School Property Evaluation and Cleanup Division Biennial Report

January 2000 through December 2001

California Environmental Protection Agency
Department of Toxic Substances Control
Gray Davis, Governor

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Governor, State of California

Winston H. Hickox
Secretary, California Environmental Protection Agency

Edwin F. Lowry
Director, Department of Toxic Substances Control

"Every child in California deserves a safe, healthy environment in which to learn. The Department of Toxic Substances Control's Schools Program has played a vital role in this goal by working to ensure that California's school sites are properly cared for and clean of harmful chemicals or pesticides."

Governor Gray Davis

California Environmental Protection Agency
Department of Toxic Substances Control
School Property Evaluation and Cleanup Division
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Biennial Report on the School Property Evaluation and Cleanup Division Activity

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California Environmental Protection Agency
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During the past two years, the Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup Division successfully supported the statewide effort to increase the number of classrooms in California, while protecting children from the potential effects of exposure to hazardous materials. By overseeing completion of environmental assessments for more than 700 school sites in nearly 280 school districts throughout the State, and overseeing completion of cleanup activities at 12 schools in two years, DTSC's "Schools Division" has set the national standard for school site environmental reviews. This success story began with a legislative mandate requiring DTSC to identify environmental contamination and oversee remediation of any proposed site before school districts can construct new schools or expand existing schools using state bond money.

473 Phase I Assessments
267 Preliminary Endangerment Assessments
+ 12 School Site Cleanups

= 752 Projects in Two Years!

Contamination discovered during construction of Belmont High School in Los Angeles spurred legislation requiring environmental reviews by DTSC.

A Brief Background of School Contamination

Between 1995 and 1998, Department of Toxic Substances Control (DTSC) staff identified contamination at several schools located on or close to contaminated properties. Local communities were concerned about possible health impacts to students and teachers from the contamination. DTSC identified significant health and safety hazards at the controversial Belmont Learning Center, a new school then under construction on an oil field with elevated concentrations of potentially explosive methane and toxic hydrogen sulfide gases.

As a result of these environmental concerns at schools, several legislative hearings documented the need for changes in existing laws. On January 1, 2000, Senate Bill 162, written by Senator Martha Escutia, and Assembly Bill 387, written by Assemblyman Scott Wildman, took effect. Signed by Governor Gray Davis in 1999, these laws detail the new environmental review process now required of school districts wishing to purchase, build, or expand school properties using matching state bond funds and require DTSC to oversee environmental assessments of potential new or expanding school sites. Additional legislation written by Assemblyman Charles Calderon, including Assembly bills 2644 and 972, further refined the environmental review process for schools.

Recognizing the statewide need for environmentally safe school sites, DTSC designated school projects as a top priority, and established the School Property Evaluation and Cleanup Division in May 2000. Since then, the Schools Division has expanded to three statewide offices with multidisciplinary staff including scientists, engineers, toxicologists, geologists, industrial hygienists, public participation specialists, and administrative and supervisory staff to oversee environmental assessments at school sites.

DTSC reviews the environmental evaluations of school properties to identify the presence of hazardous materials at the site. These substances may include chemicals remaining from previous land uses, such as pesticides that may be found at former agricultural properties. If such chemicals are present, DTSC uses a risk assessment approach to determine whether these chemicals are present at high enough concentrations to cause health problems to people or damage to the environment.

Soil sampling on the playground at Burbank Elementary School.

Three-Step Environmental Assessment Process for School Sites

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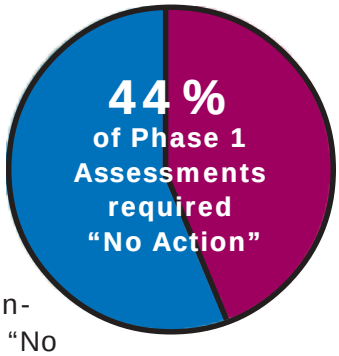
Step 1: Phase I Environmental Site Assessments. The school district contracts with qualified environmental assessors to prepare a Phase I Environmental Site Assessment. The contractor reviews records to determine if the potential exists for exposure to hazardous materials, including methane and naturally occurring asbestos. The district submits these assessments for DTSC review, comment, and approval. DTSC is required to provide comments on these reviews within 30 days. If the assessment identifies no potential contamination , the school district will receive a "No Action" determination letter from DTSC, and the process is complete.



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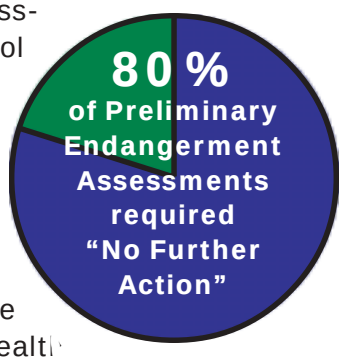
Step 2: Preliminary Endangerment Assessments (PEAs). If the environmental site assessment reveals potential contamination, school districts must contract for preparation of a Preliminary Endangerment Assessment, which includes sampling and risk assessment conducted according to DTSCguidelines. School districts must make these reports available for public review and comment before DTSC's final determination. DTSC is required to approve or disapprove Preliminary Endangerment Assessment reports within 30 days of close of public comment period or within 30 days of the school district's approval of the Environmental Impact Report for the school. If the assessment identifies no significant health or environmental risks, the district will receive a "No Further Action" determination letter from DTSC.



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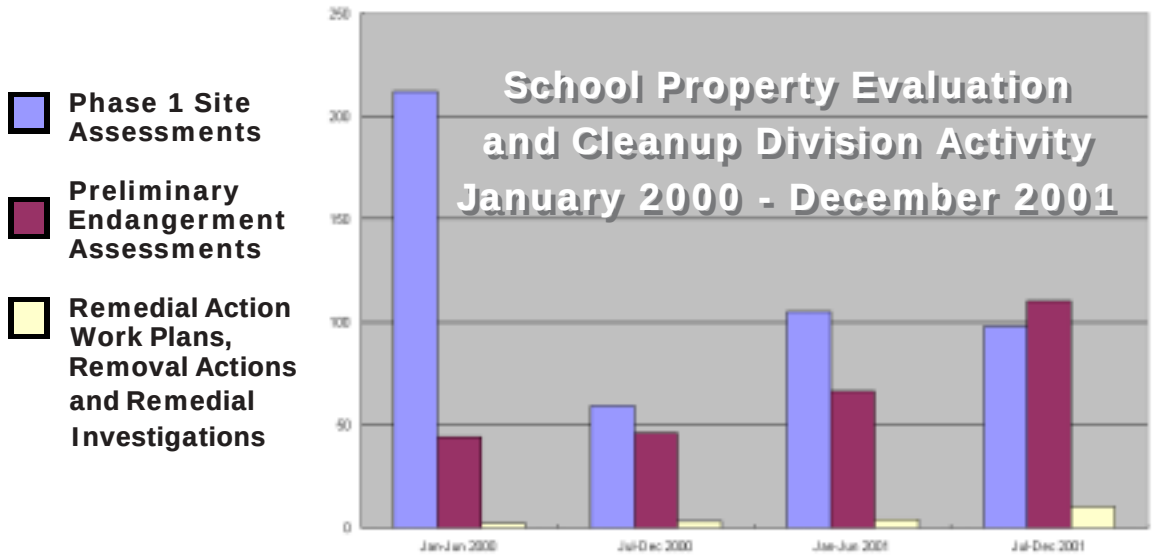
Step 3: Removal Actions/Remedial Actions (Cleanups). If the PEA identifies significant contamination, school districts may elect to drop the property from consideration, or investigate further and, if necessary, clean up the contamination under DTSC oversight. The subsequent steps may include a Supplemental Site Investigation and a Removal Action Work Plan. DTSC is required to make the Removal Action Work Plan available for public review and comment before its final approval. When the cleanup is complete, DTSC will certify that "No Further Action" is needed.



Statutory Time Frames

The acute need for more classrooms in California requires acceleration in all phases of school construction, including environmental assessment. The California Education Code requires that DTSC review Phase I Assessments within 30 days of receiving them, and that DTSC review Preliminary Endangerment Assessment reports within 60 days of their receipt. Meeting or exceeding these deadlines is a high management priority for DTSC. Environmental assessments and cleanups at most of the school sites have proceeded quickly, especially where contractors followed DTSC guidance materials and protocols. Of the 473 Phase I Determinations and 267 preliminary endangerment assessment determinations issued (a total of 740 projects during the past two years), DTSC missed the deadlines for only six projects, the longest of which was 12 days past the deadline.

Pilot Project - Federal Grant Funding

Because some school districts lack financial resources to pay environmental contractors and DTSC oversight costs, DTSC requested federal grant funds from the United States Environmental Protection Agency (U.S. EPA) to conduct a pilot project in 2001. The pilot project was developed both to assist school districts with financial hardships, and to quantify reasonable contractor costs and timeframes for completing a Preliminary Endangerment Assessment.

The pilot project assisted two school districts, the Los Angeles County School District and the Hawthorne School District. Using grant money, DTSC employed a contractor to complete two Preliminary Endangerment Assessments under DTSC oversight. One of the assessments was completed within six weeks; the second, more complex assessment took about four months. The grant covered DTSC's contractor and oversight costs for both projects totaling almost $145,000.

Coordination and Communication

DTSC has sought continual feedback in order to improve the Schools Program. DTSC managers participate in monthly coordination meetings with representatives from the California Department of Education (CDE) and the Coalition for Adequate School Housing (CASH). CASH represents an aggregate of 1,200 school districts, architects, attorneys, construction managers, consultants and facility planners, contractors, developers, and financial institutions.

DTSC also participated in 12 workshops and conferences presenting information about DTSC's site evaluations, risk assessment, and cleanup process. These outreach efforts have improved coordination and communication between school districts, CDE, and DTSC, and provided a forum for school districts to raise concerns to DTSC. In addition, DTSC encourages public involvement in the school property environmental review and decision-making process by participating in public meetings with parents, teachers, and community members, as well as conducting meetings with legislators and local officials.

Guidance, Policies and Fact Sheets

DTSC continues to provide information and develop methods to assist school districts, consultants, and the general public to understand the environmental review process for school sites. Technical guidance documents have been developed to address questions most frequently asked by the school districts. DTSC has prepared 13 advisories and fact sheets to clarify policy questions, explain new laws, and provide technical guidance for sampling and report preparation. Advisories and fact sheets for the DTSC Schools Program are posted on the DTSC Website at: www.dtsc.ca.gov. If you have questions, please contact Sharon Fair at (818) 551-2821 or Hamid Saebfar at (818) 551-2876, or write to DTSC Schools Program, 1011 North Grandview Avenue, Glendale, CA 91201.

Guidance Currently Available Includes:

1) **Interim Guidelines for Sampling Agricultural Soils, June 28, 2000**
2) **Interim Guidelines for Evaluating Lead-Based Paint and Asbestos-Containing Materials at Proposed School Sites, July 23, 2001**
3) **Phase I Environmental Site Assessment Advisory: School Property Evaluations, September 5, 2001**
4) **Fact Sheet #1: New Environmental Requirements for Proposed School Sites, Assembly Bill 387 and Senate Bill 162, June 2000.**
5) **Fact Sheet #2: Update on Environmental Requirements for Proposed School Sites/Construction Projects, AB 2644 Summary, February 2001**
6) **Fact Sheet #3: Update on School Site Environmental Review Process, AB 972 Summary, November 2001.**

Environmental Contamination Identified at School Sites

Contamination Found at Former Industrial Properties

Urban school districts often face land shortages and may use former industrial properties for new school sites. However, hazardous materials from landfills, storage tanks, transformers, dry cleaners, chemical production, and oilfields contaminate many of these properties. School districts must carefully test such properties to evaluate residual contamination, soil and groundwater, as well as possible soil gases that could affect human health or the environment. Los Angeles Unified School District has faced this challenge many times.

Excavated soil at the Southeast Middle School and High School site in Los Angeles.

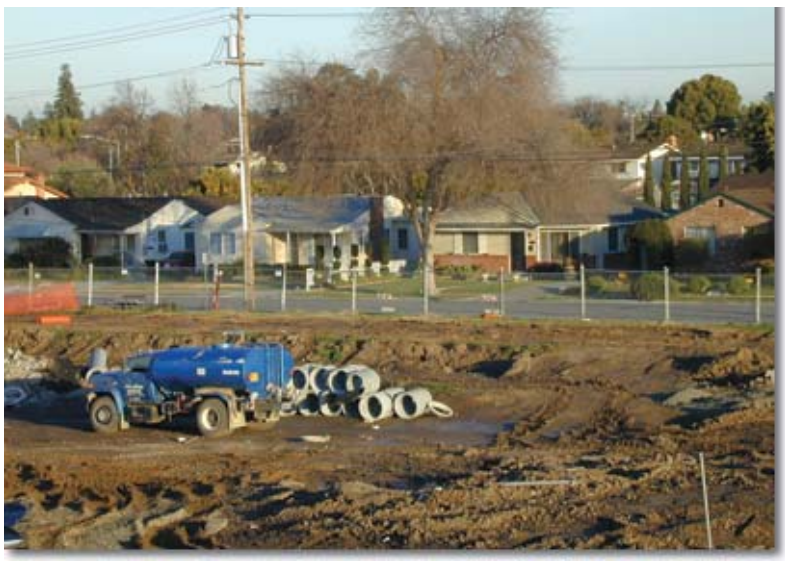
Southeast High School and Middle School: DTSC is currently working with the Los Angeles Unified School District to oversee a Removal Action Work Plan at the proposed 40-acre site to house three new schools: Southeast High School #2 (for 3,465 students), Continuation School (for 120 students), and Middle School #3 (for 1,873 students) in South Gate, California. Former land uses on the property include a General Motors production plant, a furniture manufacturer, and an automotive junk yard. Before purchasing the property, the school district conducted an environmental assessment and investigation that identified elevated levels of arsenic, polychlorinated biphenyls (PCBs) and lead in limited areas. DTSC recently approved the Removal Action Work Plan for excavation and off site disposal of the contaminated soils.

In addition to the environmental problems, this community has experienced severe student overcrowding. The predominately Latino community has expressed concerns about environmental justice issues, and has been especially concerned that the new schools are safe. They have also been concerned about ensuring an expedited schedule because of severe overcrowding at other schools. DTSC staff has met with members of the community in various meetings to discuss the findings of the environmental investigation and plans to clean up the site, and also to address their concerns regarding health issues for the students and teachers. These meetings have reassured the community and helped to reduce the general anxiety over the selection of these sites, thus increasing community support for the proposed cleanup.

Contamination Found at Former Agricultural Properties

School districts often propose new schools on properties formerly used for agricultural purposes, including crop production and dairy farming, that may contain pesticide contamination. Approximately five percent of these sites are contaminated with pesticides. Arsenic contamination, associated with arsenic pesticides, is common at these sites. Former dairy farms often contain collection ponds for animal wastes, which may produce high volumes of methane gas that can rise to the surface and create potentially hazardous conditions. DTSC has required several school properties to develop methane collection systems to address these issues. Ernesto Galarza Elementary School in San Jose is an example of a former agricultural site contaminated with pesticides.

Ernesto Galarza Elementary School: The San Jose Unified School District proposed to demolish the existing River Glen Elementary School and construct a new school named Ernesto Galarza Elementary School. Before 1957, this 7.6-acre site was agricultural land. Under DTSC oversight, the district conducted a Preliminary Endangerment Assessment, which discovered soils contaminated with pesticides in a grassy area along the north end of the site. DTSC oversaw and approved a Removal Action Work Plan to address the pesticide contamination. School construction continued in the unaffected areas, preventing significant construction delays. In July 2001, DTSC approved the completion of the Remedial Action and the school opened on August 29, 2001. The new 37-classroom school serves 750 elementary school students.



Agricultural pesticide contamination was removed from Galarza Elementary School in San Jose.

A meteorologic station was erected on the Burbank Elementary School property during the removal to monitor weather conditions including wind speed and direction.

Excavating sand from the playground area as requested by the San Bernardino City Unified School District.

A high-density polyethylene (HDPE) liner prevents residual contamination from rising to the surface.

Contamination at Existing Schools

Although exempt from DTSC requirements, some school districts have requested DTSC assistance in overseeing the environmental investigation and remediation of existing school sites.

Burbank Elementary School: In August 2000 DTSC responded to a referral from the San Bernardino County Fire Department concerning probable pesticide contamination from an adjacent chemical company. DTSC met with the San Bernardino Unified School District, the Fire Department, the pest control company, and the company's contractor. Under DTSC oversight, the pest control company conducted an expedited Preliminary Endangerment Assessment to investigate the presence of heavy metals and organochlorine pesticides. Within six weeks, DTSC determined that a removal action was required for pesticides that had spread to the adjacent grass playground area. DTSC held group meetings and interviewed parents, teachers, community members, and public officials in early September 2000. At DTSC's recommendation and at parents' request, the school closed down for seven weeks while the pest control company removed and disposed of 8,800 tons of pesticide-con-

taminated soil. The area was backfilled with clean soil. The school reopened on October 30, 2000. In addition, DTSC investigated the entire pest control company property to ensure that no other contamination will impact the students or school property.

An Investment In Our Future

DTSC recognizes the critical need for school districts to build new classrooms and new schools because of California's growing population. Without enough new schools, the education process and the children in it suffer. Students are forced to attend multi-track schools with shortened school days and fewer days per year. They are often bussed long-distances from their own neighborhoods. Overcrowded classrooms can result in a substandard education even in otherwise ideal circumstances.

While recognizing the need to speed along new school construction, DTSC has a mandate to ensure that new school sites are environmentally safe for students so that their health and safety is not impacted by toxic chemicals or hazardous materials. By working closely with school districts and their consultants, DTSC has ensured that the environmental assessments are performed quickly and efficiently, and that they provide sufficient information to effectively evaluate health risks at school sites. As long as there is a shortage of schools and new schools are being built, the Schools Program will remain a high priority for DTSC.

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