## InspectAPedia.com - Odor Identification and Source Checklist

**InspectedAPedia.com Odor Checklist**  © 2010 InspectAPedia.com

**ODOR DIAGNOSIS CHECKLIST** – online fulltext version of this document

For In-Depth Odor Diagnosis & Remedy Information see these Internet Articles:

- Home Page on Odor Diagnosis: [ODORS, Smells, Gases in Buildings-Diagnosis & Cure](#)
- Keep an Odor Log: use this [Odor Log Spreadsheet](#) or [Odor Log printer-friendly file](#) to record your odor observations for further analysis.

### Odor Cause Diagnosis Questions

<table>
<thead>
<tr>
<th>Odor Cause Diagnosis Questions</th>
<th>Odor Diagnosis Variables</th>
<th>Comments &amp; More Help at InspectAPedia.com</th>
</tr>
</thead>
</table>
| Odors in boats, cars, campers, trucks | □ Water leak at window, door, trunk  
□ Carpeting has been wet  
□ Seats have been wet  
□ Headliner has been wet | See [BOAT & CAR SMELLS & ODORS](#) |
| Odors & Building Structure: does the odor relate to presence of a nearby air movement pathway | □ Building stairwell  
□ Heating and cooling duct system? | |
| Odors & Building height, use, occupancy: does the odor relate to the level in the building to: | □ Windows open when odor is present  
□ Windows shut when odor is present  
□ Stairwell present?  
□ Elevator present?  
□ Odors relate to elevator usage?  
□ Cooking odors | Odors may move among building levels via elevator shafts, stairwells, elevator movement |
| Odor Character: Describe the odor and its strength: *Also see Odors & Paints, below.* | □ chemical,  
□ flue gases,  
□ fuel gas,  
□ heating oil,  
□ sewer gas | □ rotten egg,  
□ mold,  
□ musty,  
□ plastic,  
□ food  
□ other___________  
□ ___________________ | See [MOLD ODORS, Musty Smells in Buildings](#)  
See [SEWER GAS ODORS](#) and [SEWER GAS ODORS in COLD WEATHER](#) |

**How to Find & Remove Odors, Gases & Smells in Buildings** at [InspectAPedia.com](#)
**Odors & Electrical Wiring:** a smell of burning plastic may be associated with potentially dangerous overheating of electrical components, wire insulation, plastic receptacles or light switches. If you smell "burning plastic" or similar odors indoors or even outside of a building, a dangerous electrical failure could be present.

<table>
<thead>
<tr>
<th>Describe smell:</th>
<th>Location of smell:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Aluminum electrical wiring?
- FPE Stab-Lok or Zinsco electrical panel?
- Electric heat?
- **SAFETY - HAVE YOU TURNED OFF OFFENDING CIRCUIT?** If not DO SO immediately.

**Odors & Fans:** while exhaust fans are often used to move odors out of a building, an investigation may be in order:

- Does the exhaust fan or whole house fan or attic roof vent fan cause odors, dust, or even mold to move upwards through the building?

**Odors & Fireplaces:** Type of fireplaces (gas, wood, coal)

- Odor when fireplace in use?
- Damper open or shut?
- Type of fuel?

Also see **CHIMNEY INSPECTION & REPAIR GUIDE**

**Odors & Heating Equipment or other Appliances** does the odor appear only when certain appliances are running

<table>
<thead>
<tr>
<th>Odors &amp; Heating Equipment or other Appliances</th>
<th>Describe smell:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stove/oven</td>
<td>aquarium</td>
</tr>
<tr>
<td>heater</td>
<td>air conditioner</td>
</tr>
<tr>
<td>fans</td>
<td>clothes dryer</td>
</tr>
<tr>
<td>TV’s</td>
<td>clothes washers</td>
</tr>
<tr>
<td>☐</td>
<td>dishwashers</td>
</tr>
</tbody>
</table>

See chimney **backdrafting, leaks, and odors from flues, CARBON MONOXIDE hazards**, **Natural Gas Combustion Products** and also **LP & Natural Gas Safety Hazards**, Also see **CHIMNEY INSPECTION & REPAIR GUIDE**

**Heating Oil** fired equipment?

- Related to oil fired equipment?
- Gas fired equipment?
- Present in or near ductwork?

See **OIL HEAT ODORS &** see **OIL TANK LEAK ODORS**

See **DUCT & AIR HANDLER ODORS**

---

**How to Find & Remove Odors, Gases & Smells in Buildings** at [InspectAPedia.com](http://InspectAPedia.com)
## InspectAPedia.com - Odor Identification and Source Checklist

### LP or Natural Gas
- Gas odors present?
- Gas leaks at appliances, piping, regulators, or incoming gas line?
- Contacted gas company, fire department?
- See chimney backdrafting, leaks, and odors from flues, CARBON MONOXIDE hazards, Natural Gas Combustion Products and also LP & Natural Gas Safety Hazards. Also see CHIMNEY INSPECTION & REPAIR GUIDE

### Odor history
<table>
<thead>
<tr>
<th>When was the odor first noticed?</th>
</tr>
</thead>
</table>
| Date first observed:  
______________________________ |
| Who first observed it?  
Was this related to any event?  
To any building modification?  
To any change in the building?  
Dates odor is present or absent? |
Explain:  

### Events that may relate to Odor:
- an event that involved an unusual number of occupants
- Change, service, or replacement of HVAC equipment
- Events, such as a fire or flood
- Modifications: additions, construction, window replacements, installation of insulation or change in building ventilation system or plumbing system or fixtures
- Pets added to the building
- Purchases: of new furnishings, carpeting, draperies, blinds
- Weather, heavy snowstorms, other weather related events, possibly recurrent or cyclical

---

**How to Find & Remove Odors, Gases & Smells in Buildings** at InspectAPedia.com
### Odor Identification and Source Checklist

- **Odors & indirect odor sources**: Ex: the ability of heating and cooling ducts to pick up odors from one location and transport them to another in the building, through the ductwork.
  - Is there any indirect source the odor could originate from?

- **Odor location**
  - Does the odor appear throughout the building?
  - On certain floors?
  - In certain rooms?
  - At certain walls?
  - See [SMELL PATCH TEST to Track Down Odors](#)

- **What is different about the room** where an odor appears:

- **What side of the building** is the room on?
  - North
  - East
  - South
  - West

- **What conditions are different there**
  - Sun exposure
  - Wind exposure
  - Nearby trees
  - Prevalent wind direction
  - Outdoor possible odor sources?

- **What side of the room**, what wall, has the strongest odor?
  - Exterior wall
  - Interior wall

---

*How to Find & Remove Odors, Gases & Smells in Buildings* at [InspectAPedia.com](https://InspectAPedia.com)
### InspectAPedia.com - Odor Identification and Source Checklist

<table>
<thead>
<tr>
<th><strong>What materials are unique to the odor-source room</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ carpets</td>
<td>☐ carpet padding</td>
<td>☐ drapes, window shades</td>
</tr>
<tr>
<td>☐ type and age of windows</td>
<td>☐ screens</td>
<td>☐ heat, air conditioning</td>
</tr>
<tr>
<td>☐ pet occupancy</td>
<td>☐ people occupancy</td>
<td>☐ laundry storage</td>
</tr>
<tr>
<td>☐ proximity to baths, kitchens, laundry</td>
<td>☐ openings between floors?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>What is different about the floor or level in a building where odors occur?</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Proximity to basements, attics, leaks, rodents, pests, animals, heating equipment, pesticide treatments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Does the odor appear related to specific equipment</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ heating or cooling system ductwork or air handlers</td>
<td>☐ Does it occur only when certain equipment is operating?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Odors &amp; Mold:</strong> moldy smells or odors present? Mold odors are generally MVOCs - these gases are produced inconsistently, not by all molds, and not under all conditions;</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ visible mold in the building?</td>
<td>☐ history of building leaks?</td>
<td>☐ Humidity levels exceeded?</td>
</tr>
</tbody>
</table>

Mold or “mildew” odor production may vary by indoor conditions such as temperature, humidity, light, darkness, even season or mechanical disturbance of moldy materials. See [MOLD ODORS, Musty Smells in Buildings](https://inspectapedia.com). Also see [Volatile Organic Compounds VOCs](https://inspectapedia.com). See [MOLD ODORS, Musty Smells in Buildings](https://inspectapedia.com).
| **Odors & neighbors:** does the odor correlate with activities by building occupants or building neighbors? | ☐ trash burning,  
☐ level of septic system usage,  
☐ use of woodstoves, coal stoves,  
☐ home improvements, building projects,  
☐ cooking, wine making. |
|---|---|
| **Odors & occupants:** does the odor occur when the building is occupied by | ☐ large number of people  
☐ visitors?  
☐ specific individuals? |
| **Odors & paints:** paints, both exterior and interior are odor sources some high VOC paints may continue to outgas VOCs at low levels for years after initial application | ☐ How long ago was paint last applied?  
☐ Where?  
☐ Type of Paint:  
See MOLD ODORS, Musty Smells in Buildings. Also see Volatile Organic Compounds VOCs. |
| **Odor perceivers:** who notices the smells? | ☐ Odor perceived only by certain occupants  
☐ Odor noticeable to all occupants  
☐ Odor noticed by occasional visitors  
☐ Medical checkup – consulted with doctor  
Some medical conditions can affect smell perception or can cause odor hallucinations |
| **Odors & Pets or other Animals in Buildings:** what is the history of animals and pets occupying the building? | ☐ Animal pests such as rodents: mice, squirrels, raccoons, insects, who may  
☐ Animal urine or fecal waste on building surfaces,  
☐ Dead animals in walls or ceilings.  
See Pet Odor Removal and see Building Inspection & Test Procedures for Pet Allergens. |
| **Odors & Plumbing:** | ☐ Does the odor presence relate to the use or dis-use of plumbing fixtures in the building?  
☐ Does heavy usage bring out the odor problem?  
Problems with the building drain-waste-vent piping, leaks, and even loose toilets are common sources of sewer gases, septic odors, and even "rotten egg" odors in buildings. See ODORS IN WATER for smells in drinking water or showers. See SEWER GAS ODORS and SEWER GAS ODORS in COLD WEATHER |

**How to Find & Remove Odors, Gases & Smells in Buildings** at InspectAPedia.com
# Odor Identification and Source Checklist

<table>
<thead>
<tr>
<th><strong>Odor strength</strong></th>
<th>□ is the odor perceived as strong or mild? □ Does the level of smell vary? □ Under what conditions?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Odors &amp; time of occurrence</strong>: does the odor appear all of the time or only at certain times.</td>
<td>□ All the time □ Only at certain times</td>
</tr>
<tr>
<td><strong>If Only at Certain Times</strong>: does the odor correlate to any of the following?</td>
<td>□ Time of day, □ sunlight, □ operation of heating or cooling equipment</td>
</tr>
<tr>
<td><strong>Time of year, season, foliage, outdoor or indoor activities</strong></td>
<td>□ Note any correlations to these. See <a href="#">CARBON MONOXIDE &amp; GAS HEAT ODORS</a></td>
</tr>
<tr>
<td><strong>Odors &amp; local temperature</strong> Does the odor appear or disappear in relation to changes in building temperature?</td>
<td>□ If yes, explain:</td>
</tr>
<tr>
<td><strong>Sunlight</strong> striking plastic window screens may make a distinctive odor only on the sunlit side of the building</td>
<td>□ Do either of these conditions apply to the odor? See <a href="#">SEWER GAS ODORS</a> and <a href="#">SEWER GAS ODORS in COLD WEATHER</a></td>
</tr>
<tr>
<td><strong>Plumbing system</strong> drains or vent systems may release odors when a private septic system is under heavy use or in certain weather conditions</td>
<td></td>
</tr>
<tr>
<td><strong>Odors &amp; weather conditions</strong> does the odor correlate with weather conditions:</td>
<td>□ Humidity □ temperature, □ rain, □ snow, □ wind? □ Does the odor or smell correlate with heavy snow-cover?</td>
</tr>
</tbody>
</table>

Special thanks to reader Kathleen Black for initial preparation and suggestion of use of this odor checklist. © 2010 InspectAPedia.com

[How to Find & Remove Odors, Gases & Smells in Buildings at InspectAPedia.com](#)