

Mr. Jeffery Fritz, Superintendent
Dr. Timothy Rayle, Assistant Superintendent for Curriculum & Instruction
Mr. Michael Howard II, Director of Extended Services
Mrs. Kathy Knust, Curriculum and Grants Coordinator
Mr. Mark Shayotovich, Director of Business Affairs
Mr. Ernie Simpson, Director of Human Resources

1013 S. Forest Avenue
Brazil, IN 47834
Phone: 812-443-4461
Fax: 812-442-0849

September 8, 2016

Rick Plew
Indoor Air Program
Environmental Public Health Division
2 North Meridian Street
Indianapolis, Indiana 46204

RE: Clay Community School's response to the IAQ Evaluation by ISDH

Dear Mr. Plew:

The purpose of this letter is to serve as the response from Clay Community Schools (CCS) in accordance with the requirements for resolving the issues identified in your recent air quality evaluation requested by myself of East Side Elementary School located in Brazil, Indiana on September 8, 2016.

1) **410 IAC 33-4-2 (b): states "carbon dioxide concentrations in the breathing zone shall never exceed 700 ppm over the outdoor concentration"**. Classrooms A-108, A-116, A-118, and A-120 all exceeded the carbon dioxide concentration limit of 1079 ppm. Please ensure there is a sufficient amount of outdoor air being supplied into the classrooms.

CCS Response:

Dampers were set to 5% due to the high humidity and frequent rains recently, causing humidity levels to be high. They have been adjusted to 10% to 15% as of Friday, September 2, 2016. Readings from our instrumentation of the rooms showed the CO₂ were in a range of 672 to 910 ppm the next morning.

2) **410 IAC 33-4-6 (d) states "when mold or mold-contaminated material is discovered, corrective action shall be taken within forty-eight (48) hours. Mold is not to be growing in the school"**. The samples collected in classrooms A-108 and A-118 were over grown with a fungus and could not be counted. Classroom A-118 had visible mold on items and materials attached to the

chalkboard. The most likely source is the high humidity inside the classrooms, but a visual inspection should be conducted above the drop ceiling for drips and to identify any water damage or visible mold growth. We recommend inspecting the ceiling tile, carpet, and the unit vent drain pans and coils for hidden mold growth. Any remediation activity should be done after hours when students are not present. Air scrubber units with (HEPA) filtration and dehumidifiers should be considered until mold remediation has been completed inside the classrooms.

CCS Response:

Maintenance staff investigated all areas listed: ceiling tile, carpet, drip pans, and coils. No obvious evidence of hidden mold growth was observed. Humidity levels have decreased with recent weather cooling and humidity levels becoming lower. Humidity levels on Friday, September 2, 2016 were in a range of 40 – 55%. Dehumidifiers will be available if the humidity levels increase due to the unusually humid and wet summer. In addition an appropriately sized air purifier has been installed in room A-108 and A-118 to further assist with any latent air quality issues.

3) 410 IAC 33-4-4 Sec. 4 (b) states: “where provided air-conditioning systems shall be capable of providing and shall be operated to maintain a temperature not to exceed seventy-eight (78) degrees Fahrenheit and sixty-five percent (65%) relative humidity during periods of student’s occupancy”. With the exception to the computer lab, the relative humidity levels inside the classrooms had a range between 65% and 69%. As shown in table 1, the relative humidity was above the allowed limit. The HVAC system should be checked to ensure it is operating within specifications. Humidity at the levels measured can promote mold growth.

CCS Response:

Maintenance staff investigated HVAC system, they all were operating within normal parameters. Humidity levels have decreased with recent weather cooling and humidity levels becoming lower. Humidity levels on Friday, September 2, 2016 were in a range of 40 – 55%. Dehumidifiers will be available if the humidity levels increase due to the unusually humid and wet summer.

If you have any questions or would like to have further discussion on any of the remedies implemented please do not hesitate to contact me at your convenience.

Sincerely,

Michael R. Howard II
Director of Extended Services
Clay Community Schools