1.0 INTENT

Prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of construction workers and building occupants.

2.1 OBJECTIVES

Implement means and methods to protect the integrity of the indoor air quality during construction by developing an efficient approach of protection for following areas:

1. HVAC Equipment and Systems
2. Indoor Spaces
3. Construction Teams and Building Occupants
4. Building Materials

3.0 METHODS AND RESPONSIBILITIES

HVAC PROTECTION

HVAC equipment shall be protected from collecting both dust and odors. Each of the systems shall be evaluated to determine how best to protect the systems from construction dust and odors. Specific methods shall be implemented on either the return or supply side and central filtration of the system.

A. Return Side Protection
   1. To minimize dust and odor, pay special attention to the location of:
      A. Return vents, ducts and shafts
      B. Ceiling Plenums
      C. Variable Air Volume (VAV) Plenum Intakes
   2. Seal return system openings in the construction area with dust barriers.
   3. Do not store or allow any subcontractors to store waste or construction materials in Air Handling Rooms.
   4. 100% of the heating, ventilation, and air conditioning (HVAC) system filtration media shall be replaced after the construction and building flush-out phases.

B. Supply Side Protection
   To minimize dust and odor,
   1. Seal diffusers when the system is not operating during construction.
   2. Clean the diffusers and ducts after construction.

C. Central Filtration Protection
   Upgrade filters if major dust loading is expected to impact operating HVAC systems. Consider options such as activated charcoal or potassium permanganate if upgrading the filters is not effective.

SOURCE CONTROL

Adopt measures to control the spread of volatile organic compound (VOC) throughout the project.

1. Monitor subcontractors to verify products containing VOCs shall meet the project specification requirements. Specific products shall include but are not limited to the following.
   A. Paints
EXHIBIT 01 35 46-01. EXAMPLE INDOOR AIR QUALITY (IAQ) MANAGEMENT PLAN

B. Carpets
C. Composite Woods
D. Clean Products
E. Adhesives
F. Sealants
G. Caulks
H. Wall coverings

2. Modify equipment operations either by substituting the equipment with “cleaner”
equipment or simply changing operating procedures.
3. Restrict idling of motor vehicles where the emissions could be drawn into the building or
occupied areas.
4. Cycle equipment off when not needed.
5. Locate the building contaminated exhaust away from the building intake.
6. For areas where exhaust is not feasible, circulate the air through a portable air cleaner.
7. Cover or seal tanks and containers that have adhesives, paints, caulk etc. when not
in use.

PATHWAY INTERRUPTION

Isolate areas of work to prevent contamination of clean or occupied spaces. The following
measures shall be implemented to reduce pathway interruption.

1. Establish positive and negative pressured work areas to control contamination. Exhaust
air at a rate of 10% greater than the supply rate, or for positive spaces, increase the
supply air rates.
2. Areas with contaminated air shall be ventilated with 100% outside air and
the contaminated air shall be directly exhausted to the outside.
3. Erect temporary barriers between work areas and non-work areas.
4. Isolate work areas and materials to prevent cross contamination of clean and occupied
spaces.
5. Identify and mark the major indoor construction walkways and pathways for the project.

HOUSEKEEPING

Institute cleaning activities during the construction phase. The activities shall concentrate on the
HVAC and building spaces. Housecleaning shall remove contaminants from the building prior to
occupancy of the building by controlling construction dust, material spills and VOC compounds.
The following measures shall be implemented to ensure contaminant control.

1. In order to reduce dust accumulation, work areas and surfaces shall be swept or
cleaned on a regular basis. If required, a wetting agent shall be applied to reduce
airborne contaminants, or a vacuum with a high efficiency particulate filter shall be used.
2. Material spills shall be removed and the surface cleaned with cleaning agents as soon
as possible.
3. Low odor emitting compound cleaning supplies shall be used.
4. Indoor accumulated water shall be removed on a daily basis to prevent mold.
5. Building materials shall be protected from weather and stored in a clean area prior to
unpacking.
6. HVAC coils, air filters and fans shall be thoroughly cleaned before test and balancing
procedures.

SCHEDULING

Schedule construction to reduce absorption of VOCs by porous materials. The following
measures shall be implemented to reduce absorption:

1. Complete the installation of wet and odorous materials before installing absorbent
materials.
2. VOC emitting materials and installation areas shall be provided proper drying and
ventilation time.
3. Schedule the delivery, storage and installation of materials to reduce cross product contamination.

Plan Verification Signatures
Upon completion of the project, the site manager shall sign the Construction IAQ Management Plan to indicate field compliance.

I, _______________________________, declare that an Indoor Air Quality (IAQ) Management Plan has been developed and implemented for the construction and pre-occupancy phase of the project.

Signature: _______________________________

Organization: _______________________________

END OF EXHIBIT 01 35 46-1