

Education and Expansion: Model School District Policies for Protection of Staff and Students during School Construction



New Jersey Work Environment Council
With input from the
Healthy Schools Ad Hoc Committee

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Model School District Policies for Protection of Staff and Students during School Construction

Prepared by the New Jersey Work Environment Council with Input from the Healthy Schools Ad Hoc Committee

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Introduction

We all want educationally adequate 21st century school facilities for New Jersey's children. School construction, demolition, and renovation are inherently hectic, noisy, dusty, odorous, and potentially dangerous. They require strong measures to keep staff and students from getting sick or hurt -- or having their learning environments disrupted. School districts have primary responsibility for keeping staff and students safe during school construction. Success largely depends upon the preparation, competence, and goodwill of the school district's staff, the project architect/engineer, the contractor, and local school officials - and the way they work together. These model policies have been developed to assist Boards of Education and school district administrators in this challenging undertaking. School staff and parents have an important role to play in encouraging boards and districts to adopt these policies.

Construction, demolition, and renovation work is dangerous, and when it is occurring in areas near or attached to buildings presently occupied by staff and students, it is a major concern. Hazards may change daily depending on the nature of the work. For example, installing a section of drywall poses one set of potential dangers, while painting the same wall poses other risks. Some common construction health hazards include reduced or removed fresh air supply, noise, diesel exhaust from construction equipment, dust, and vapors from a variety of toxic construction products in materials from flooring to roofing, and disturbed asbestos, lead, mold, and other materials of health concern in or on existing building materials. Safety hazards may include fires, dangerous traffic patterns, unattended tools and construction equipment, falling tools, open trenches, and bottled gas. Uniform Construction Code (UCC) violations such as blocked exits and disabled fire alarms and emergency lights may arise.

Because of the state's role in the construction program, the Abbott districts are in a somewhat unique position. These districts must look to the state to fund and oversee the renovation and construction of school facilities, but are still responsible for the safety of staff and students. This creates a system of interconnected responsibilities that requires careful attention. There are bound to be some issues that cause concern in coordinating the process; however, this does not decrease the role of the district. Every Abbott district must understand that Abbott V (1998) 153 N.J. 480 and the Educational Facilities Construction and Financing Act (EFCFA (2000) 18A: 7G-4 and 7G-5) give the districts a responsible role in the school construction program.

This document is designed to help Boards of Education and school district administrators consider the development of policies that reflect the district's concern for the health and safety of students and staff and the steps being taken to protect them. During the initial planning stage leading to design and construction or renovation of a school building, it is essential for a district to develop policies that will provide a level of readiness for handling most situations as they arise. The policies must also take into account the need to keep all stakeholders informed of the process and progress. All policies should be put in writing, introduced at a public Board of Education meeting and voted on by the Board. All official Board policies should be published and available for review by the public.

A. Pre-Construction Planning

General safety and security standards for construction projects

- 1) Construction workers should be required to wear photo-identification badges at all times for security purposes while working on school sites.
- 2) As much as possible, noisy, dusty, odorous work should be performed before and after-hours, on students' days off, weekends, and during vacations.
- 3) All construction materials should be stored in a safe and secure manner and kept dry to prevent mold growth.
- 4) Fences around construction supplies or debris should be inspected daily and maintained.
- 5) Gates should always be locked unless a worker is in attendance to prevent unauthorized entry.
- 6) During exterior renovation work, overhead protection should be provided for any sidewalks or areas immediately beneath a work zone unless such areas are fenced off and provided with signs warning against entry.
- 7) Signs should be posted identifying the construction management company, General Contactor (GC) and at least one, preferably several, emergency telephone number(s) to call in the case of vandalism or other problems.

Separation of construction areas from occupied spaces: Construction areas that are under the control of a contractor and not occupied by district staff or students should be separated from occupied areas. Periodic inspection and repairs of these separation barriers should be made by the district. Required fire ratings should be maintained.

- 1) Provisions should be made to prevent the passage of dust and contaminants into occupied parts of a building by sealing construction work areas and placing them under negative pressure relative to occupied areas. Air exhausted from work areas should be ducted at least 25 feet from any doors, windows, or air intakes into occupied areas before being released. Release should be at as high a level as possible to facilitate quick dispersion. A temporary stack can be devised for this purpose.
- 2) Heavy-duty plastic sheeting may be used only for a vapor, fine dust or air infiltration barrier, and should not be used solely to separate occupied spaces from construction areas.
- 3) A specific stairwell and/or elevator should be assigned for construction worker use during school hours. In general, construction workers should not use corridors, stairs or elevators designated for students or school staff.
- 4) Large amounts of debris should be removed by using enclosed chutes or a similar sealed system. Movement of debris through hallways of occupied spaces of the building should be minimized. No material should be dropped or thrown outside the walls of the building. During roofing demolition, debris may be thrown directly off the roof into dumpsters provided the area is roped off and all work ceases during arrival, dismissal, and class changes.

- 5) All occupied parts of the building affected by renovation activity should be cleaned at the close of each workday. School buildings occupied during a construction project must be maintained at a level to allow for proper educational delivery and consideration of the health and safety of all occupants at all times.

Emergency procedures: The school district should write or review Emergency Action Plans. They should comply with OSHA/PEOSH standard 1910.38(a), Emergency Action Plans, and adhere to advice in the OSHA publication *How to Plan for Workplace Emergencies and Evacuations*, 2001 (www.osha.gov/Publications/osha3088.pdf). (OSHA is the federal Occupational Safety and Health Administration with jurisdiction over private sector employees. PEOSH is the Public Employees Occupational Safety and Health Program with jurisdiction over New Jersey public employees, including public school staff.) The plan should:

- 1) Define what constitutes an emergency (e.g. fire, explosion, structural collapse, spill or other unplanned chemical release, or serious injury or illness)
- 2) Define response options
 - a) Emergency contacts – The district should prepare a list of people to be called in case of an emergency, including police, fire, hazardous materials response team, local health department, environmental officials, buildings and grounds manager, union officials, etc.
 - b) Building evacuation-- The district should have a plan in place to respond immediately to acute exposure episodes and relocate staff and students.
 - c) Spill clean-up procedures, including lines of authority, site control measures, step-by-step procedures, equipment available, training of personnel, reoccupancy criteria, disposal procedures, and compliance with OSHA/PEOSH standard 1910.120, Hazardous Waste Operations and Emergency Response.

Fire and hazard prevention: A school can be especially vulnerable to fire during the construction process. Areas of buildings under construction that are to remain occupied should maintain a certificate of occupancy. In addition, the following should be strictly enforced:

- 1) No smoking is allowed on public school property, including construction areas.
- 2) During construction, daily inspections of district occupied areas should be conducted by school district personnel to assure that construction materials, equipment and debris do not block fire exits or emergency egress windows.
- 3) Proper operation of fire extinguishers, fire alarm, and smoke/fire detection systems should be maintained throughout the project except as otherwise approved by the construction official or fire official.
- 4) Fire drills should be held to familiarize students and staff with any temporary exits and revised emergency procedures.

Pre-construction testing and planning for construction projects

- 1) The occupied portion of any school building should always comply with the minimum requirements necessary to maintain a certificate of occupancy and should be monitored during construction activities for safety violations by school district personnel.

- 2) Every school district should have a joint labor-management health and safety committee that periodically reviews building conditions; the buildings and grounds supervisor should be a member. Many larger districts have committees for each school; the principal should be a member. A district should expand the committee(s) to monitor health and safety during school construction projects. During construction projects, the expanded committee(s) should include the Schools Development Authority (SDA) Project Officer, Project Management Firm (PMF), Safety Service Provider (SSP), and General Contractor (GC). The committee should be responsible for reviewing issues and complaints related to health and safety resulting from the construction project.

Swing space and temporary placements: The school district should minimize disruption to staff and students by carefully planning the order in which schools are constructed and renovated and the locations to which staff and students will be relocated during the interim. All space used for temporary housing of staff and students should meet the requirements of all state and federal regulations, including the New Jersey Uniform Construction Code.

Special considerations must be given to staff and students with health or mobility problems. The district should be responsible for identification and relocation of children and staff who are asthmatic, allergic, chemically sensitive, sight or hearing-impaired, wheelchair-users, or have other special health concerns that may require relocation during construction activities.

B. Communication

Pre-construction notification of construction projects: The school district should establish procedures for notification of parents, staff and the community in advance of a construction project of \$10,000 or more to be conducted in or near a school building while the building is occupied. Such procedures should provide notice at least two months prior to the date on which construction is scheduled to begin. In the case of emergency construction projects or unforeseen, potentially hazardous renovation work, notice should be provided as far in advance of the start of work as possible. Notice should include information on the district's plans to provide a safe school environment during construction projects, and should be given by publication in district newsletters, direct mailings, and a public hearing on the project to inform parents, students, school personnel and community members.

- 1) The school district should provide for communication between the Schools Development Authority (SDA), the Project Management Firm (PMF), the General Contractor (GC), subcontractors and representatives of employees, school district administration, staff, students, and parents.
- 2) A summary of all current and planned construction and renovation projects in the school district should be supplied to the representatives of employees and parents describing the nature of each project in detail, including a timetable for the beginning, end, and major steps in each project. A list of all paper documentation and specifications for the project and locations where copies can be reviewed should be provided, unless there is a bona fide security issue.
- 3) A list of all parties to be involved in each project should be compiled, including the district staff, school staff, architects, engineers, Schools Development Authority (SDA)

Project Officer, Project Management Firm (PMF), Safety Service Provider (SSP), and General Contractor (GC) on each project with a description of the responsibilities of each and a contact name, address, and phone number for each.

- 4) Construction related information should be posted in schools and on websites readily available to staff and parents. Posted information should include:
 - a) Construction timetable and progress chart.
 - b) Construction photos and updates.
 - c) Weekly written update.
 - d) Complaint procedures and contact persons.
- 5) An initial meeting with representatives of employees and parents, the school principal, and the district should be held before construction begins and be followed by periodic update meetings upon request by representatives of employees or parents. Weekly written updates should be supplied each Friday explaining work taking place the next week and steps being taken to protect staff and students. Results of relevant environmental sampling should be summarized in the update.
- 6) Work closely with custodial staff. The custodial staff will probably be in daily contact with the contractor, providing access to portions of the building and grounds, designating temporary storage areas, etc. They will probably be burdened with extra cleaning duties, too, which may require extra time and pay. Budget for this. If the building is being enlarged, budget for a larger custodial staff and more cleaning supplies.

Complaint resolution: All major projects encounter problems as construction proceeds. It is critical for a school district to put in place a process to handle concerns before problems arise. The school district should develop and implement a protocol for handling complaints from the health and safety committee as well as individuals using advice in Chapter 3, Effective Communications, in *Building Air Quality, A Guide for Owners and Facility Managers* (www.cdc.gov/niosh/baqtoc.html). The protocol should include the following steps:

- 1) Designate a staff member to receive complaints.
- 2) Notify staff, parents, and students how they can report problems.
- 3) Adopt a complaint form - sample at www.cdc.gov/niosh/pdfs/complain.pdf.
- 4) Maintain a complaint log - sample at www.cdc.gov/niosh/pdfs/incident.pdf.
- 5) Investigate complaints promptly with an onsite inspection and by talking with affected staff members. Involve the members of the health and safety committee.
- 6) Document findings and recommendations in writing as follows:
 - a) Maintain a permanent file of copies of all complaints and responses.
 - b) Make copies of records available to the representatives of employees and parents upon request.
 - c) Record actions, if any, taken to solve the problem.
 - d) Keep copies of any investigations, inspections or tests made to verify a complaint, or statements explaining why further investigations, inspections or tests are not necessary.
 - e) Forward a copy of the response to the representatives of health and safety committee and an individual filing the complaint.

C. Bidding for Construction

The Board should assure that safety is addressed in the bid specifications and contract documents before the documents are advertised for bid. Appropriate procedures to protect the health of building occupants should be included in the final construction documents for bidding. The following specifications should be required in all plans and bid documents for school building projects.

Maintaining exits: A plan detailing how exiting required by the applicable building code will be maintained during construction should be included in bid documents. The plan should describe temporary construction required to isolate construction equipment, materials, people, dust, fumes, odors, and noise during the construction period. Temporary construction details should meet code-required fire ratings for separation and corridor enclosure. At a minimum, required exits, temporary stairs, ramps, exit signs, and door hardware should be provided at all times.

Ventilation during school construction projects

- 1) A plan detailing how adequate ventilation will be maintained during construction should be included in bid documents. The plan should indicate ductwork that must be rerouted, disconnected, or capped in order to prevent contaminants from the construction area from entering the occupied areas of the building. The plan should also indicate how required ventilation to occupied spaces affected by construction will be maintained during the project.
- 2) A plan detailing how compliance with the 2007 PEOSH Indoor Air Quality Standard, N.J.A.C. 12:100-13, will be maintained during construction should be included in bid documents. A checklist of these requirements can be found at www.state.nj.us/health/eoh/peoshweb/iaqchecklist.pdf.

Necessary abatement measures: The school district should assure that proper planning is made for the safety of building occupants during construction. All school areas to be disturbed during renovation or demolition should be inspected for lead, asbestos, mold, bird and bat droppings, and other materials of health concern. If found in or on existing building materials or in soil, they should be abated prior to demolition or renovation. Appropriate procedures to protect the health of building occupants during these abatements should be included in the final construction documents for bidding.

- 1) **Asbestos abatement:** Any construction or maintenance operations which will disturb asbestos containing material (ACM) will require abatement of those areas pursuant to protocols detailed applicable federal and New Jersey laws, including but not limited to:
 - AHERA, Asbestos Hazard Emergency Response Act, 40 CFR 763.
 - New Jersey Asbestos Hazard Abatement Subcode, N.J.A.C. 5:23-8, known as "Subchapter 8".
 - New Jersey laws on Asbestos Licenses and Permits, N.J.A.C. 8:60.
 - OSHA/PEOSH Asbestos Standard for General Industry, 29 CFR 1910.1001.
 - OSHA/PEOSH Asbestos Standard for Construction, 29 CFR 1926.1101.

Large and small asbestos projects as defined by Subchapter 8 should not be performed while the building is occupied. Minor asbestos projects defined by Subchapter 8 as an asbestos project involving the removal, disturbance, repair, encapsulation, enclosure or handling of 10 square feet or less of asbestos or ACM, or 25 linear feet or less of asbestos or ACM may be performed in unoccupied areas of an occupied building in accordance with the above referenced regulations.

- 2) **Lead paint abatement:** Any construction or maintenance operations that will disturb lead based paint will require abatement of those areas. All areas scheduled for demolition or renovation as well as areas of flaking and peeling paint should be tested for the presence of lead and abated or encapsulated. The contractor hired to perform lead evaluation (inspection) or abatement work must be certified pursuant to N.J.A.C. 5:17 and must follow the work practices prescribed in N.J.A.C. 5:17. The rehabilitation subcode of the Uniform Construction Code (N.J.A.C. 5:23-6) contains the language below. These restrictions apply to ANY work done in residential (Group R) or educational (Group E) buildings.

"The following practices shall not be used on painted surfaces in all buildings of Group R that were constructed before 1978, Group E and Group I-4 buildings used as child-care facilities unless the painted surface has been tested and found to be free of lead-based paint:

- i. Open flame burning or the use of high temperature (in excess of 1100 degrees Fahrenheit) heat guns.
 - ii. Power sanding or sandblasting, unless a special HEPA (high efficiency particulate air) filter equipped vacuum attachment is used to contain dust.
 - iii. Uncontained water blasting or power washing.
 - iv. Dry scraping or sanding more than two square feet per room (interior) or 10 square feet or more per building (exterior)."
- 3) **Mold abatement:** Any construction or maintenance operations which will disturb mold will require abatement of those areas pursuant to protocols detailed in *Mold Remediation in Schools and Commercial Buildings* (March 2001, U.S Environmental Protection Agency, Washington, D.C., available at www.epa.gov/mold/mold_remediation.html)
- 4) **Bird and animal droppings abatement:** Any construction or maintenance operations which will disturb bird and/or animal droppings should be abated pursuant to the protocol detailed in PEOSH publication, *Control of Health Hazards Associated with Bird and Animal Droppings* (www.state.nj.us/health/eoh/peoshweb/pigeon.pdf)
- 5) **Other Contamination:** Other types of indoor building contamination may exist due to previous usage of a building being converted to a school. For example, there may be mercury contamination if the space has been used previously to manufacture thermometers, fluorescent bulbs, electrical switches, or other devices containing elemental mercury. In such cases, it may be useful to consult documents that provide guidance to child care center operators and their environmental consultants on the evaluation and assessment of the interior of buildings. These documents describe how

to conduct an evaluation to assess conditions inside of a building which may impact the health of its occupants. The assessment must evaluate the whole indoor environment; not just indoor air. For more information, go to www.nj.gov/dep/dccrequest and/or www.state.nj.us/health/iep/ccc_ieha.shtml

- 6) **Soil abatement:** Soil remediation should ideally be conducted during earlier siting and clean-up phases. However, additional contamination can sometimes be discovered during construction or renovation. DEP and SDA have established requirements for assessments and approvals regarding remediation of toxic and hazardous materials in soil that school districts must follow before receiving final site approval from the DEP and funds from the SDA. A checklist of DEP site remediation requirements is found at www.nj.gov/dep/srp/guidance/srrchecklist/. DEP has prepared an inventory for each Abbott District locating different types of major facilities regulated by the DEP. This information will help municipalities select sites that will protect students and will move rapidly through the site assessment and permitting phases. Inventories are found at www.state.nj.us/dep/opppc/school.htm.

Noise abatement during construction: The district should anticipate that there will be times when construction noise is unacceptable and incorporate "no work" periods into the bid specifications. Construction and maintenance operations should not produce noise in excess of 60 dBA in occupied spaces at any time. If necessary, these activities should be scheduled for times when the building or affected building spaces are not occupied or noise control measures should be taken. Noise level measurements (dBA) should be taken with a type 2 sound level meter in the occupied space closest to the source of the noise.

Control of chemical fumes, gases, and other contaminants: Large volumes of dust and other airborne contaminants released during construction work may pose a problem for people, computers, and other sensitive equipment. The bid specifications and construction contracts for each construction project should indicate how and where welding, gasoline engine, diesel engine, roofing, paving, painting or other contaminants will be exhausted. Care should be taken to ensure that outdoor air intakes do not draw in exhausted contaminants.

- 1) All diesel and/or gasoline powered equipment should be a minimum of 25 feet away from the building prior to being started.
- 2) The bid specifications should require schedules of work on construction and maintenance projects that include time for "off-gassing" of volatile organic compounds introduced during construction before occupancy is allowed. Specific attention is warranted for activities including adhesive, paint and other coatings, caulk, furniture, carpeting, one-piece flooring, wall coverings, and drapery. Manufacturers should be contacted to obtain information regarding appropriate temperatures and times needed to cure or ventilate the product during use and before safe occupancy of a space can be assured. Efforts shall be made to purchase low odor, low emissions products. Two websites at the end of this document contain lists of such products.
- 3) Building materials or furnishings which "off-gas" chemical fumes, gases, or other contaminants should be "aired out" in a well-ventilated, heated warehouse before they are brought to the project for installation or the manufacturer's recommended "off-gassing" periods should be scheduled between installation and occupancy of the

space. If the work will generate contaminants that cannot be contained in an isolated area, the work should be done when school classes and programs are not in session. The building should be properly ventilated and the material should be given proper time to cure or "off-gas" before re-occupancy.

- 4) Manufacturer's Material Safety Data Sheets (MSDS) should be maintained at the site for all products used in the project. Copies of MSDS should be provided to anyone who requests them. MSDS contain information on the chemical ingredients used in the product, product toxicity, typical effects of exposure to the product and precautions for safe use of the product.

Procedures to control dust: Bid specifications should require that the General Contractor fulfills its responsibility to minimize dust creation. Equipment should be wrapped with dust-proof coverings as far as possible. Clean-up of dust on floors, carpeting, desks, shelves, and other exposed surfaces should be complete before any construction area is re-entered by staff and students. Ordinary dust can be a health hazard to sensitive staff and students and is a common trigger of asthma. Dust may contain a variety of materials that increase its danger, such as pesticides and herbicides; insect, rodent, and bird/bat droppings; chalk dust; fiberglass, mold; cleaning and housekeeping chemical residues, asbestos and lead. The district should inspect all such areas before re-occupancy and require additional cleaning if needed.

Procedures to control water intrusion: Bid specifications should require the General Contractor to assure that building materials and partially constructed buildings do not become wet during construction. Ongoing construction must be protected with tarps fastened with furring strips that effectively keep materials and partially constructed buildings dry. Tarps must also be used effectively during roof renovations. If these precautions fail, all wet materials must be dried or disposed of within 48 hours to prevent mold growth.

D. Completion

Final cleanup: When all construction work and clean up work is completed, a final inspection should be conducted by a team consisting of the general contractor, school principal, representatives of employees, the health and safety committee, and parent representatives. When the Schools Development Authority (SDA) is involved, their Project Officer, Project Management Firm (PMF), and Safety Service Provider (SSP) should participate. The team should confirm that new and renovated areas are clean and odor-free and that ventilation, heating and cooling, plumbing, lighting, electrical, security, and fire protection systems are all working properly. Final clearance should be given before staff and students occupy new or renovated areas.

Flush out: Before occupancy is allowed, a period of one to two weeks should be allotted for flushing possible contaminants out of the school by opening windows and running the ventilation system on maximum outdoor air supply, 24 hours a day, 7 days a week.

Post-construction commissioning: Consideration should be given to the use of a third party commissioning service to do additional verification of the installation and performance of building systems prior to delivery and final acceptance by the school district. This is especially true for Heating, Ventilation, and Air Conditioning (HVAC) systems. Commissioning of HVAC systems is required under the New Jersey Uniform Construction Code for buildings with greater than 50,000 square feet of conditioned space.

The Whole Building Design Guide, www.wbdg.org/project/buildingcomm.php, describes the goals of commissioning as follows:

Commissioning is often misinterpreted to focus solely on testing during the end of the construction phase. But commissioning is actually a collaborative process for planning, delivering, and operating buildings that work as intended. ASHRAE (The American Society of Heating, Refrigeration and Air-Conditioning Engineers) defines commissioning as "...the process of ensuring that systems are designed, installed, functionally tested, and capable of being operated and maintained to perform in conformity with the design intent... Commissioning begins with planning and includes design, construction, start-up, acceptance and training, and can be applied throughout the life of the building." This definition accurately depicts commissioning as a holistic process that spans from pre-design planning to post-construction operation and can be thought of as a checks-and-balances system. Accordingly, the goals of commissioning are to:

1. Define and document requirements clearly at the outset of each phase and update through the process.
2. Verify and document compliance at each completion level.
3. Establish and document commissioning process tasks for subsequent phase delivery team members.
4. Deliver buildings and construction projects that meet the owner's needs, at the time of completion.
5. Verify that operation and maintenance personnel and occupants are properly trained.
6. Maintain facility performance across its life cycle.

E. Getting Help with School Health and Safety Concerns

School Construction Health and Safety Publications

Renovation and Construction in Schools; Controlling Health and Safety Hazards, PEOSH, 2004.

www.state.nj.us/health/eoh/peoshweb/schoolsren.pdf

Provides information on potential health and safety hazards associated with school renovation and construction and what precautions to take in order to prevent and control them.

Sample Renovation/Construction Project IAQ Compliance Checklist

www.state.nj.us/health/eoh/peoshweb/renovchecklist.pdf

Assists school districts in ensuring compliance with the PEOSH IAQ standard during all phases of a renovation/construction project. Districts are encouraged to begin completing this checklist at the planning phase of a renovation/construction project. Completing this checklist will also serve as documentation of compliance with some requirements of the standard.

New Jersey Schools Development Authority Safety Manual

www.njsda.gov/business/Doc_Form/PDFsForms/Safety_Manual.pdf

The August 2007 SDA Safety Manual contains the safety and health procedures that must be followed by all contractors on SDA school construction projects. It requires contractors to agree that construction operations will not impact or impede the learning environment (page 8); prohibits fraternization between contractors and school staff or students (page 8); requires a student and faculty orientation by the construction Manager and PMF (page 13); requires construction, inspection and maintenance of an 8 foot fence around construction areas (page 9); requires all sidewalks, entranceways, lobbies, corridors, aisles, doors or exits that remain in use by occupants to be free of obstructions (page 9); requires same-day investigation of construction-related accidents involving school occupants (page 24); and requires maintenance of a file of Material Safety Data Sheets (MSDS) for every chemical product brought onsite during construction (pages 17 and 27).

California Department of Education School Site Selection and Approval Guide

www.cde.ca.gov/ls/fa/sf/schoolsiteguide.asp

This 2004 guide is designed to help school districts select school sites that provide both a safe and a supportive environment for the instructional program and the learning process.

A Principal's Guide to On-Site School Construction

www.edfacilities.org/pubs/pubs_html.cfm?abstract=construction

This 2000 publication addresses construction that takes place in or near the school building while school is in session--the most difficult kind of construction to manage.

California Collaborative for High Performance Schools (CHPS) Best Practices Manual, Volume IV- Maintenance & Operations

www.chps.net/manual/index.htm

Contains valuable information to ensure that high performance school buildings continue to operate as intended in their design—providing optimal health, efficiency, and sustainability. The introductory chapters are geared towards district and managerial staff, and the remaining chapters contain specific guidelines—such as building envelope, lighting, HVAC, landscaping, plumbing, and snow management & de-icing—which address the needs of maintenance, custodial and grounds-keeping staff. This manual is available at

California Collaborative for High Performance Schools Best Practices Manual, Volume V - Commissioning

www.chps.net/manual/index.htm

Provides important information on commissioning high performance schools—a critical step in ensuring that the technologies and high performance elements are actually built and tested to meet specifications.

School Health and Safety Government Agencies

Below are descriptions of government agencies that can be helpful in providing information, advice, and publications on school health and safety concerns. In some cases, obtaining onsite inspections is also possible.

Public Employees Occupational Safety and Health (PEOSH) Program is responsible for health and safety enforcement for staff in New Jersey public schools.

Health hazards such as indoor air quality, mold, and chemical hazards

New Jersey Department of Health and Senior Services

Phone: 609-984-1863

www.state.nj.us/health/eoh/peoshweb/

Safety hazards, discrimination, and record-keeping

New Jersey Department of Labor and Workforce Development

Phone: 609-292-7036 or 800-624-1644 www.state.nj.us/labor/lsspeosh.html

Indoor Environments Program in the New Jersey Department of Health and Senior Services can offer information, advice, and sometimes enforcement on issues such as asbestos, lead, mold, and the EPA Indoor Air Quality Tools for Schools Program.

Phone: 609-631-6749

www.state.nj.us/health/iep/index.shtml

Communicable Disease Program in the New Jersey Department of Health and Senior Services can offer information, advice, and sometimes enforcement on issues such as tuberculosis, hepatitis, meningitis, vaccines, etc.

Phone: 609-588-7539

www.state.nj.us/health/cd/index.html

Cancer Epidemiology Program in the New Jersey Department of Health and Senior Services can offer information and advice about cancer cluster concerns in the workplace and community.

Phone: 609-588-3500

http://nj.gov/health/ces/cancer_cluster.shtml

New Jersey Department of Environmental Protection can offer information, advice, and enforcement on contamination of school sites, school bus idling, integrated pest management, radon, lead in drinking water, ozone and other air pollutants, and mercury.

- School facilities issues, **609-777-0122**. www.nj.gov/dep/school/
- Contamination of school sites, **800-253-5647**. www.nj.gov/dep/srp
- School bus idling, **609-292-7953**. www.nj.gov/dep/stophesoot/
- Integrated pest management, **609-530-4070**, www.nj.gov/dep/enforcement/pcp
- Radon, **800-648-0394**. www.nj.gov/dep/rpp/radon/index.htm
- Lead in drinking water, **609-292-5550**. www.nj.gov/dep/watersupply/index.htm
- Ozone and air pollutants, **609-292-0138**. www.nj.gov/dep/airmon/cfpage.htm
- Mercury, **609-984-6070**. www.nj.gov/dep/dsr/mercury_task_force.htm

Division of Codes and Standards in the New Jersey Department of Community Affairs (DCA) enforces the Uniform Construction Code in Abbott Districts, including issuing certificates of occupancy. The division enforces elevator safety, the Asbestos Hazard Abatement Subcode, also known as Subchapter 8 of the Uniform Construction Code as well as the Lead Hazard Abatement rules in all buildings and structures undergoing lead hazard abatement. **Phone:** 609-984-7609. www.state.nj.us/dca/codes

Local Construction Code Officials enforce the Uniform Construction Code in non-Abbott districts. Find your code official at www.state.nj.us/dca/codes/misc/muniroster.pdf

New Jersey Schools Development Authority (SDA) is responsible for monitoring construction-related health and safety problems in public schools if the projects are funded by them. www.njsda.gov

- Southern NJ - **609-943-5955**
- Hudson Region, Jersey City - **201-915-3477**
- Newark Region - **973-648-8335**

Occupational Safety and Health Administration (OSHA) is responsible for health and safety enforcement for employees of private contractors working in the public schools, for example, construction workers and privatized custodians. **Phone:** 1-800-321-6742, toll-free, 24 hours a day, 7 days a week. www.osha.gov

Local Health Departments can offer information, advice, and sometimes enforcement on issues related to sanitation, food safety, noise, and other public health nuisances. Find your local health department by calling **1-800-367-6543**. www.state.nj.us/health/lh/directory/lhdselectcounty.htm

Local Fire Officials can offer information, advice, and enforcement inspections on fire extinguishers, sprinklers, alarms, exits, and flammable materials. Find your local fire officials in the government pages of the phone book.

www.nj.gov/nj/govinfo/county/localgov.html

School Health and Safety Websites

New Jersey Healthy School Facility Environments

www.state.nj.us/health/healthyschools/

Access to the online resources of seven New Jersey state agencies and two federal agencies on issues such as indoor air quality, mold, hazardous substances, and construction dust and noise.

New Jersey Dept. of Environmental Protection School Facilities Issues

www.nj.gov/dep/school/

Provides convenient access to department, state and federal guidance regarding environmental regulations directed towards school facilities management and operations, environmental and human health concerns, indoor and outdoor environmental quality and natural resource management.

EPA Healthy School Environment Resources

<http://cfpub.epa.gov/schools/index.cfm>

Healthy School Environment Resources is a gateway to on-line resources to help facility managers, school administrators, architects, design engineers, school nurses, parents, teachers and staff to address environmental health issues in schools.

National Clearinghouse for Educational Facilities

www.edfacilities.org/

The National Clearinghouse for Educational Facilities (NCEF) provides information on planning, designing, funding, building, improving, and maintaining safe, healthy, high performance schools. There are resource lists on 120 topics. Each list includes descriptions of books, studies, reports, and journal articles, as well as links to online publications and websites.

EPA Indoor Air Quality, Tools for Schools

www.epa.gov/iaq/schools/

The *IAQ Tools for Schools* Program is a comprehensive resource to help maintain a healthy environment in school buildings by identifying, correcting, and preventing IAQ problems.

EPA Indoor Air Quality, Design Tools for Schools

www.epa.gov/iaq/schooldesign/

IAQ Design Tools for Schools provides both detailed guidance as well as links to other information resources to help design new schools as well as repair, renovate and maintain existing facilities. Though its primary focus is indoor air quality, it is also intended to encourage school districts to embrace the concept of designing high performance schools, an integrated, "whole building" approach to addressing a myriad of important – and

sometimes competing – priorities, such as energy efficiency, indoor air quality, day-lighting, materials efficiency, and safety, and doing so in the context of tight budgets and limited staff.

PEOSH Health Publications Pages

www.state.nj.us/health/eoh/peoshweb/odispubp.htm

Access to all PEOSH health publications.

PEOSH Safety Publications Pages

www.state.nj.us/labor/lsse/lspeosh.html

Access to all PEOSH safety publications.

Safe Schools Manual

www.njsafeschools.org/pub.html

The Safe Schools Manual is a manual of 79 self-inspection checklists covering environmental, health and safety regulations for secondary occupational and career orientation programs in New Jersey public schools.

NJEA Health and Safety

www.njea.org/page.aspx?z=1076&pz=6

Access to all health and safety publications of the New Jersey Education Association.

Healthy Schools Healthy Kids Clearinghouse

www.healthyschools.org/clearinghouse.html

Guides, posters, and reports on a wide variety of healthy school issues. Easy registration required for access.

Low-Emitting Materials (LEM) Table

www.chps.net/manual/lem_table.htm

This table lists products that have been certified by its manufacturer and an independent laboratory to meet the California Collaborative for High Performance Schools (CHPS) Low-Emitting Materials criteria-Section 01350-for use in a typical classroom as described in a CA Department of Health Services (CDHS) Standard Practice.

EPA Environmentally Preferable Purchasing Pages

www.epa.gov/opptintr/epp/pubs/products/products.htm