

Bartholomew Consolidated School Corporation Energy Management Program

Dear Staff Members,

As this school year draws to a close and we begin to look toward the upcoming school year it has become necessary to inform you of changes that will impact you and your classroom in the fall. I believe it is appropriate to address these issues with you now so that you are not surprised by the changes when you return in August. As a former teacher and principal, I realize most of the changes contained in this memo will not be welcomed. But they are necessary to bring our corporation in compliance with state regulations, improve our risk assessment status from our insurance carrier, and continue to implement our Energy Management Program.

1. All appliances should be removed from classrooms and storage areas adjacent to classrooms. Buildings will have established lounge/break areas. Appliances such as coffeemakers, microwave ovens, refrigerators are limited to these areas.
2. Space heaters are prohibited from classroom or office areas.
3. All fabric covered furniture and pillows that are designated for student use must be removed from the classroom. The lead building custodian must have a plan to address overstuffed fabric furniture in the media centers and other common student areas. *These items not only pose a significant fire risk they harbor many allergens and pests, such as dust mites, lice and bedbugs.*
4. Animals (with the exception of fish in an aquarium) are not permitted in the classroom without a direct curriculum based instructional purpose.
5. Plug-in air fresheners and ozone generators are prohibited from use in classrooms.
6. Unit ventilators cannot be used as a shelf. This means they should not have anything stacked on top of them, including plants*, books or student projects. In addition, when arranging the classroom please allow a 36" flexible space along the front and sides of the units. Be especially careful to not block the lower return air vents on the unit ventilator. This is necessary for proper air flow and preventative maintenance procedures.
 - ❖ *Plants should be diligently maintained to control allergens and debris that clogs the coils on the unit ventilators. The soil is a major source of mold*

As we became aware of the need to implement these changes, we believed that it was better to finish the year the way we were operating and then make the changes at the beginning of a new school year. I have sent you a copy of this memo via e-mail and attached some of the supporting documentation regarding the changes to help clarify the reason for the changes.

I can explain the rationale for the changes so if you have questions feel free to ask. An example of a question might be, "Why can't I have turtles in my classroom?" The answer is that they pose a risk of spreading salmonella to students. I will try to add your questions to the FAQ page and post it on our website.

I appreciate everything that you have done to make BCSC a great place for our children. I will look forward to seeing everyone in August.

Sincerely,

Charlie McCoy

Energy Manager

Indoor Air Quality Coordinator

Bartholomew Consolidated School Corporation
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Supporting Documentation

From the Indiana Insurance risk assessment document...

Residential appliances should only be allowed in the teacher's lounge or brought in for Board approved special events or approved classroom instruction such as family and consumer sciences. Electrical equipment and appliances should be approved by the school corporation prior to being used in the school. Also to decrease the fire load the school corporation should eliminate any overstuffed furniture in the classrooms.

From the Indiana State Department of Health...410 IAC 33-4

Animals

Sec. 7. (a) Furred, feathered, or reptilian animals shall only be allowed in classrooms for educational purposes.

(b) Fish in aquariums are exempt from the educational requirement in subsection (a); however, they should be of a reasonable size and quantity.

- *Service animals are exempt*

Furniture

Sec. 9. Furniture in classrooms shall be maintained so as to prevent the accumulation or growth of allergens. This shall include routine cleaning as appropriate for the type of furniture. (Indiana State Department of Health; 410 IAC 33-4-9; filed)

Sanitary Schoolhouse Law IAC 6-5.1-5(N) States:

(n) All furniture and equipment used in any school building or a part of a building used for school purposes shall be durable and easily cleanable, with rounded corners and edges, and otherwise protected to ensure safety. Heights of furniture and equipment shall be based on the size of students using them.

Fabric covered, upholstered, sofas and chairs are not easily maintained and can be a source of asthma triggers. Based on the Sanitary Schoolhouse rule cited above, upholstered sofas and chairs are not appropriate for STUDENT use in classrooms.

Donated used furniture is not appropriate for school use without prior approval of the building Principal. (This means the old sofa or overstuffed chairs from home should not be brought to school.) These items could potentially harbor allergens and /or pests that could adversely affect the health of the school's occupants.

Staff often unknowingly bring appliances into the building that can adversely affect air quality.

1. Air fresheners are often found in classrooms and can be allergy triggers for some individuals and are prohibited in IAC 33-4-6(b).
2. Ozone generators sold as air fresheners are also found in schools. These units emit ozone in an attempt to destroy the odor. Ozone is also an asthma trigger. They are prohibited by IAC 33-4-6(a)

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From IAC 33-4-6 (a) Ozone generators sold as air purifiers are not to be used in the classrooms while students are present. (b) Scented candles and air fresheners are not to be used in classrooms.

BCSC Energy Management Program Guidelines

Establish and Maintain the Optimal Learning Environment based upon established district norms.

Indoor Air Quality

- ❖ Temperature Control 70°-74° Winter and 72°-78° Summer
- ❖ Relative Humidity 50%-60% during summer air conditioning season.
- ❖ CO2 <700 ppm above outdoor levels.

Lighting

- ❖ Classroom - 60 foot candles
- ❖ Gymnasium - 80 foot candles with spectators and 50 foot candles for recreational and class purposes
- ❖ Hallways and corridors - 35 foot candles
- ❖ Cafeteria -50 foot candles

Noise - 45 dB Background Noise

Air Movement (Drafts)

Filtration - Proper air filtration is required to maintain proper indoor air quality; therefore, BCSC has implemented a filter maintenance program that adheres to the manufacturer recommended replacement schedule

Manage Demand

- ❖ Monitor building energy consumption and identify times of peak demand.
- ❖ Phase high impact equipment start times to lower peak demand.
- ❖ Take advantage of instructional schedules to place zones of the building into unoccupied mode when not in use for 45 minutes or more.
- ❖ Install VFD's when appropriate.
- ❖ Work with food service personnel to phase start times of ovens, fryers and warmers.

Improve Consumer Habits

- ❖ Turn off all lights in unoccupied areas.
- ❖ Turn off computer monitors when the computer is not in use.
- ❖ Turn off all printers after hours.
- ❖ Turn off projectors when not in use.
- ❖ Turn off Televisions when not in use.

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- ❖ Unplug all portable peripherals
- ❖ Harvest daylight when possible. Only use the amount lighting necessary.
- ❖ Turn off copiers at the end of the work day.
- ❖ Turn off hallway lights no more than 90 minutes after the school day.
- ❖ Turn on hallway lights no more than 30 minutes before student arrival.

Eliminate Unnecessary Plug Loads

- ❖ Remove refrigerators, microwaves, and other household appliances from classrooms and non-designated break areas.
- ❖ Diligent Scheduling of Energy Resources
- ❖ Maintain accurate building occupancy schedules.
- ❖ Utilize Facility Scheduling Software to improve communication between all stakeholders.
- ❖ Take advantage of instructional schedules to place zones of the building into unoccupied mode when not in use for 45 minutes or more.
- ❖ Parking lot lighting should be on timer and photocell controlled.

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Frequently Asked Questions

1. What if I think my classroom is not meeting the Optimal Learning Environment standards?

Submit a 360 request and state the reason for the request as HVAC other or Indoor Air Quality. The Energy Manager and Indoor Air Quality point person monitor all 360's with that label.

2. Should I just tell the principal or custodian that my classroom has an HVAC or Indoor Air Quality issues?

No. It is important to document your concerns in the 360 system. It is important that you keep your building administrators informed of your concerns but the 360 will trigger action and establish a record of your concerns.

3. Why do I have to take the time to submit a 360?

The 360 system allows us to track the progress we make towards solutions to problems and serves as documentation of problems. In addition, the data that can be generated by the 360 system will help us identify patterns of problems, needs for preventive maintenance and solutions to problems that can be applied to new situations.

4. I have submitted 360 after 360 and the problem is not corrected. What should I do?

Contact the IAQ coordinator directly via e-mail (mccoych@bcsc.k12.in.us) and he will follow up on the situation for you. He will bridge the gap between repair technicians and you.

5. What if I think I have mold in my classroom or spot mold on a ceiling tile in a public space?

Submit a 360 indicating that you have a concern about the IAQ in your classroom or Public space. Please be specific so that the situation can be remedied quickly.

6. Why can't I stack stuff on top of my unit ventilator?

When you have items placed on top of your Unit Ventilator it makes it difficult to perform regular maintenance on it. In addition, the items often end up over the top of the supply air grate and restrict air flow.

7. Why do I need and what is considered a 36" flexible buffer around the Unit Ventilator?

This is necessary to provide adequate air flow to the unit and make it possible to perform maintenance on the unit. Our HVAC technicians are hesitant to move books and furniture in order to access the interior of the unit. Any furniture with 36" of the front of the unit ventilator should be easily moveable without a fear of damaging or breaking something.

8. I have always had a pet in my classroom. Why are animals restricted in classrooms?

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There are two primary reasons for restricting animals and reptiles in your classroom. First, fur bearing animals pose a threat to students who have allergies. In some cases, just being in the room with the animal will cause a reaction. Students and adults who have allergies should not have to feel guilty for being the reason an animal must be removed from the classroom. Second, all animals in a classroom pose a health and safety risk. It is very possible that a child handling a hamster or other small animal could be bitten or become ill due to exposure to salmonella, etc. Another issue is the health risk associated with exposure to all animal waste in general.

9. The guidelines allow for an animal to be in the classroom for curricular reasons. What is a curricular reason?

A curricular connection requires a direct tie to the Indiana Academic Standards. In most cases these connections will be in the secondary schools. Two examples that come to mind is an Advanced Biology class that might be studying live animals or an Animal Science class in the Vocational Agriculture program.

10. My classroom or office is always cold to me. What should I do?

Follow the guidelines in FAQ #1.

11. Sometimes the personal hygiene of the students is not good. Using an air freshener really helps. Why can't we have air fresheners in our classroom?

There are several reasons why air fresheners are not allowed. Air fresheners or ozone generators pose a threat to anyone who has asthma. In addition, scented candles and plug in air fresheners pose a significant fire risk.

12. What if I don't want to take home my old appliances or sofas from my classroom?

It is possible the your building custodian can help you dispose of the old appliances or furniture. If you ask for help, we help you find a solution.

13. Is any furniture allowed in the classroom for student use other than the standard desks and chairs?

All furniture for **student** use in your classroom must meet the guidelines listed above and the requirements of the State Fire Code. The State Fire Code requires that the furniture have a manufacturer tag that indicates compliance with the applicable guidelines. Some furniture manufactured for home use does not meet these standards.

14. I understand that the mini-refrigerators use a lot of energy and probably need to go; but, I don't understand why I can't have my microwave and coffee maker in my room. Will you please explain this to me?

A coffee maker is a fire hazard and poses a risk to students because of possible scalding or burns. The microwave does not use a great deal of energy when not in use but anything that is used in food preparation attracts a myriad of pests. The best way to rid your rooms of ants and roaches is to remove the sources of food.

15. What if I have compelling reasons to have a banned device in my classroom?

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Describe your situation to your building principal. They will contact the appropriate people at the district level to gain approval for you. This will allow you to maintain your anonymity.

16. What do you mean by all printers?

This simply means all printers in your classroom and in common spaces.

17. What do you mean by peripheral devices?

In this case peripheral devices are components connected to your computer that do not receive power from the computer. These devices also plug into the wall socket for power. Camera docking stations, IPOD docking station/chargers, and external hard disk drives are a few examples.

18. What do you mean by occupancy schedules?

The HVAC schedules have occupied and unoccupied settings. The building is in occupied mode when students and the majority of staff are present. There is a difference in the space temperature settings and the amount of outside air brought into the building during occupied modes.