

PENN MANOR SCHOOL DISTRICT

ADMINISTRATIVE REGULATION

APPROVED: March 8, 2013

REVISED:

703-AR-1. INDOOR AIR QUALITY – NEW/RENOVATED FACILITIES

Many of the common indoor air quality problems can be prevented by prudent design of new construction and major renovation. Ventilation and cooling systems have the most profound effect on air quality. Design of new or renovated buildings and facilities should reflect the most stringent current standards. Good, stringent design is cost-effective because it can significantly reduce the cost of subsequent repairs and renovation.

Construction Planning And Practice

The district's recommendations for construction planning and practices that reduce the chance of subsequent health problems include the following:

1. Incorporate indoor air quality goals into the bid and construction documents.
2. Require the development and use of an indoor air quality management plan or program.
3. Ensure that all members of the project team are familiar with indoor air quality issues and have defined their responsibilities to address those issues.
4. Require contractors to provide information on any product substitutions.

Architect/Contractor Requirements

The district will require that the following guidelines be followed by contractors during new construction and renovations:

1. Perform as much of the work as possible when the building or facility is not occupied.
2. Keep building occupants as far as possible from the construction.
3. Install temporary barriers and ensure that the ventilation system is not drawing any pollutants to occupied areas; create positive pressure in those areas.
4. Use methods that will reduce the concentration of airborne pollutants, such as wet methods.

In order to secure appropriate indoor air quality in district buildings and facilities, when new facilities are constructed and when existing facilities are renovated, the following requirements will be specified to the architect or design professionals responsible for the construction project:

1. Adherence to applicable state and local requirements defining minimum air circulation.
2. Building/Space must meet or exceed the ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) standards that consider chemical, physical and biological contaminants that can affect air quality.
3. Design and placement of air handling equipment must be done in a manner where it is accessible to inspect and maintain the equipment; mechanical rooms are desirable, versus exposed rooftop units or units hung above suspended ceilings.
4. With increased air flow requirements, attention must be given to the potential of air velocity noise within ductwork.
5. Fresh air intakes must be located away from all types of vents and exhausts of roofs, whenever possible.
6. Air intakes and ventilation windows must be sufficiently distant from bus loops and loading docks.
7. Radon mitigation systems should be part of new construction to provide a vapor barrier and protection from under-slab humidity.
8. Attention must be given to the selection of carpeting, carpet adhesives, and synthetic materials that may emit odorous and irritating volatile organic vapors degrading indoor air quality.
9. Reduction of the potential of moisture intrusion through appropriately designed pitched roofs wherever possible.
10. Consideration of the economic feasibility of achieving dehumidification through air conditioning.
11. Installation of temperature control systems that monitor temperature and other factors helpful in monitoring and diagnosing heating, ventilation and air conditioning (HVAC) systems.
12. When renovating an occupied building, provision for the mechanical control of airborne pollutants associated with the construction process.
13. Building materials must be kept dry to prevent microbial growth, and water damaged materials must be dried as soon as possible.
14. Spills of toxic or irritant materials must be cleaned immediately.