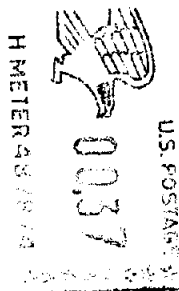
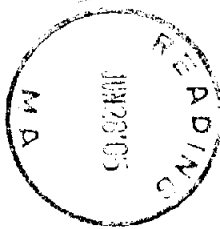
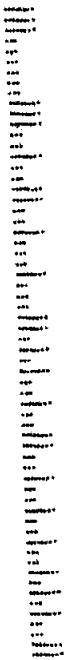




Town of Reading
16 Lowell Street
Reading, MA 01867-2601

Gary and Linda Phillips
42 Willow Street
Reading, MA 01867

01867+1544 10





Town of Reading
16 Lowell Street
Reading, MA 01867-2684
Website: www.ci.reading.ma.us

Reading Health Division
Phone: 781 942-9061
Fax: 781 942-9071

Karen Callan, Principal
Wood End School
Sunset Rock Road
Reading, MA 01867

RE: Complaint regarding elevated ambient air temperature in classrooms.

Property: Town of Reading
Barrows at Wood End School
85 Sunset Rock Lane
Reading, MA 01867

The Reading Health Division responded to a written complaint (attached), which was hand delivered to the Health Division, 16 Lowell Street on June 13, 2005 and received by Health Administrator at 12:40 pm regarding "several complaints" received by Linda and Gary Phillips concerning temperatures of 104-110 degrees at Wood End Elementary School. Up to June 13 at 12:40 pm the health Division had received one complaint at 4:45 pm on June 12, 2005 from an anonymous complainant. No telephone number was left to further investigate the call.

At 1:10p.m., Jane M. Fiore, RN, CHO, Health Services Administrator and Patrick Schettini, Superintendent of Schools began the site inspection at Wood End Elementary School.

Procedure followed:

- A. Check in at school office with identification and request principal accompany Health Administrator and Superintendent through building.
- B. Met with School Nurse: Lynn Dunn to assess any dismissals due to heat fatigue, sickness or asthma attacks. Report to that time none. Mrs. Dunn stated she was carefully monitoring all complaints.
- C. All temperatures outside and inside were taken with calibrated Raytek Raynger ST Model RAYSR2XHCU.
- D. Inside and outside ambient air temperature were recorded at:
 1. ground level
 2. five (5) feet elevation
- E. Interior air temperatures were recorded at:
 1. elevation of five (5) feet
 2. in the center of each space
 3. 2 feet and 3 feet in each corner

4. Approximately 34 inches from floor - window height - in each classroom. It should be noted, all operable windows in each room were open.

F. Comparative temperatures were taken in regard to stream of sunshine and color of desk tops, computers on /off, case colors and paper color all objects temperatures were noted for proximity to each other.

All recorded temperatures are indicated in the attached table.

Summary of Inspection:

Research:

The Commonwealth of Massachusetts Department of Labor and Workforce Division of Occupational Safety and Occupational Hygiene program requires minimum heating guidelines under MGL Section 113 Chapter 149 of which schools are list to be no colder than the range of 66-68 degrees. The highest (hottest) temperature for a school to operate is not regulated in the State of Massachusetts. Confirmation of the preceding information was confirmed by the State Department of Public Health, Division of Environmental Health Indoor Air Quality Division. Reference to this information and further discussion took place with the Reading Health Division, Jane Fiore, RN, CHO and the State Department of Public Health representative, Michael Fenney, JD, MPH, RPH, CHO, specialist in this field. If work or school is canceled it is under the guidelines of the Superintendent of Schools or Chief Operating Officer if a corporation/business site is involved.

Site inspection:

The inspection took place mid day. The outside ambient air was 96.4 degrees. Upon entering the school office, which is air conditioned, the initial information gathered from principal and from the school nurse was not indicative of heat stressed occupants. No dismissals, no asthma attacks triggered, no stomach aches reported. Continuing on the basic observation of the inspection, students were observed in the cafeteria writing school work quietly. (79degrees). Students were also observed in the gymnasium under instruction quickly moving from one marked space to another (78 degrees). A student with a teacher passed the inspector, no evidence of perspiration or tiredness (first floor base of stairs 75 degrees).

The second floor corridor was hot (94-95 degrees). The sky-lights are not shaded nor do they have sun guard glass that was visible. Entering five of the twelve class rooms the temperature ranged from 84 degrees to 94 at the open window. The lights were off which is a good heat reduction. Most computers if not in use were down. The ventilation system was in operation – noted by the flow of tissue, a basic but adequate method to test if a ventilation system is on or off. The drinking fountain water was at 68 – 69 degrees. The second floor corridor was cluttered with study desks, paper and other items. This is a narrow space. Ambient air temperature elevated. It is recommended for passage safety the area corridor not be used as an extension of a classroom or study area. At the end of the corridor, both north and south stairwells were equipped with exhaust fans to remove the warm air from the hallway. At the time of inspections the fans had just been installed; their efficacy to reduce ambient air temperature was not measurable but was palpable by the inspector.

Recommendations:

- Temporary installation of exhaust fans at each end of second floor corridor June 13, 2005
- Installation of sky light shields / shades. This installation will reduce, glare and lower temperature of the second floor corridor.
- Removal of student desk/ work /study areas located in second floor corridor
- Continued monitoring of ventilation system. The system should remain at a minimum of 85% function level 100% of time. Ideal functional level is, of course 100% operable.
- Regular check of roof HVAC intake for proper operation – no obstructions

If there are any questions regarding this inspection and the results of this inspection please call, Jane Fiore at 781-942-9061 between 8:30 am – 5 pm Monday through Friday.



Jane M. Fiore

Jane Fiore, RN, CHO

Enclosures

CC: Patrick Schettini, Superintendent of School
Peter Hechenbleikner, Town Manager
Linda and Gary Phillips, Complainant

Barrows at Wood End Elementary School
 85 Sunset Rock Lane
 Reading, MA 01867

Indoor Air testing ambient air temperature

June 13, 2005

Location/room	Temp (F)	Occupants	Windows open	Ventilation operable
Outside entrance		0	0	0
First floor corridor	76	6	0	Y
Cafeteria	79	15	Y	Y
Main Stairwell	75 (bottom) 79.4 (top)	5 5	0 0	N N
Bridge walk way	88	3	0	N
Second floor corridor	91	10	0	N
Classroom #201	84 center room 99 air entering window	0	Y	Y
Classroom # 203	79.1 center 95.1 air entering window	2	Y	Y
Classroom # 212	89 99.1 air entering window	3	Y	Y
Classroom # 214	94 95.4 air entering window	0	Y	Y