Purpose:
To verify that International Mechanical Code Chapter 5, Sec. 502.1.1, does support Ms. Sweet-Abshire's assertion that the 10' requirement does not apply to the co-located intake and exhaust vents indicated in the EPA memorandum.

Scope:
International Mechanical Code Chapters 4 (Ventilation) and 5 (Exhaust Systems)

Conclusion:
The International Mechanical Code does not require that the office relief air be located a minimum of 10' from the air intake.

Details:
The section referenced by the GSA IH (H-07d) states:

502.1.1 Exhaust location. The inlet to an exhaust system shall be located in the area of heaviest concentration of contaminants.

This section does not appear to have any relevance to the question of how far from the intake vent the exhaust vent must be located. However, a quick review of the rest of the chapter did provide this relevant section:

501.3. Outdoor discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a nuisance and from which it cannot again be readily drawn in by a ventilating system.

The scope of Chapter 5 is "the design, construction and installation of mechanical exhaust systems, including dust, stack and refuse conveyor systems and exhaust systems serving commercial food heat-processing appliances" (501.1), thus it covers the MIB exhaust system. Section 501.3 states that the exhaust system must discharge where it cannot be readily drawn in by a ventilating system, but it does not incorporate a minimum distance, such as 10', into that requirement.

A 10' requirement like the one described by EPA can be found in Chapter 4, Section 401.5.1:

401.5.1 Intake openings. Mechanical and gravity outside air intake openings, such as vents, chimneys, plumbing vents, streets, alleys, parking lots and loading docks, shall be located a minimum of 10 feet (3048 mm) from any hazardous or noxious contaminant except as otherwise specified in this code. Where a source of contaminant is located within 10 feet (3048 mm) of an
intake opening, such opening shall be located a minimum of 2 feet (610 mm) below the contaminant source.

While this requirement does contain a minimum 10' statement, that statement applies only to hazardous or noxious contaminants. According to the GSA Project Manager the exhaust vent only contains relief air from office spaces, and therefore does not contain contaminants considered to be hazardous or noxious (H-07c).

International Mechanical Code, Chapters 4 & 5:

Methodology:
Reviewed the International Mechanical code to determine which chapters could potentially be applicable, then read potentially applicable chapters in detail and analyzed the bearing on the question at hand.

Submission: Submitted Dawn Citrin 09/19/2006 09:11:25 PM
Level 1 Approval:
Level 2 Approval: Approved Suzanna Park 08/23/2006 04:46:43 PM

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