## B2: PERIODIC IAQ MAINTENANCE INSPECTION

Building _____ Location_____ Prepared by_____ ____Date_____
Equipment _____ Manufacturer _____Other ID _____File # _____

| Checklist & *Action Items* *(Action items in italics)* | Y | N | Actions taken / Notes | Freq (possible) | Date |
|---|---|---|---|---|---|
| **AIR HANDLING UNIT** | | | | | |
| **Outdoor air intake and outdoor air dampers** (Id. # _____) | | | | | |
| **Outdoor pollution:** No pollution sources w/i 25 ft. (e.g. dumpster, chimney stack) | | | | 1 mo | |
| **Louvers and access doors:** Operating properly? | | | | 1 mo | |
| **Deflectors & screens**: No debris? | | | | 1 mo | |
| **Dampers:** Operate properly, secure connections, no obstructions? | | | | 1mo | |
| ***Lubricate:*** *Lubricate as per manufacturers instructions* | | | | 1mo | |
| ***Outdoor air intake filter*****:** *Change as per manufacturer's instructions.* | | | | 2mo | |
| **Mixing Plenum (Id # _____)** | | | | | |
| **Clean:** No excess dirt, not used for storage? | | | | 1 mo | |
| **Insulation:** Secure and clean? | | | | 1 mo | |
| **Floor drain:** Charged with liquid? | | | | 1 mo | |
| **Dampers:**<br>Airtight?<br>Connections OK?<br>Motors operate to design specifications?<br>Air moving OK?<br>Fire dampers open? | | | | 1 mo | |
| **Filters** (id # _____ ) | | | | | |
| No bypassing, excessive loading, dampness or odor?<br>Flow direction correct? | | | | 1 mo | |
| ***Change filters****: Change as per manufacturers recommendation* | | | | 3 mo | |
| **Heating coil** (id. # _____ ) | | | | | |
| **Clean**: Clean, no noticeable leaks, no obstruction, no | | | | 1 mo | |
| ***Clean coils:*** *Clean coils & drain pan.* | | | | 3 mo | |

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| **Cooling coils** (Id # _____) | | | | | |
| **Clean:** Coils clean? | | | | 1mo | |
| **Access:** No obstructions in area that may affect access? | | | | 1mo | |
| **Condensation:** No excess condensation problems? | | | | 1mo | |
| **Blowoff:** No water from coil blowoff? | | | | 1mo | |
| **Condensate pan and drain line:**<br>No noticeable odor?<br>No visible bacterial or fungal growth,?<br>Clean, no residue, no standing water?<br>No overflow, no leakage, no blockage, no damage?<br>Proper slope, drain line ok, drainage acceptable, discharge ok? | | | | 1mo | |
| ***Clean coils/pan:*** *Clean coils, condensate drains, and external parts.* | | | | 3 mo | |
| **Steam humidifier** (id # _____ ) | | | | | |
| **Contaminants:** No mineral deposits, or biological growth? | | | | 1 mo | |
| **Duct liner:** If duct liner within 12 feet, no dirt or mold growth? | | | | 1 mo | |
| **Steam lines**: Condition OK | | | | 6mo | |
| **Humidistat** : Operation OK | | | | 6 mo | |
| **Traps, strainers, and drains**: Condition OK, no bacterial or fungal growth ? | | | | 6 mo | |
| **Spray humidifier or Air washer** (id # _____ ) | | | | | |
| **Condition**:<br>All parts clean?<br>No noticeable leaks? | | | | 1mo | |
| **Biocide:** Biocide treatment ok? | | | | 1mo | |
| **Operation:** Floats, pumps, filters, nozzles operate properly? | | | | 6 mo | |
| **Pans:** Draining properly, no bacterial or fungal growth? | | | | 6 mo | |

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| **Spray humidifier or Air washer** (id # _____ ) **continued** | | | | | |
| **Coil**: Complete coverage? | | | | 6 mo | |
| **Motor**: No unusual sounds?<br>Operation acceptable?<br>Wiring secure, brushes OK? | | | | 6 mo | |
| **Fans and Motors (Id#_____)** | | | | | |
| **Condition:**<br>No unusual odors, noise, or vibration?<br>RPM and heat acceptable?<br>Wiring, voltage, and amp OK? ? | | | | 1 mo | |
| **Belts and sheaves:**<br>No excessive wear?<br>Alignment and tension OK? | | | | 3 mo | |
| **Hangers and mounting:** All secure, in good condition? | | | | 3 mo | |
| **Terminals:** Starter and terminal connections OK? | | | | 3 mo | |
| **Drive:** No wear on drive shaft?<br>Drive section is aligned? | | | | 3 mo | |
| **Chains and guards**:<br>No missing chain links or teeth?<br>Sprocket and chain guards in place? | | | | 3 mo | |
| ***Chain tension****: Adjust tension.* | | | | 3 mo | |
| ***Bolts:*** *Tighten mounting bolts.* | | | | 3 mo | |
| ***Bearings:*** *Repack and lubricate per manufacturer's instructions.* | | | | 12 mo | |

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| **AIR DISTRIBUTUON AND TERMINAL SYSTEM** | | | | | |
| **Ductwork (supply and return)** (id # _____ ) | | | | | |
| **Condition**:<br>No odors, noise or vibration?<br>Clean, no obstructions, debris?<br>No signs of moisture/mold, insects or rodents?<br>No noticeable air leaks? | | | | 1 mo | |
| **Connections and seals:** Tight, no damage or denting? | | | | 3 mo | |
| **Duct lining**:<br>No dirt, dampness, mold?<br>No deterioration? | | | | 3 mo | |
| **Fire and smoke detectors** and dampers: Condition ok? | | | | 3mo | |
| **Plenum** (id # _____ ) | | | | | |
| **Condition**:<br>No odors, unusual sounds, or vibration?<br>Clean, no obstructions, debris?<br>No signs of moisture/mold, insects or rodents?<br>No leaks from supply or exhaust into return? | | | | 1 mo | |
| **Ceiling tiles**:<br>Tight seal of all tiles?<br>No stained/damaged tiles indicating high RH or moisture problem? | | | | 1 mo | |
| **Insulation & fireproofing**: Condition OK? | | | | 3 mo | |
| **Fire dampers**: Open? | | | | 3 mo | |

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| **Supply diffusers, return grilles, exhaust grilles** (id # ___ ) | | | | | |
| **Condition:**<br>No odors or unusual sounds?<br>Clean, no excess dirt or moisture?<br>No obstruction to air flow?<br>No purposely placed obstruction indicating occupant distress? | | | | 1 mo | |
| **Louvers:** Adjustable louvers move freely? | | | | 3 mo | |
| **Location:** No short circuiting between supply and return? | | | | 3 mo | |
| **Doors:** Closed tightly? | | | | | |
| **Supply diffuser:**<br>Supply diffusers have proper air flow—not too high or too low?<br>Air temperature under cooling conditions ok? | | | | 3 mo | |
| ***Inspect:*** *Clean and clear obstructions on all diffusers and grilles. Determine and fix source of excess dirt, dust or moisture (e.g. dirty filter media or air bypassing media). Investigate signs of occupant distress.* | | | | 3mo | |

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| **CAV / VAV Boxes** (id # _____) | | | | | |
| **General:**<br>Clean, clear air pathways?<br>No odors or unusual noise or vibration? | | | | 3 mo | |
| **Condition:**<br>Condition of ducts, hangers / mounting, smoke detection, motor, wiring, acceptable?<br>No noticeable leaks? | | | | 3 mo | |
| **Controls:**<br>Wiring connections OK?<br>Control operates properly?<br>Minimum flow is sufficient to ventilate space, meet standards? | | | | 3 mo | |
| **Reheat coils:** Clean, functioning, no obstruction ? | | | | 3 mo | |
| **Fans:**<br>No unusual noise or vibration?<br>Belt condition, alignment, and tension OK?<br>(See Fan Maintenance in AHU) | | | | 3 mo | |
| ***Filters:*** *Change filters* | | | | 3 mo | |
| **Fan-coil unit /Heat pump (id. # _____ )** | | | | | |
| **Condition:** No odors, or unusual noise or vibration? | | | | 1 mo | |
| **Convectors**;<br>Condition OK?<br>No HW/CW leaks? | | | | 3 mo | |
| **Air intake**:<br>Clean, no blockage to air?<br>Damper mobility OK? | | | | 3 mo | |
| **Insulation :**<br>Clean?<br>No deterioration? | | | | 3 mo | |
| **Covers:** Fit tight, no vibration? | | | | 3 mo | |
| **Fans**<br>No unusual noise or vibration?<br>Belt condition, alignment, and tension OK?<br>(See fan maintenance in AHU) | | | | 3 mo | |
| ***Filters:*** *Change filters* | | | | 3 mo | |

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| **Exhaust Systems in Special Use Areas (ID#_____)** | | | | | |
| **Operation:** Operates whenever source of pollution is present? Drawing sufficient air? Room under negative pressure? Make up air path unobstructed? | | | | 1mo | |
| ***Filters:*** *Change filters.* | | | | 3 mo | |
| **CENTRAL PLANT** | | | | | |
| **Boiler** (id # _____) | | | | | |
| **Condition:** Chemical treatment proper? No back drafting? Fresh water use and temp. OK? | | | | 1 mo | |
| **Condensate & return**: Operation and temperature acceptable? | | | | 1 mo | |
| **Controls**: Operation and calibration OK? | | | | 1 mo | |
| Expansion tank: Condition OK? | | | | 1 mo | |
| **Circulating pump:** Condition OK? | | | | 1 mo | |
| *Perform combustion and flue gas test.* | | | | 1mo | |
| *Clean boiler* | | | | 12 mo | |
| **Chiller** (id. # _____ ) | | | | | |
| **Condition/operation:** No Leaks? Operation OK? *Analyze chemicals in of water in chiller and HVAC loop and adjust as needed* | | | | 1 mo | |
| **Crankcase** : Crankcase heater operation OK? | | | | 3 mo | |
| **Refrigerant**: Refrigerant charge OK? | | | | 3 mo | |
| **Leaks:** No air, refrigerant, or oil leaks? | | | | 3 mo | |
| ***PM:*** *Inspect and perform maintenance of chiller* | | | | 12 mo | |
| ***Procurement:*** *Purchase chemicals for chiller* | | | | 12 mo | |

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| **Condensing equipment ( cooling tower)** (id # _____ ) | | | | | |
| **Leaks:** No leaks in cooling tower, reservoir, or storage tank? | | | | 1mo | |
| ***Chemicals:*** *Analyze chemicals for cooling tower water and adjust as needed.* | | | | 1mo | |
| **Mist Eliminator:** Operation OK? | | | | 1mo | |
| **Baffles:** No slime or algae? | | | | 1mo | |
| **Chemical dispenser:** Proper operation? Adjust as needed. | | | | 1mo | |
| ***PM:*** *Perform maintenance of cooling tower* | | | | 6 mo | |
| ***Procurement:*** *Purchase chemicals for cooling tower* | | | | 12 mo | |
| **Air compressor and pneumatic system (Id#_____)** | | | | | |
| **Condition:**<br>No odors or unusual noise?<br>No leaks?<br>Cycling on/off OK? | | | | 1mo | |
| ***Water:*** *Drain water from compressor tank.* | | | | 1mo | |
| **Corrosion:** Unit free of deterioration and corrosion? | | | | 3 mo | |
| **Oil**: Oil level and condition OK? | | | | 3 mo | |
| **Safety valve***:* Head pressure safety valve OK? | | | | 3 mo | |
| ***Filter****: Clean / change air filter.* | | | | 3 mo | |
| ***Belts****: Inspect condition, adjust alignment and tension, change as needed.* | | | | 3 mo | |
| ***Bearings:*** *Inspect bearing and operating surface temperature.* | | | | 3 mo | |
| ***Vibration:*** *Investigate vibration and tighten bolts.* | | | | 3 mo | |

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| **HVAC pumps and pipes** (id # _____ ) | | | | | |
| **Condition:**<br>No unusual noises, vibration?<br>No corrosion or deterioration?<br>Insulation in place, acceptable condition?<br>No steam, water, or gas leaks?<br>Water circulates with pump when cooled? | | | | 1mo | |
| **Valves and gaskets:**<br>Valves open & close OK ?<br>No corrosion or leaks?<br>Hand hold not leaking or deteriorating?<br>*Inspect/test safety valves & devices.* | | | | 1 mo | |
| **Tanks:**<br>Expansion and other tanks and receivers operate properly?<br>No leaks or deterioration? | | | | 1mo | |
| **Drains and traps:**<br>Drains clean and unobstructed?<br>Traps charged? | | | | 1mo | |
| **Heat and lubrication:**<br>No excessive heat or sparking?<br>Lubrication OK? | | | | 3 mo | |
| **Hangers, connectors, fittings:**<br>No loose, missing parts in hangers?<br>Fittings and connectors are not deteriorating? | | | | 3 mo | |
| **Couplings:**<br>Shaft security, and safety guards of couplings OK?<br>Alignment OK? *(If belt coupled, check tension and condition.)*<br>No uneven wear? | | | | 3 mo | |
| **Impeller:** Impeller moving medium through pipe OK?. | | | | 3 mo | |
| **Housing:** Packing, seals, gaskets OK? No leaks?. | | | | 3 mo | |

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| **HVAC pumps and pipes** (id # _____ **) continued** | | | | | |
| **Wiring**: No broken, frayed, and loose wiring? | | | | 3 mo | |
| **Pipes**: No leaks, corrosion? No loose connections? | | | | 3 mo | |
| ***Pumps****: Inspect and perform preventive maintenance on pumps over 1 H.P.* | | | | 3 mo | |
| **Bypass valves*:*** Bypass valves operating properly? | | | | 6 mo | |
| **Motors:**<br>Pumps running smoothly?<br>Pumps not running excessively?<br>No excessive heat or sparking?<br>*Lubricate as needed* | | | | 6mo | |
| **Emergency generators** (id # _____ ) | | | | | |
| ***PM****: Perform preventive maintenance program* | | | | 3 mo | |
| ***Procurement:*** *Purchase emergency generator fuel* | | | | 6 mo | |

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| **Control system:** | | | | | |
| ***Testing equipment:*** *Calibrate according to manufacturer's instructions. Perform PM on all testing equipment.* | | | | 1 mo | |
| ***Pressure Control:*** *Inspect pressure control: Confirm that pressure meets design specs* | | | | 3 mo | |
| **Leaks:** No compressed air and pneumatics leaks in connections, valves, and hoses? | | | | 3 mo | |
| **Calibration check**: HVAC equipment controls calibrated? | | | | 3 mo | |
| **Operation:** Controls operation OK? Control sequence meets design specs? Set points meet specs? | | | | 3 mo | |
| **Central system clocks**: Set appropriately? Check standard/daylight savings. Location appropriate (e.g. (thermostat not near draft or heat source) | | | | 6 mo | |
| **Economizer:** Operates at correct settings? Humidity control not a problem? | | | | 6 mo | |
| ***Gauges:*** *Inspect for proper equipment operation , and calibration* | | | | 6 mo | |

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| **BUILDING** | | | | | |
| **Envelope (Id#_____)** | | | | | |
| **Roof:**<br>In good condition?<br>No leaks? | | | | 3 mo | |
| **Foundation:**<br>Has proper drainage?<br>No moisture penetration or signs of mold? | | | | 3 mo | |
| **Doors and windows:** Caulking and weather stripping in good condition? | | | | 3 mo | |
| **Machine Room (Id#_____)** | | | | | |
| **Condition:**<br>Clean, no unusual noise or odor?<br>Room is ventilated under negative pressure? | | | | 1 mo | |
| **Elevator Shafts (Id#_____)** | | | | | |
| **Condition:**<br>Dry, clean?<br>Evacuating odors? | | | | 1 mo | |
| **Stairwells (Id#_____)** | | | | | |
| **Condition:**<br>Dry, clean, no odors?<br>Doors close and latch?<br>No penetrations allowing uncontrolled air flow? | | | | 1 mo | |