

Jeff M. Spencer

6502 Spencer Drive Freeport, TX 77541-9440

Phone 979-482-3895 jmsinspections@att.net TREC 6365

| I | NI | ١. | 1 | | . 1 | | • | |
|---|----|----|---|---|-----|----|---|--|
| ı | ıv | W | 4 | l | ш | ι. | , | |

| SOLD TO: | INVOICE NUMBER | 2019073 |
|--------------------|----------------|---------------|
| | INVOICE DATE | 05/21/2019 |
| Chris Wachtstetter | | |
| | | |
| TX | LOCATION | 100 Jay Court |
| | REALTOR | |
| | KEALION | |

| DESCRIPTION | PRICE | AMOUNT |
|-------------------------|-------------|----------|
| | | |
| General Home Inspection | \$330.00 | \$330.00 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | SUBTOTAL | \$330.00 |
| | TAX | \$0.00 |
| | TOTAL | \$330.00 |
| | BALANCE DUE | \$330.00 |

Payment of this invoice is due upon receipt. A late payment charge of \$120.00 applies when payment is made 10 or more days after inspection or receipt of invoice, whichever occurs latest.

THANK YOU FOR YOUR BUSINESS!



Inspection Report

Prepared for

Chris Wachtstetter

Concerning

100 Jay Court Lake Jackson, TX 77566



Jeff M. Spencer, TREC #6365 6502 Spencer Drive Freeport, TX 77541 979-482-3895 jmsinspections@att.net



Jeff M. Spencer 6502 Spencer Drive Freeport, TX 77541 (979) 482-3895 jmsinspections@att.net

PROPERTY INSPECTION REPORT

| Prepared For: | Chris Wachtstetter | |
|---------------|---|------------|
| • | (Name of Client) | |
| Concerning: | 100 Jay Court, Lake Jackson, TX 77566 | |
| | (Address or Other Identification of Inspected Propert | ty) |
| By: | Jeff M Spencer, Lic #6365 | 05/21/2019 |
| • | (Name and License Number of Inspector) | (Date) |
| | | |
| | (Name, License Number of Sponsoring Inspector) | |
| | | |

PURPOSE, LIMITATIONS AND INSPECTOR / CLIENT RESPONSIBILITIES

This property inspection report may include an inspection agreement (contract), addenda, and other information related to property conditions. If any item or comment is unclear, you should ask the inspector to clarify the findings. It is important that you carefully read ALL of this information.

This inspection is subject to the rules ("Rules") of the Texas Real Estate Commission ("TREC"), which can be found at www.trec.texas.gov.

The TREC Standards of Practice (Sections 535.227-535.233 of the Rules) are the minimum standards for inspections by TREC-licensed inspectors. An inspection addresses only those components and conditions that are present, visible, and accessible at the time of the inspection. While there may be other parts, components or systems present, only those items specifically noted as being inspected were inspected. The inspector is NOT required to turn on decommissioned equipment, systems, utility services or apply an open flame or light a pilot to operate any appliance. The inspector is NOT required to climb over obstacles, move furnishings or stored items. The inspection report may address issues that are code-based or may refer to a particular code; however, this is NOT a code compliance inspection and does NOT verify compliance with manufacturer's installation instructions. The inspection does NOT imply insurability or warrantability of the structure or its components. Although some safety issues may be addressed in this report, this inspection is NOT a safety/code inspection, and the inspector is NOT required to identify all potential hazards.

In this report, the inspector shall indicate, by checking the appropriate boxes on the form, whether each item was inspected, not inspected, not present or deficient and explain the findings in the corresponding section in the body of the report form. The inspector must check the Deficient (D) box if a condition exists that adversely and materially affects the performance of a system or component or constitutes a hazard to life, limb or property as specified by the TREC Standards of Practice. General deficiencies include inoperability, material distress, water penetration, damage, deterioration, missing components, and unsuitable installation. Comments may be provided by the inspector whether or not an item is deemed deficient. The inspector is not required to prioritize or emphasize the importance of one deficiency over another.

Some items reported may be considered life-safety upgrades to the property. For more information, refer to Texas Real Estate Consumer Notice Concerning Recognized Hazards or Deficiencies below.

THIS PROPERTY INSPECTION IS NOT A TECHNICALLY EXHAUSTIVE INSPECTION OF THE STRUCTURE, SYSTEMS OR COMPONENTS. The inspection may not reveal all deficiencies. A real estate inspection helps to reduce some of the risk involved in purchasing a home, but it cannot eliminate these risks, nor can the inspection anticipate future events or changes in performance due to changes in use or occupancy. It is recommended that you obtain as much information as is available about this property, including any seller's disclosures, previous inspection reports, engineering reports, building/remodeling permits, and reports performed for or by relocation companies, municipal inspection departments,

Promulgated by the Texas Real Estate Commission (TREC) P.O. Box 12188, Austin, TX 78711-2188 (http://www.trec.texas.gov).

lenders, insurers, and appraisers. You should also attempt to determine whether repairs, renovation, remodeling, additions, or other such activities have taken place at this property. It is not the inspector's responsibility to confirm that information obtained from these sources is complete or accurate or that this inspection is consistent with the opinions expressed in previous or future reports.

ITEMS IDENTIFIED IN THE REPORT DO NOT OBLIGATE ANY PARTY TO MAKE REPAIRS OR TAKE OTHER ACTIONS, NOR IS THE PURCHASER REQUIRED TO REQUEST THAT THE SELLER TAKE ANY ACTION. When a deficiency is reported, it is the client's responsibility to obtain further evaluations and/or cost estimates from qualified service professionals. Any such follow-up should take place prior to the expiration of any time limitations such as option periods. Evaluations by qualified tradesmen may lead to the discovery of additional deficiencies which may involve additional repair costs. Failure to address deficiencies or comments noted in this report may lead to further damage of the structure or systems and add to the original repair costs. The inspector is not required to provide follow-up services to verify that proper repairs have been made.

Property conditions change with time and use. For example, mechanical devices can fail at any time, plumbing gaskets and seals may crack if the appliance or plumbing fixture is not used often, roof leaks can occur at any time regardless of the apparent condition of the roof, and the performance of the structure and the systems may change due to changes in use or occupancy, effects of weather, etc. These changes or repairs made to the structure after the inspection may render information contained herein obsolete or invalid. This report is provided for the specific benefit of the client named above and is based on observations at the time of the inspection. If you did not hire the inspector yourself, reliance on this report may provide incomplete or outdated information. Repairs, professional opinions or additional inspection reports may affect the meaning of the information in this report. It is recommended that you hire a licensed inspector to perform an inspection to meet your specific needs and to provide you with current information concerning this property.

TEXAS REAL ESTATE CONSUMER NOTICE CONCERNING HAZARDS OR DEFICIENCIES

Each year, Texans sustain property damage and are injured by accidents in the home. While some accidents may not be avoidable, many other accidents, injuries, and deaths may be avoided through the identification and repair of certain hazardous conditions. Examples of such hazards include:

- malfunctioning, improperly installed or missing ground fault circuit protection (GFCI) devices for electrical receptacles in garages, bathroom, kitchens, and exterior areas;
- malfunctioning arc fault protection (AFCI) devices;
- ordinary glass in locations where modern construction techniques call for safety glass;
- malfunctioning or lack of fire safety features such as, smoke alarms, fire-rated doors in certain locations, and functional emergency escape and rescue openings in bedrooms;
- malfunctioning carbon monoxide alarms;
- excessive spacing between balusters on stairways and porches;
- improperly installed appliances;
- improperly installed or defective safety devices; and
- lack of electrical bonding and grounding.

To ensure that consumers are informed of hazards such as these, the Texas Real Estate Commission (TREC) has adopted Standards of Practice requiring licensed inspectors to report these conditions as "Deficient" when performing an inspection for a buyer or seller, if they can be reasonably determined.

These conditions may not have violated building codes or common practices at the time of the construction of the home, or they may have been "grandfathered" because they were present prior to the adoption of codes prohibiting such conditions. While the TREC Standards of Practice do not require inspectors to perform a code compliance inspection, TREC considers the potential for injury or property loss from the hazards addressed in the Standards of Practice to be significant enough to warrant this notice.

Contract forms developed by TREC for use by its real estate licensees also inform the buyer of the right to have the home inspected and can provide an option clause permitting the buyer to terminate the contract within a specified time. Neither the Standards of Practice nor the TREC contract forms requires a seller to remedy conditions revealed by an inspection. The decision to correct a hazard or any deficiency identified in an inspection report is left to the parties to the contract for the sale or purchase of the home.

| Report Identification | : 2019073, | 100 Jay C | Court, Lake | Jackson, | , TX |
|-----------------------|------------|-----------|-------------|----------|------|
|-----------------------|------------|-----------|-------------|----------|------|

INFORMATION INCLUDED UNDER "ADDITIONAL INFORMATION PROVIDED BY INSPECTOR", OR PROVIDED AS AN ATTACHMENT WITH THE STANDARD FORM, IS NOT REQUIRED BY THE COMMISSION AND MAY CONTAIN CONTRACTUAL TERMS BETWEEN THE INSPECTOR AND YOU, AS THE CLIENT. THE COMMISSION DOES NOT REGULATE CONTRACTUAL TERMS BETWEEN PARTIES. IF YOU DO NOT UNDERSTAND THE EFFECT OF ANY CONTRACTUAL TERM CONTAINED IN THIS SECTION OR ANY ATTACHMENTS, CONSULT AN ATTORNEY.

| | ADDITI | ONAL INFORMATIO | N PROVIDED BY INSI | PECTOR | | | | |
|---|--|--|---|---|--|--|--|--|
| Present at Inspection: | ☐ Buyer | ☐ Selling Agent | ☐ Listing Agent | ☐ Occupant | | | | |
| Building Status: | ✓ Vacant | ☐ Owner Occupied | ☐ Tenant Occupied | ☐ Other | | | | |
| Weather Conditions: | ✓ Fair | ☐ Cloudy | Rain | Outside Temp: 81 degrees | | | | |
| Utilities On: | ✓ Yes | ☐ No Water | ☐ No Electricity | ☐ No Gas | | | | |
| Special Notes: For pu | rposes of t | his report the house | most nearly faces sou | <u>uth</u> | | | | |
| | | | | _ | | | | |
| | | INACCESSIBLE OR C | BSTRUCTED AREAS | 5 | | | | |
| ☐ Sub Flooring | | ☐ Attic S | Space is Limited - Viewed | from Accessible Areas | | | | |
| ☑ Floors Covered | | ☐ Plumb | ing Areas - Only Visible | Plumbing Inspected | | | | |
| ☐ Walls/Ceilings Covere | ☐ Walls/Ceilings Covered or Freshly Painted ☐ Siding Over Older Existing Siding | | | | | | | |
| ☑ Behind/Under Furnitur | ☑ Behind/Under Furniture and/or Stored Items ☐ Crawl Space is limited - Viewed From Accessible Areas | | | | | | | |
| Mold/Mildew investigations are NOT included with this report; it is beyond the scope of this inspection at the present time. Any reference of water intrusion is recommended that a professional investigation be obtained. | | | | | | | | |
| whatsoever includi authorization from the effect of all parties agre | ng sharing a company sho eing to hold | ccess to a protected co own above. Unauthoriz harmless individually, | ppy is prohibited withoused duplication of, use o | 21/2019. Duplication by any means at prior written permission and of or reliance on this report has the this inspector, the Company, their DPYRIGHT LAWS. | | | | |

I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

I. STRUCTURAL SYSTEMS

\square \square \square A. Foundations

Type of Foundation(s): Slab on Grade

Comments: Foundation inspections are limited to observations of accessible interior and exterior structural components. No engineering studies or measurements are made. Factors preventing accurate assessment of structural conditions included but are not limited to painting, repairs, floor/wall coverings, furnishings, soil, foliage, decking and masonry. Some symptoms of foundation movement such as slab cracks, uneven floors, drywall crack and sticking doors can be minor and may not necessarily indicate significant loss of structural integrity. Nonetheless, if such symptoms are of substantial concern, you may with to obtain a second opinion from a qualified structural engineer before closing on the property.

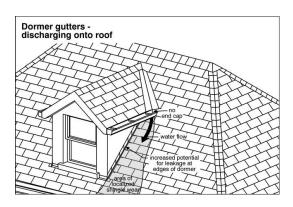
The foundation is performing as intended.

\square \square \square B. Grading and Drainage

Comments: Site drainage, retaining walls around the structure an drain gutters are inspected. Any visible conditions or symptoms that may adversely affect performance of the foundation or structure or indicate water penetration are reported. No geological, topographical or flood plain studies are made or consulted as part of this inspection.

NOTE: Upper roof downspouts discharge onto lower roof surfaces, creating potential for accelerated wear of shingles beneath the point of discharge. Ideally, downspouts should be installed that extend to lower-level gutters.





☑ □ □ □ C. Roof Covering Materials

Type(s) of Roof Covering: Fiberglass Asphalt Shingles Viewed From: Viewed from ladder at eaves

Comments: Roof inspections are limited to visual observations of accessible surfaces. The roof will be inspected from roof level only if access can be made safely without risk of damage to the roof. Certain types of damage such as hail blisters and pinhole leaks as well as poor workmanship such as improper nailing schedule may not be readily visible and may prevent accurate assessment of a roof's condition, particularly during periods of dry weather. No attempt is made to determine insurability or remaining service life of any roof covering. If roof covering deficiencies are reported or you have concerns about remaining life expectancy, insurability and/or potential for future problems you should contact a qualified roofing contractor.

Roof Coverings

No deficiencies were observed.

Flashings

I=Inspected NI=Not Inspected **NP=Not Present D=Deficient** NI NP D D. Roof Structures and Attics Viewed From: Entered attic Approximate Average Depth of Insulation: Ten to 11 inches of loose-fill natural fiber insulation Approximate Average Thickness of Vertical Insulation: Four inches of fiberglass batt insulation Comments: Inspection is limited to areas that can be safely accessed. Inaccessible components and areas are noted below. **Structure** No deficiencies were observed. Insulation No deficiencies were observed. Ventilation No deficiencies were observed. Finish/Trim No deficiencies were observed. E. Walls (Interior and Exterior) Comments: Comments are limited to issues affecting structural performance or water penetration. Routine maintenance and housekeeping items are not addressed. Inspection of concealed wall flashing details (such as those found around doors, windows and brick ledges) are beyond the scope of this inspection. Heavy foliage, recent redecorating, wall hangings, window treatments, furniture placement and other obstructive items can obscure water stains, mold growth and other types of damage preventing accurate assessment of conditions. Interior No deficiencies were observed. Exterior No deficiencies were observed. F. Ceilings and Floors Comments: Issues affecting structural performance, indicative of water penetration or deemed to affect safety of occupants are reported. Routine maintenance/repair items are typically not addressed. Recent redecorating, re-painting, furniture placement and floor coverings can obscure cracks, water stains, mold growth and other types of damage preventing accurate assessment of all conditions present.

Ceilings

NOTE: A stain is present on the garage ceiling near the north wall between the water heater and the rear garage door. The area is located beneath the rear roof valley and may have been caused by previous rainwater penetration. The stain was dry at the time of inspection as measured with a moisture meter. Further evaluation by a roofing contractor is recommended if record of repair cannot be verified.



Report Identification: 2019073, 100 Jay Court, Lake Jackson, TX NI=Not Inspected I=Inspected **NP=Not Present D=Deficient** NI NP D **Floors** No deficiencies were observed. **Floor Coverings** No deficiencies were observed. **G.** Doors (Interior and Exterior) **Exterior** No deficiencies were observed. Interior No deficiencies were observed. Garage No deficiencies were observed. Attic No deficiencies were observed. H. Windows Low-emittance coatings have failed on the doublepane light unit of the formal dining area window, causing a grainy appearance on inner pane surfaces. The condition cannot be corrected without replacement of the affected double-pane glass unit. Desiccant seals have failed in the double-pane sash unit of the bedroom 1 left window, causing silica haze on interior pane surfaces. I. Stairways (Interior and Exterior) J. Fireplaces and Chimneys Comments: Chimneys are inspected as/where accessible. Frequently, upper portions of flues are not accessible and cannot be inspected due to presence of flue caps or spark arrestor screens of which removal is not attempted. Chimneys in excess of 50 years old should be further inspected by a fireplace specialist that is certified to perform a Level II chimney inspection. Drafting of fireplaces and chimney is not measured or assessed..

Page 6 of 10

K. Porches, Balconies, Decks, and Carports No deficiencies were observed.

Report Identification: 2019073, 100 Jay Court, Lake Jackson, TX

| I=Inspected | NI=Not Inspected | NP=Not Present | D=Deficient | |
|-------------|---|--|--|----------------|
| I NI NP D | | | | |
| | L. Cabinets and Countertops No deficiencies were obse | | | |
| | M. Other | | | |
| | II. | ELECTRICAL S | YSTEMS | |
| | A. Service Entrance and Pan Service Lateral Wires | els | | |
| | Service lateral wires a | re buried/contained in co | onduit and were not accessible for inspection | on. |
| | Service Entrance Wires | | | |
| | Type of Service: 3-win Type of Wiring: Coppo Wire Size: 1/0 AWG | re single-phase (groundi er | ng) | |
| | Service entrance wires | s appear properly sized | relative to system ampacity. | |
| | Service Panel | | | |
| | Type of Panel: Breake Maximum Amperage: Main Breaker/Fuse/Di | | 50 amperes | |
| | No deficiencies were of | bserved. | | |
| | System Grounding | | | |
| | No deficiencies were o | bserved. | | |
| | B. Branch Circuits, Connected Type of Wiring: Copper | ed Devices, and Fixtures | | |
| | ceilings/eaves or behind furnitugenerally not reported. Test but | re may not be inspected). Co ttons on smoke detectors that | accessible components (i.e., fixtures and devices on has metic items such as broken or missing fixture glass are integrated with centrally monitored security systems. | are ems are |

Distribution Wires

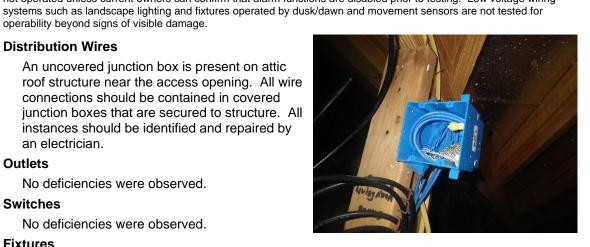
An uncovered junction box is present on attic roof structure near the access opening. All wire connections should be contained in covered junction boxes that are secured to structure. All instances should be identified and repaired by an electrician.

Outlets

No deficiencies were observed.

No deficiencies were observed.

Fixtures



I=Inspected NI=Not Inspected NP=Not Present D=Deficient

I NI NP D

Faceplates

No deficiencies were observed.

III. HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS

✓ □ □ A. Heating Equipment

Type of System: Induced Draft Furnace Nominal Input Capacity: 88,000 Btu/h

Energy Source: Gas

Nominal AFUE: 80.0 Year of Manufacture: 2010

Comments: Heating system inspections are limited to visual, audible and operational characteristics observed on accessible equipment. While access covers are removed whenever possible, no dismantling of operating components is conducted as part of this inspection. Frequently, components such as heat exchangers are not fully accessible or visible, preventing exhaustive inspection of their condition. Ancillary equipment such as humidifiers, air purifiers, zoning dampers, heat reclamation devices and electronic air filters are not operated except as they may normally operate in conjunction with the heating system.

The furnace operated normally using manual controls.

☑ ☐ ☑ B. Cooling Equipment

Type of System: Central Forced Air System

Nominal Input Capacity: 3 tons Nominal SEER: 14.0

Energy Source: Electricity Year of Manufacture: 12010

Comments: Air conditioning system inspections are limited to visual, audible and operational characteristics observed at accessible equipment. Major components such as the evaporator coil may not be fully accessible, preventing accurate assessment of their conditions. Refrigerant pressure and leak tests are beyond the scope of this inspection and should only be performed by a properly licensed HVAC technician. No dismantling of operating components is conducted as part of this inspection. Cooling efficiency of window/through-the-wall cooling systems is not determined

The temperature drop measured across the evaporator coil of the air conditioning system is lower than considered typical. A temperate drop of 11 to 12 degrees was measured, whereas differentials of 15 to 22 degrees are considered normal. This usually indicates that servicing is needed. A qualified heating and cooling technician should be consulted to further evaluate this condition and the remedies available for correction. Insulation is missing from exterior refrigerant tubing, creating excess condensation and allowing increased heat gain. Replacement is recommended.



| | C. Duct Systems, Chases, and Vents No deficiencies were observed. |
|-----------------------------|---|
| $M \square \square \square$ | D. Thermostats |

Report Identification: 2019073, 100 Jay Court, Lake Jackson, TX I=Inspected NI=Not Inspected **NP=Not Present D=Deficient** NI NP D PLUMBING SYSTEMS IV. A. Plumbing Supply, Distribution Systems and Fixtures Location of water meter. Southeast front yard Location of main water supply valve: East exterior wall of formal dining room Static water pressure reading: 51 psi Type of plumbing: PEX Comments: Inaccessible plumbing system components such as those in wall and floor cavities, inaccessible attic areas and buried exterior pipes are not inspected. No excavation is conducted to determine conditions of buried plumbing. Main shut-off valves and fixture stop valves are not operated due to risk of property damage in the event of failure. Water mains, water softeners and water purification systems are not operated and are not inspected beyond those items that can be identified as missing or broken. **Supply Plumbing** No deficiencies were observed. **Fixtures** The travel limit device is missing from the master bathroom shower's faucet. The condition allows the handle to rotate 360 degrees, making location of hot and cold water positions difficult. \square \square \square B. Drains, Wastes, and Vents Comments: Exclusions enumerated in section IV.A above are also applicable drain, waste and vent plumbing. Inaccessible drains are not inspected. No deficiencies were observed. C. Water Heating Equipment Input Capacity: 38,000 Btu/h Water Capacity: 40 gallons Energy Source: Gas Year of Manufacture: 2010 Comments: Temperature/pressure relief valves are operated only when they are properly connected to a drainpipe and are in compliance with current safety standards. Solar and geothermal water heating systems are not inspected. The water heater operated normally during inspection. D. Hydro-Massage Therapy Equipment E. Other

APPLIANCES

V.

 \square \square \square

A. Dishwashers

Report Identification: 2019073, 100 Jay Court, Lake Jackson, TX

| I=Inspected | NI=Not Inspected | NP=Not Present | D=Deficient |
|-------------|---|---|--|
| I NI NP D | | | |
| ☑ □ □ □ B. | Food Waste Disposers No deficiencies were obser | ved. | |
| ☑ □ □ □ c. | . Range Hood and Exhaust Sy No deficiencies were obser | | |
| ☑ □ □ ☑ D. | found to be greater than a 2 | n was found to be inaccurate 25-degree difference of 350 | e and should be repaired. Temperature was degrees as measured by a detached sured when the thermostat was set to 350 |
| ☑ □ □ □ E. | Microwave Ovens No deficiencies were obser | ved. | |
| ☑ □ □ □ F. | Mechanical Exhaust Vents a No deficiencies were observ | | |
| ☑ □ ☑ G. | | ng the sensitivity control on | resistance while closing. Improvement is the opener. This should be repaired, nticipated. |
| ☑ □ □ □ н. | Dryer Exhaust Systems No deficiencies were observed. | ved. | |
| □ ☑ ☑ □ I. | Other | | |
| | VI. | OPTIONAL SYSTE | MS |
| ☑ □ □ □ A. | . Gas Supply Systems No deficiencies were obser | ved. | |

ADDENDUM: LEAD BASED PAINT INFORMATION

Lead-based paint is hazardous to your health.

Lead-based paint is a major source of lead poisoning for children and can also affect adults. In children, lead poisoning can cause irreversible brain damage and can impair mental functioning. It can retard mental and physical development and reduce attention span. It can also retard fetal development even at extremely low levels of lead. In adults, it can cause irritability, poor muscle coordination, and nerve damage to the sense organs and nerves controlling the body. Lead poisoning may also cause problems with reproduction (such as a decreased sperm count). It may also increase blood pressure. Thus, young children, fetuses, infants, and adults with high blood pressure are the most vulnerable to the effects of lead.

Children should be screened for lead poisoning.

In communities where the houses are old and deteriorating, take advantage of available screening programs offered by local health departments and have children checked regularly to see if they are suffering from lead poisoning. Because the early symptoms of lead poisoning are easy to confuse with other illnesses, it is difficult to diagnose lead poisoning without medical testing. Early symptoms may include persistent tiredness, irritability, loss of appetite, stomach discomfort, reduced attention span, insomnia, and constipation. Failure to treat children in the early stages can cause long-term or permanent health damage.

The current blood lead level which defines lead poisoning is 10 micrograms of lead per deciliter of blood. However, since poisoning may occur at lower levels than previously thought, various federal agencies are considering whether this level should be lowered further so that lead poisoning prevention programs will have the latest information on testing children for lead poisoning.

Consumers can be exposed to lead from paint.

Eating paint chips is one way young children are exposed to lead. It is not the most common way that consumers, in general, are exposed to lead. Ingesting and inhaling lead dust that is created as lead-based paint "chalks," chips, or peels from deteriorated surfaces can expose consumers to lead. Walking on small paint chips found on the floor, or opening and closing a painted frame window, can also create lead dust. Other sources of lead include deposits that may be present in homes after years of use of leaded gasoline and from industrial sources like smelting. Consumers can also generate lead dust by sanding lead-based paint or by scraping or heating lead-based paint.

Lead dust can settle on floors, walls, and furniture. Under these conditions, children can ingest lead dust from hand-to-mouth con- tact or in food. Settled lead dust can re-enter the air through cleaning, such as sweeping or vacuuming, or by movement of people throughout the house.

Older homes may contain lead based paint.

Lead was used as a pigment and drying agent in "alkyd" oil based paint. "Latex" water based paints generally have not contained lead. About two-thirds of the homes built before 1940 and one-half of the homes built from 1940 to 1960 contain heavily-leaded paint. Some homes built after 1960 also contain heavily-leaded paint. It may be on any interior or exterior surface, particularly on woodwork, doors, and windows. In 1978, the U.S. Consumer Product Safety Commission lowered the legal maximum lead content in most kinds of paint to 0.06% (a trace amount). Consider having the paint in homes constructed before the 1980s tested for lead before renovating or if the paint or underlying surface is deteriorating. This is particularly important if infants, children, or pregnant women are present.

Consumers can have paint tested for lead.

There are do-it-yourself kits available. However, the U.S. Consumer Product Safety Commission has not evaluated any of these kits. One home test kit uses sodium sulfide solution. This procedure requires you to place a drop of sodium sulfide solution on a paint chip. The paint chip slowly turns darker if lead is present. There are problems with this test, however. Other metals may cause false positive results, and resins in the paint may prevent the sulfide from causing the paint chip to change color. Thus, the presence of lead may not be correctly indicated. In addition the darkening may be detected only on very light-colored paint.

Another in-home test requires a trained professional who can operate the equipment safely. This test uses X-ray fluorescence to determine if the paint contains lead. Although the test can be done in your home, it should be done only by professionals trained by the equipment manufacturer or who have passed a state or local government training course, since the equipment contains radioactive materials. In addition, in some tests, the method has not been reliable.

Consumers may choose to have a testing laboratory test a paint sample for lead. Lab testing is considered more reliable than other methods. Lab tests may cost from \$20 to \$50 per sample. To have the lab test for lead paint, consumers may:

? Get sample containers from the lab or use re-sealable plastic bags. Label the containers or bags with the consumer's name and the location in the house from which each paint sample was taken. Several samples should be taken from each affected room (see HUD Guidelines discussed below).

- ? Use a sharp knife to cut through the edges of the sample paint. The lab should tell you the size of the sample needed. It will probably be about 2 inches by 2 inches.
- ? Lift off the paint with a clean putty knife and put it into the container. Be sure to take a sample of all layers of paint, since only the lower layers may contain lead. Do not include any of the underlying wood, plaster, metal, and brick.
- ? Wipe the surface and any paint dust with a wet cloth or paper towel and discard the cloth or towel.

The U.S. Department of Housing and Urban Development (HUD) recommends that action to reduce exposure should be taken when the lead in paint is greater than 0.5% by lab testing or greater than 1.0 milligrams per square centimeter by X-ray fluorescence. Action is especially important when paint is deteriorating or when infants, children, or pregnant women are present. Consumers can reduce exposure to lead-based paint.

If you have lead-based paint, you should take steps to reduce your exposure to lead.

You can:

1. Have the painted item replaced.

You can replace a door or other easily removed item if you can do it without creating lead dust. Items that are difficult to remove should be replaced by professionals who will control and contain lead dust.

2. Cover the lead-based paint.

You can spray the surface with a sealant or cover it with gypsum wallboard. However, painting over lead-based paint with non-lead paint is not a long-term solution. Even though the lead-based paint may be covered by non-lead paint, the lead-based paint may continue to loosen from the surface below and create lead dust. The new paint may also partially mix with the lead-based paint, and lead dust will be released when the new paint begins to deteriorate.

3. Have the lead-based paint removed.

Have professionals trained in removing lead-based paint do this work. Each of the paint-removal methods (sandpaper, scrapers, chemicals, sandblasters, and torches or heat guns) can produce lead fumes or dust. Fumes or dust can become airborne and be inhaled or ingested. Wet methods help reduce the amount of lead dust. Removing moldings, trim, window sills, and other painted surfaces for professional paint stripping outside the home may also create dust. Be sure the professionals contain the lead dust. Wet-wipe all surfaces to remove any dust or paint chips. Wet-clean the area before re-entry.

You can remove a small amount of lead-based paint if you can avoid creating any dust. Make sure the surface is less than about one square foot (such as a window sill). Any job larger than about one square foot should be done by professionals. Make sure you can use a wet method (such as a liquid paint stripper).

4. Reduce lead dust exposure.

You can periodically wet mop and wipe surfaces and floors with a high phosphorous (at least 5%) cleaning solution. Wear waterproof gloves to prevent skin irritation. Avoid activities that will disturb or damage lead based paint and create dust. This is a preventive measure and is not an alternative to replacement or removal.

Contact your state and local health departments lead poisoning prevention programs and housing authorities for information about testing labs and contractors who can safely remove lead-based paint. The U.S. Department of Housing and Urban Development (HUD) prepared guidelines for removing lead-based paint. Ask contractors about their qualifications, experience removing lead-based paint, and plans to follow these guidelines.