

PLUMBING

WATER SUPPLY

- Water supply: Public
- Line: 3/4 inch copper
- Main shut-off valve: On the south wall close to the main entrance
- Pressure reducing valve: No pressure reducing valve was observed.
- *Recommendation:* Install pressure reducing valve in order to prevent any pipes and fittings failure due to probable high incoming water pressure.



DISTRIBUTION PIPING AND FLOW

- Types:
 - 1- Copper in the exposed portions in mechanical room
 - 2- Nonconforming rubber pipe for dish-washer connection
- Conditions: Rust over some sections of the pipes and fittings were observed.
- *Recommendations:*
 - 1- Investigate for anymore corrosions, and be aware that the copper pipes may lead to failure without notice due to their age.
 - 2- In cold weather shut the hose bib valves by their shut-off valves and drain the water inside the pipe and valve.



WASTE DISPOSAL SYSTEM, LINES, AND DRAINAGE

- System: connected to public sanitary sewage by a sewage sump (inspection chamber) shared with the east neighbor and located in the south west of the property
- Line: plastic piping
- Conditions
 - 1- Drain line of the dish-washer was done with nonconforming materials.
 - 2- The drain size under the toilet basin and its trap is inadequate due to the dish-washer's drain connection.
 - 3- The hot water line was not tested due to not operating gas water heater.



4- The drainage connection of the washing machine to the waste disposal line had made a S trap (due to their length and elbows used) which compromised the present P trap led to sewage gas entering into the room.



5- The connection of the sink drainage in the laundry room led to an open ended pipe which led to sewage gases entering into the room.



6- The lengths of the pipes for sharing same vent were more than approved length either in the laundry or dish washer connection.



7- There was a drain in the mechanical room, but the effectiveness of the drain was not verified.



GAS LINE

- Type: Carbon-steel piping not grounded
- Location of the main shut-off valve: Out side and next to the meter
- *Recommendation:* Ground bond gas pipe for fire and safety requirement.

HOT WATER SYSTEM

- Type: A 1997-151 litter gas hot-water heater
- Conditions:
 - 1- Top of the gas water heater was rusted, and did not operate in the time of inspection.
 - 2- There were no seismic belt and splash pan for the gas water heater.
- *Recommendations:*
 - 1- Install a new gas water heater due to the age and conditions of the present one.
 - 2- Install proper splash pan and seismic belt for safety reasons.



FAUCETS AND FIXTURES

- **Conditions:** Almost all of the shut-off valves did not operate, and also there was some sludge in the second floor toilet.
- **Recommendations:** Install operable shut-off valves for emergency situations.

INTERIOR SUMP PUMP SYSTEMS

- **Type:** Not applicable

❖ **Recommendation:** Check all the aspects of the plumbing and drainage by a licensed plumbing contractor due to the mentioned deficiencies.