DuPont Pompton Lakes
Vapor Intrusion Mitigation System Inspection Checklist

Address inspected: _____ Pompton Lakes, NJ

Person(s) interviewed: _____

Date of inspection: _____ **Time of inspection:** _____ to _____

Inspector(s): _____

Make and Model of Fan _____

Date System Installed_____

System Pressures	SSP-1	SSP-2
Observed Vacuum Pressure		
Commissioned Vacuum Pressure		
Difference		

1.0 Systems Installation and Interior Piping Requirements	**Yes**	**No**	**Unk / NA**
1.1 Are all manifold and suction point piping solid, rigid pipe not less than 3 in. inside diameter?	____	____	____
1.2 Are all pipe interior joints and connections in mitigation systems sealed permanently? (Exceptions include installation of fans and sump covers)	____	____	____
1.3 Does the system piping avoid attachment to or support by existing pipes, ducts, conduits or any kind of equipment?	____	____	____
1.4 Does the system piping avoid blocking window and doors or access to installed equipment?	____	____	____
1.5 Are supports for system piping installed at least every six (6) feet on horizontal runs?	____	____	____
1.6 Are vertical runs secured above or below the points of penetration through floors, ceilings and roofs, or at least every (8) feet on runs that do not penetrate floors, ceilings or roofs?	____	____	____
1.7 Are suction point pipes supported and secured in a permanent manner that prevents their downward movement to the bottom of suction pits or sump pits, or into the soil beneath a soil-gas-retarder membrane?	____	____	____
1.8 Are horizontal runs in system piping sloped to ensure that water from rain or condensation drains downward into the ground beneath the slab or soil-gas-retarder membrane?	____	____	____
1.9 Does the system piping pass the smoke stick check (no leaks)?	____	____	____
2.0 General Sealing Requirements			
2.1 Are openings around the suction point piping penetrations of the slab properly sealed using methods and materials that are permanent \ durable and pass the smoke stick check?	____	____	____
2.2 Are accessible openings around utility penetrations of the foundation walls and slab, test holes, wells and other openings in slabs properly sealed using methods and materials that are permanent / durable and pass the smoke stick check?	____	____	____

	Yes	No	Unk/NA
2.3 Are openings / cracks sealed where the slab meets the foundation wall (if appropriate)?	____	____	____
2.4 At the point where vent pipe and electric conduit exits the building, is urethane caulk or equivalent material used, and when the joint is greater than ½ inch in width, is a foam backer rod or other comparable filler material inserted into the joint before the application of the sealant (principally from the outside)?	____	____	____
2.5 When installing baseboard-type suction systems, are all baseboard sealed to walls and floors with adhesives also designed and recommended for such installations?	____	____	____
2.6 Are all utility and other penetrations through a soil-gas-retarder membrane sealed?	____	____	____
2.7 Did all cracks or openings in the slab or wall pass the smoke test? If not, identify the location of failed cracks or openings in the Notes & Comments Section below.	____	____	____
3.0 Electrical Requirements			
3.1 Is the plugged cord used to supply power to the fan no more than 6 feet in length?	____	____	____
3.2 Does the plugged cord avoid penetrating a wall or being sealed within a wall?	____	____	____
3.3 Is the power supply to the fan hard-wired with an electrical disconnect within line of sight and 4 feet of the fan?	____	____	____
3.4 Does the power supply have a seal to determine if access has occurred?	____	____	____
3.5 Is the electrical service panel labeled to indicate the circuit breaker powering the SSDS fan?	____	____	____
4.0 Sub-Membrane Depressurization Requirements			
4.1 Is a sub-membrane depressurization system part of the mitigation system?	____	____	____
4.2 If yes, did the sub-membrane depressurization system pass the smoke test?	____	____	____
5.0 Sump Pit Requirements			
5.1 Is there a sump pit in basement?	____	____	____
If yes:			
5.2 Is the sump pit installed with an impermeable cover and sealed with O-ring or silicone caulking?	____	____	____
5.3 Is the sump pit cover designed to facilitate removal for sump pit maintenance?	____	____	____
5.4 Is there a mitigation system designed to draw soil-gas from the sump pit?	____	____	____
6.0 Monitors and Labeling Requirements			
6.1 Does each suction point have a mechanism to measure vacuum?	____	____	____
6.2 Is the mechanical mitigation system's monitor, such as manometer type pressure gauges, clearly marked to indicate the initial pressure readings?	____	____	____

	Yes	No	Unk/NA
6.3 Is the current vacuum reading within 0.25"water of the initial reading for low vacuum fans and within 5% of the commissioned vacuum for high vacuum fans?	____	____	____
6.4 Is a system description label placed on the mitigation system or other prominent location?	____	____	____
6.5 Is the label legible from a distance of at least three feet and does it display the following information: Purpose of the system ("Vapor Intrusion Mitigation"), name and phone number of the contact person.	____	____	____
6.6 Does the mitigation system prevent backdrafting of combustion products into the structure?	____	____	____
6.7 Were air measurements taken using a DRI with a CO detector?	____	____	____

If yes:

6.7.1 Type of instrument used:_____

6.7.2 Concentration of CO in basement:_____ppm.

6.8 Were the vacuum readings in the system stable during the backdraft test?	____	____	____
6.9 Does the mitigation system include an audible alarm to inform occupants of a system malfunction?	____	____	____
6.10 Is the audible alarm operational?	____	____	____

7.0 System Vent Discharge Point Requirements

7.1 Is the vent pipe vertical and upward, outside the structure, at least 10 feet above ground level, and above the edge of the roof ? **(Req. A)**	____	____	____
7.2 Is the discharge of the vent pipe ten feet or more away from any window, door, or other opening into conditioned or otherwise occupiable spaces of the structure, if the vapor discharge point is not at least 2 feet above the top of such openings? **(Req. B)**	____	____	____
7.3 Is the discharge of the vent pipe ten feet or more away from any opening into the conditioned or other occupiable spaces of an adjacent building? Chimney flues shall be considered openings. **(Req. C)**	____	____	____
7.4 For vent stack pipes that penetrate the roof, is the point of discharge at least 12 in. above the surface of the roof? **(Req. D)**	____	____	____
7.5 For vent stack pipes attached to or penetrating the sides of the buildings, is the point of discharge vertical and a minimum of 12 inches above the surface of the roof.	____	____	____
7.6 Does the horizontal run of vent stack pipe penetrate the gable end walls? **(Req. E)**	____	____	____
7.7 If yes, does the piping outside the structure routed to a vertical position so that the discharge point meets the requirements of (**A**), (**B**), (**C**), and (**D**)?	____	____	____
7.8 Do points of discharge that are not in a direct line of sight from openings into conditioned or otherwise occupiable space because of intervening objects, such as dormers, chimneys, windows around the corner, etc. meet the separation requirements of (**A**), (**B**), (**C**), (**D**) and (**E**)?	____	____	____

	Yes	No	Unk/NA
7.9 Is the outside vent piping fastened to the structure of the building with hangers, strapping or other supports that will secure it adequately (every 8 feet)?	____	____	____
7.10 Is vent stack piping's ID at least as large as the largest used in the manifold piping? Manifold piping to which two or more suction points are connected shall be at least 4 inch ID. (3x4 inch aluminum downspout is an acceptable deviation)	____	____	____
7.11 If system piping is installed on the exterior of a building, is piping and electric conduit sealed from the outside at point of entry to the building?	____	____	____

8.0 Fan Installation Requirements

8.1 Is the fan installed in a configuration that avoids condensation buildup in the fan housing?	____	____	____
8.2 Is the fan mounted on the exterior of buildings rated for outdoor use or installed in a weather proof protective housing?	____	____	____
8.3 Is the fan mounted and secured in a manner that minimizes transfer of vibration to the structural framing of the building?	____	____	____
8.4 Does the system operate without noise or vibration above normal conditions?	____	____	____

9.0 Design Drawing and As-Built Drawing Requirements

9.1 Was the system installed as per the design drawings submitted to the municipality?	____	____	____

10.0 Notes & Comments

11.0 Required Corrective Actions