Reports for Connetquot Teachers Association
Site Visits

November 16, 2006
Report Date: January 3, 2007

Report for:

Loretta Powell, President CTA
Brad Lindell, Vice President CTA – Negotiations
Doug Sposato, Vice President CTA – Grievances

Wendy Hord, NYSUT Health and Safety Specialist, was contacted by Labor Relations Specialist and CTA Vice-President Brad Lindell because of concerns about odors, leaks, fungal growth, and numerous health symptoms. A walk-through was conducted at the High School. Health symptom complaints included asthma, headaches, drowsiness, chronic cough, allergic symptoms and other respiratory symptoms and sinusitis. Major concerns were from the science department.

The following recommendations for improving the indoor environment are offered. School-specific observations and recommendations are listed first, with recommendations for general issues following. Recommendations are based on visual observations, some record reviews and staff interviews. No environmental testing was conducted.

OBSERVATIONS and RECOMMENDATIONS

1st Floor Science Rooms

Particular concern was expressed for these classrooms. There have been many complaints regarding class size, ventilation, chemical waste tank overflows, chemical storage, etc.

- Room 122 AP Chemistry Room: the chemical waste tank overflows into this room (as well as Room 101) through the floor drain. This presents an exposure hazard to the students and staff. Some areas have less than 28" access to egress around furniture. The 28" access is a requirement under OSHA standards for fire and life safety. There is evidence of ceiling leaks. These must be corrected.
- There are no eye wash stations or emergency showers in any other science room even though chemicals used are the same. This is a violation of the OSHA standard CFR1910.151(c). Eye washes should be plumbed into existing fixtures or separate sinks provided.
- Room 117 smells as if there may be a deodorizing plug-in present. If there are any in use, they should be disposed of, since they are asthma triggers and sensitizers. The "Greenhouse" room sink in the back is said to regularly overflow with toxic waste backup. There is also a chemical odor in the room, stronger than to be expected for a science room. The backflow must be fixed. Continued chemical backups in the sink could indicate a serious exposure and fire hazard.
- The toxic waste tank monitoring equipment is located in Room 117. The equipment is not working and apparently has never been functional. The district should be concerned about liability

for possible EPA violations and continued chemical exposures to students and staff. The monitoring equipment must be fixed and appropriate school staff trained in its operation. A consultant should be brought in to assess the condition of the tank and make sure it is not leaking.

- Room 111: The rescue window in the room is blocked by a lab table. The Bunsen burner on the table should be moved. The table cannot be in front of the window.
- Chemical Storage Room for Sciences (Prep Room): There is an exhaust fan in the window but the room needs a local exhaust fume hood for preparation of mixtures. Ventilation should provide a minimum of ten air exchanges per hour. All acids need to be put in the acid storage cabinet; some were in the wood cabinet.
- For safety, teachers need to mix/dilute chemicals in the prep room before they get to their rooms, not take undiluted chemicals through the hallways. If the district created a lab assistant title, that person could do all the classroom chemical prep and take care of the storage room.
- Oxidizer Room: The exhaust fan in the room needs to be checked to insure it's operating as designed. If the room is properly vented, it should not be necessary to vent the storage cabinet.
- Chemical Hygiene Plan: The district must develop and annually update a chemical hygiene plan. A Chemical Hygiene officer or committee must also be designated to be responsible for the implementation of the Chemical Hygiene Plan. This is required in OSHA standard CFR1910.1450.
- For student and staff safety, science laboratory classrooms should have a maximum of 24 students, as recommended by multiple science lab professional organizations. There certainly should not be more students than lab tables can accommodate.

Other Rooms 1st Floor

- Resource Room 118 has noticeable odors. It is carpeted and has been flooded in the past. Carpeting should be cleaned with using the least amount of water or replaced with tile.
- Room 115: the portable fume hood on top of the refrigerator, if it is operational, could be used in a chemistry classroom.

- Staff lounge: ventilation is needed in the room, whether by adding a unit or providing for passive air movement from the hallway.
- Athletic Department: the rug is buckling and needs removal. The underlying tile floor could remain or the carpet could be replaced. Staff said ventilation unit filters were not changed regularly. This should be checked and corrected.
- Guidance Office: the area has noticeable odors which could be related to the significant water leaks in the room last year; staff reported major rodent problems in the area. An integrated pest management consultant should be used to assess the problem and devise a strategy to get rid of the mice. Staff also report temperature extremes. This needs to be assessed by maintenance staff and corrective action taken to even out temperatures.
- LGI Room: the door is broken on the bottom, which prevents ability to lock down this area in an emergency. This should be corrected as soon as possible.
- Library: this area also has noticeable odors, as if there is not enough outside air in the ventilation system. The system should be checked to see if it's working properly and introduces adequate outside air into the space.
- Staircase by 11th Grade Administration: there are leaks around the skylight and peeling paint. This needs to be repaired. The water could cause mold growth and create a hazard from falling deteriorated building materials.
- Room 102: this room has a noticeable odor; there is standing water in the outside courtyard that could contribute to room conditions. Drainage in the courtyard needs to be improved.
- Emergency Exit outside the school store: there is caution tape over the grates, which is not an effective way to keep students or the public from walking on them. The grates appear to cover an approximately 20 foot drop to a large air intake. The area outside is dirt and would pose a trip and slip hazard in inclement weather. This should be addressed since this area is part of the emergency exiting capacity of the building.

General

- The toxic waste tank overflows periodically into Rooms 122 and Room 101, coming up into floor drains. The tank must be regularly maintained, the monitoring equipment needs to be turned on and staff trained on how to respond. This is potentially

major liability problem for the district, both from the standpoint of student and staff exposure and environmental contamination.

- There is evidence of roof leaks throughout the building. Staff said when it rains there are multiple buckets on the floors to catch the water. Having the buckets in hallways is a code violation and an OSHA violation because it obstructs emergency egress. The roof needs to be replaced or repaired to correct the problems.
- Staff report there is rodent (mice) infestation throughout the building and they see evidence of it every day. Some suspect there may be a nest where the soda is stored. This is a serious health and sanitation issue. An integrated pest management (IPM) company needs to be consulted. Mice would not be in the building unless they had access through building cracks and other openings. An IPM program includes identifying where mice and other pests are entering the building and educating the school staff and students about how they can help. The State Education Department has information about IPM on their web site at http://www.emsc.nysed.gov/facplan/HealthSafety.htm.
- Windows in several classrooms are not operational and the district has responded by nailing them shut, so that staff don't hurt themselves trying to open and close them. Windows should be repaired so they can be used. The state property maintenance code section 303.13.2 **Openable Windows** states: "Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware".
- I strongly urge that the district, with the cooperation of the unions, form the required district-wide health and safety committee to deal more effectively with health and safety issues. Meetings must be held regularly and mutually agreed to committee protocols adapted. A clear and uniform structure for dealing with issues at each building also needs to be established so that problems can be resolved and those that are persistent or have district-wide implications are brought to the district-wide committee. Both NYSUT and NYCOSH are available for assistance in this process.

Occupational Safety and Health Investigation Conducted by the New York Committee for Occupational Safety and Health (NYCOSH) on behalf of New York State United Teachers (NYSUT)
November 16, 2006

Introduction

On November 16, 2006, an occupational safety and health investigation was conducted at several schools in the Connetquot School District. The investigation was initiated by the Connetquot Teachers' Association who requested that Wendy Hord, the Director of Health and Safety for NYSUT, conduct a walk through investigation. In order to complete several schools in a timely fashion, Ms. Hord requested the assistance of Susan O'Brien, MA, Associate Director of NYCOSH. Ms. Hord conducted the investigation at the Connetquot High School and Ms. O'Brien at the Oakdale-Bohemia Middle School and the Prem Pre-School.

The Connetquot Teachers Association requested the investigation in responding to complaints by union members of problems such as poor indoor air quality, mold, unsanitary conditions and vermin infestations in several schools. Several members also reported a number of health symptoms that they believe are connected to the problematic health and safety conditions.

OAKDALE-BOHEMIA MIDDLE SCHOOL

Findings and recommendations

Susan O'Brien of NYCOSH, accompanied by four representatives of the Connetquot TA and a representative of the custodial union (CSEA) examined a sampling of the rooms where problems have been reported. The union representatives prepared a detailed account of relatively current problems and complaints reported by teachers prior to the investigation. In that account, at least 28 classrooms, hallways, bathrooms, and other areas reported water leaks and water damage, damp carpeting, walls and ceilings, and discolored walls, ceiling and floor tiles. Most complained of what they believed to be mold. No instrumentation was used to validate the presence of mold. However, given the constantly wet conditions in many locations, the brown substances were either discolored water from leaks or mold, neither or which are acceptable in a classroom.

General recommendations

1. **A de-humidification system should be installed in the school to prevent the continual build-up of moisture.** Moisture seems to be an overwhelming problem in the school which must be addressed. Upon entering the building at the main entrance, I was told of the excessive humidity that plagues the building causing moisture to build up on every surface in the hallways and in some of the classrooms. Due to the location of the building which was apparently built over a spring, there appears to be a regular and on-going problem with moisture and humidity.

School-wide dehumidification must be explored. It may be able to be achieved through the purchase of power vents that circulate air through the building's crawl space. The custodian present during the investigation, made this suggestion, is familiar with these systems, and his opinion should be solicited.

Generally, *powered foundation vents* are used to provide ventilation for moisture control. A small fan is encased in the housing of the vent and runs either continuously or at intervals, creating negative pressure in the foundation to pull air through the foundation. Usually power vents are only needed on one side of the building.

2. **The school needs roof repair, or a new roof.** The vast majority of problems identified in the school had their origins in the constant leaking of the roof, often directly into the classrooms, which causes myriad problems including water flowing directly into classroom ceilings, ceiling tiles, walls, carpeting and onto students' heads, books, and desks. In many classrooms on the second floor, custodians have taken to creating holes in several of the ceiling tiles hoping the water will flow through the holes and into pails, as opposed to spreading over the entire dropped ceiling. The pails filled with water are then left in the classrooms during rainy periods and teachers report the pails are frequently knocked over, creating floods. In general, flooding has become a regular problem, particularly in certain hallways.

As a result of the constant water leaks, many porous surfaces such as ceiling tiles, wall board, carpeting, books etc., never have a chance to completely dry thus creating the perfect conditions for mold growth. To prevent mold growth or eliminate current mold, the roof as well as the excessive humidity must be addressed. Mold is a potentially serious problem. The EPA has developed a program called, "Mold Remediation in Schools and Commercial Buildings" which can be found on their website at http://www.epa.gov/mold/mold_remediation.html . One section, *Appendix B - Introduction to Molds,* defines mold and how it grows, how to identify mold and describes its harmful properties and potential danger to students and teachers. The rest is a comprehensive guide for ridding the school of mold. While no testing was done to confirm the presence of mold, there is no question that there is either currently mold in the school or mold growth will occur, given the current conditions.

3. **The school district should demand that school bus drivers immediately shut down their engines after entering the school parking lot.** The buses are in the lot with their engines running while waiting for students in the parking lot in the front of the building, facing an entire row of classrooms. Each classroom has as univent which draws fresh air for the classroom through an outside vent. With the buses running, the diesel exhaust is being pulled into the classroom. The Environmental Protection Agency (EPA) has found diesel exhaust to be a "probable human carcinogen". Exposure of children, with smaller body sizes than adults to such toxic contaminants creates even greater risk.

Under New York State law (6 NYCRR §217-3.2), no person operating diesel trucks or buses, "shall allow or permit the engine of such heavy duty vehicle to idle for more than

five consecutive minutes when the heavy duty vehicle is not in motion...." The New York State Department of Environmental Conservation can cite violations of this law, with penalties from $250 to $15,000. (See attached factsheet.) There may be stronger county or local ordinances as well. However, there should be no reason, once a bus is parked in the front of the school, for running the engine even the five minutes. Although 17 NYCRR 720.41.1a requires bus heaters to maintain an inside temperature of 50 degrees, there is not requirement that the bus already be at 50 degrees when the students first get on the bus.

4. **Rooms with no visible source of air circulation should be vented.** A number of rooms, some that were former closets now being used as teacher/student meeting rooms, have no source of fresh air. In any such room, a source of air should be introduced or the rooms should not be used for meeting purposes ASHRAE standards should be followed when determining the amount of ventilation needed in a room.

The American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) published its "Standard 62-1989: Ventilation for Acceptable Indoor Air Quality", reflecting consensus among industry professionals about indoor air quality. This is a voluntary standard for "minimum ventilation rates and indoor air quality that will be acceptable to human occupants and are intended to avoid adverse health effects." The standard specifies that outdoor air must be supplied to each room within a facility at a range from 15 to 60 cfm/person, (cubic feet of air per minute per person) depending on the activities that normally occur in that room. This standard is widely accepted as the benchmark for acceptable indoor air quality, although it is not enforceable by law.

5. **Insure that hot water is available throughout the building.** Teachers reported that there was no hot water in the building. The federal Occupational Safety and Health Administration (OSHA), enforced in New York State by the Public Employee Safety and Health Agency, requires that workers have available to them, hot and cold, or tepid water for washing. The regulations state, under 29CFR 1910.141(d)(2)(ii), "Each lavatory shall be provided with hot and cold running water, or tepid running water". And, under 29CFR 1910.141(d)(2)(iii), "Hand soap or similar cleansing agents shall be provided." Violations of PESH and OSHA laws carry fines.

The State Education Department Manual of Planning Standards section S707-4 says "Provide water at 100°F to all fixtures except in swimming pools."

6. **Windows nailed shut in several classrooms must be made operable.** Complaints were made by the teachers of windows being nailed shut Windows, wherever they are, should not be nailed shut for fire safety as well as ventilation reasons.

SPECIFIC ROOMS - (I am attaching the excellent and extensive list compiled by one of the teachers as reported to her by other teachers about problems they have in their rooms throughout the school.)

Below is what I observed in the sampling of rooms I visited.

Water and Mold

Hallway to left of main entrance- There was evidence of some discolored water on many surfaces, including lockers, floor, ceiling and walls.

Room 1- Water stains were seen on the ceiling and on the caulking around the edges.

Room 3 – On the back wall there is an open hole from which water regularly leaks from the 2nd floor, presumably originally from the roof. The leak has never been completely fixed. Many ceiling tiles were discolored, wet and most likely mold-filled.

The teacher from the room reported that she has suffered from migraine headaches, as have others who have used the room, as have students.

Room 2, like all the other classrooms that face the front of the building, particularly those on the first floor, are being exposed to the regular and continuous running of school bus engines, as they wait for students to be discharged.

Room 203 – This room, which is directly above room 3 has a wooden eave that hangs over the outside of the top of the windows. Every time it rains, water from the leaking roof pours through the eave leaving what appears to be some type of dark colored mold which is always present. Water often pours into the classroom leaving books and other materials soaked. There have been health complaints as well as a constant smell.

Rooms 202, 220, 215, 218 - Many of the ceiling tiles in all these rooms were water stained and possibly moldy. Several of the tiles were buckling from the weight of repeated water leaks or had just been removed and not replaced. Room 215 had had all new ceiling tiles installed very recently, however some of the tiles were already discolored and buckled.

Room 221 – There is a closet in use behind the teacher's desk in this room, and the entire back wall is soaked and eroded due to the repeated and sustained water leaks.

Second Floor Hallway – There were leaks throughout the hallway in the ceiling tiles and frequently water could be seen in the light fixtures.

Ventilation Issues

Auditorium – The auditorium had a musty smell to it and the teachers complained that there is inadequate ventilation into the room when it is filled. It was unclear at the time of the investigation if there is and HVAC system for the room and if it provides adequate air exchange and if it is working properly.

Sycamore and Cafeteria– In both spaces, the teachers have complained that the windows are nailed shut.

Room 4A, Pythagorean Place, Chorus room, ISS room- These rooms have no source of air ventilation, nor do they have any windows.

Safety

Rooms 213 and 214 - These rooms need blinds to minimize the glare coming into the classroom from the roof of a one story section of the school that is very close to the classrooms. There is also an odor from the rubberized roof that should be investigated and measures employed to redirect the smell or eliminate it.

Cafeteria – The doors that face the grounds from the cafeteria are broken. One of them closes hard due to a broken piston on the door. This is a very dangerous situation with children around, and should be fixed.

Room 30 – This is a shop room with slippery floors, a stuffed up putrid smelling sink and a univent that looks like it needs to be cleaned and the filter changed.

Prem Pre-School

Prem pre-school primarily serves children with special needs. The school occupies part of a building that houses a BOCES program for severely handicapped students. I walked through several of the rooms in the Connetquot section of the building with a one of the teachers and a representative of the custodian's union.

Findings and recommendations

1. **Roof repair must be done.** Again in this school, there are numerous rooms and hallways that show damage from regular water leaks from the roof. The same concerns about water damage and mold growth apply as in Oakdale-Bohemia Middle School.
   - The office and adjoining conference room and bathroom have leaks and damaged ceiling tiles.
   - The copy room has water damage on the ceiling which is visible where the ceiling tiles are missing. Ceiling tiles that are present are water damaged and possibly mold-filled and the room smells of mildew.
   - Ceiling tiles in the main hallway show signs of water damage. The hatch in the ceiling also shows signs of water leakage and discoloration and/or mold.
   - The psychologist's office shows signs of a water leak.

2. **Insure that hot water is available throughout the building.** There is no hot water available in the bathrooms. This is especially problematic given there are occupational and physical therapy activities going on the school and the therapists, who have hands-on involvement with students, must have hot water. (See discussion of hot water under Oakdale-Bohemia Middle School.)

3. **Miscellaneous issues.**

- **Heat -** There were complaints about the heating system either making rooms too hot or too cold throughout the Connetquot space. The system needs to be regulated.

- **Fire safety issues**
  - The window in the speech therapist's room, which would be used as an escape route in case of a fire, does not open all the way. The stops must be removed, immediately.
  - There are no easily seen signs indicating the direction to go in case of a fire, to reach the exit. If there is a fire, students and teachers could conceivably run away from the exit. Local fire authorities could assist with suggesting remedies.

- **Other**
  - There is a leak from one of the toilets in the public bathroom.
  - Room 107 has a backed-up toilet and sink.
  - The intercom at the front door does not always work properly. If it is raining staff cannot hear people on the outside, which may result in unknown persons being let into the school.