, we will review those data and provide an analysis of public health implications associated with those data upon request.

If you have any questions, please contact us at (512) 458-7111 extension 3004 or 6039.

Sincerely,



Carrie Bradford, Ph.D.  
Toxicologist  
Health Assessment & Toxicology Program



Tom Ellerbee  
Environmental Specialist  
Health Assessment & Toxicology Program

cc: Mike Aplin, Senior Toxicologist, Texas Commission on Environmental Quality  
Jeff Henke, P.G., Senior Project Manager, Weston Solutions, Inc.  
Ellen Skoviera, Leander Independent School District  
Jon Rinehart, Site Assessment Manager, U.S. Environmental Protection Agency  
Christine Ackerson  
Beth Ward  
Jeff Kellam, Env. Health Scientist, Agency for Toxic Substances and Disease Registry  
Jennifer Lyke, Public Health Advisor, Agency for Toxic Substances and Disease Registry