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RECOMMENDED PROGRAM FOR WELL AND SEPTIC SYSTEM REAL ESTATE TRANSACTION INSPECTIONS

Many properties in Contra Costa County are served by septic systems and/or private wells. Some real estate transactions require an inspection of any on-site septic systems or wells. Such inspections may be requested by buyers, mortgage companies, title companies or underwriters. While no inspection can discover all latent or hidden defects a thorough inspection can provide important information to all interested parties about the condition of the property's sewage disposal system and water supply. Some conditions if present should be corrected prior to the transaction while others should at the very least be disclosed.

The following are **RECOMMENDED** guidelines for an inspection program.

SEPTIC SYSTEM

On properties not served by a public sewer, septic systems are utilized for wastewater disposal. A septic system typically consists of a septic tank and some sort of a disposal field (leach lines, absorption bed, etc.) Inspections should be performed by an experienced and licensed septic system contractor or septic tank pumper. An inspection of a septic system should include the following.

1. Review of Environmental Health Division files for evidence of previous problems, permits, pumping reports, diagrams, etc. The new property owner should be provided with copies of any available data.
2. Review the site in the vicinity of the disposal field and septic tank for signs of sogginess, recent excavations, vegetation indicative of saturation, etc.
3. The disposal field should be evaluated for saturation and excessive sludge build-up. Probing and excavation down to the top of the drain rock should be conducted in several locations. Standing sewage, excess moisture or sludge build-up in the disposal field should be noted since these are indicative of a failing disposal field.
4. The location and dimensions of the septic system should be determined and plotted in a scaled drawing. Also consider the size and availability of the disposal field replacement area. Make sure the septic system is on the subject property.
5. The septic tank should be have both compartments opened and completely pumped. While uncovered, the size and construction of the tank should be determined. In redwood tanks, which should be completely uncovered, look for signs of dry rot or crumbling wood above the water line. Also note if any wastewater runs back into the tank from the disposal field while pumping. Runback is indicative of a failing disposal field. Note: The tank should be pumped after the disposal field has been evaluated for saturation.

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6. Make note of the location of the septic system in relation to wells, structures (including pools, shops, gazebos), trees, paved areas, property lines, water lines, streams, areas subject to vehicular traffic, etc. These items should be adequately separated from the septic system.
7. Determine if public sewer is available.
8. Review surrounding properties to determine the location of the septic system and disposal field replacement area in relation to wells, streams, springs, etc.
9. Ask the property owner if the system has recently been pumped, if it has ever been repaired, or if they have ever had any problems.

ITEMS REQUIRING CORRECTIVE ACTION

If the following conditions exist they should be corrected as indicated:

1. Septic tank constructed of wood or grossly undersized.
Correction: Replace with adequately sized concrete tank.
2. Septic tanks located in areas subject to vehicular traffic and not specifically designed for such loads.
Correction: Replace with tank designed to withstand heavy loads.
3. Septic tanks lacking ready access to both compartments.
Correction: Provide ready access to both compartments. Access should allow for the complete removal of covers for inspection and pumping.
4. Disposal fields with sewage standing above the invert level of the perforated pipe, showing excessive sludge accumulation, or grossly undersized or evidence of run-back into the tank while pumping.
Correction: Provide new disposal field.
5. Damaged septic tanks or piping.
Correction: Repair.
6. Septic tank lacking ABS or cast iron sanitary tees for both inlet and outlet piping.
Correction: Provide.
7. Surfacing sewage.
Correction: Repair system. Under Environmental Health Division permit and inspection.

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8. Any part of septic tank or disposal field located under structures or less than 5' from a structure.
Correction: Relocate tank or disposal field.
9. Any portion of a septic system located less than 50' from a well.
Correction: Relocate septic system and/or well to provide adequate separation.
10. Evidence of septic system work performed without permit.
Correction: Replace with work done under permit.
11. Available sewer.
Correction: Connect property to sewer.
12. Abandoned septic tanks present.
Correction: Eliminate tank pursuant to Environmental Health Division requirements.
13. Unfinalized septic system permits issued after 7/1/92 on file.
Correction: Obtain final approval.
14. Septic system located off-site.
Correction: Relocate on-site or obtain easements.
15. Food facility with substandard septic system or lacking a grease interceptor.
Correction: Provide adequately sized septic and/or interceptor.
16. House has more bedrooms than septic system designed for.
Correction: Provide adequately sized septic system.
17. Uncorrected notices of violation on file.
Correction: Correct violations.
18. Water line lacks 5' setback from disposal field.
Correction: Provide at least a 5' horizontal separation.

ITEMS WHICH SHOULD BE DISCLOSED

If the following conditions exist they should be disclosed:

1. Disposal field paved over or subject to vehicular traffic.
2. Limited disposal field replacement area. Note if future disposal field replacement will require relocation of wells, concrete excavation, connection to public water and elimination of well, removal of auxiliary structure, etc.

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3. Disposal field located less than 100' from a well.
4. Septic tank or disposal field located less than 10' from any structure.
5. Disposal field located in an area with slope in excess of 20%.
6. Septic system located in high groundwater areas or areas subject to seasonal flooding or high groundwater.
7. House vacant at time of septic system inspection.
8. Septic system predates Environmental Health Division records or no records exist.
9. Installation of pool or other structure would have required removal of all or a portion of the disposal field and no record exists to show that removed portion was replaced.
10. On-site or off-site easements exist for wastewater disposal.
11. Septic system repaired with permit. Specify details of repair.
12. Trees planted near or over septic system.
13. Septic tank has been pumped frequently.
14. Future septic system repair will require waiver of setback or construction standards by the Environmental Health Division.
15. Unfinished septic system permits issued prior to 7/1/92 on file.

WELLS

On properties not served by a public water, private wells are utilized for water supply. A private water supply typically consists of a well, storage tank and some sort of distribution system. Inspections should be performed by an experienced licensed well/pump contractor. An inspection of a system should include the following:

1. Review of Environmental Health Division files for evidence of previous problems, permits, diagrams, etc. The new property owner should be provided with copies of any data.
2. Analyses by a state-certified laboratory for coliform bacteria and nitrates. The laboratory performing the analyses should be required to collect and transport the sample and verify that raw untreated water was obtained. The lab should perform a field test for chlorine at the time of sample collection.

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3. Evaluate the well surface construction features.
4. Evaluate the distance between the well and potential sources of contamination. Make a note of the location of the well in relation to septic systems, disposal field placement areas, sewer lines, storm sewers, animal enclosures, etc.
5. Determine the sustained yield of the well.
6. For steel casings evaluate the condition of the casing.
7. Look for abandoned wells.
8. Ask the property owner if there has ever been any problems or if any abandoned wells are present.

ITEMS REQUIRING CORRECTIVE ACTION

If the following conditions exist they should be corrected as indicated:

1. Coliform bacteria contamination as determined by water analyses. ***Correction: Disinfect well, have professional look for defective well construction or inadequate separation to potential sources of contamination and resample. If well cannot reliably produce potable water after repeated disinfect ion then it should be eliminated.***
2. **Fecal** coliform bacteria contamination as evident by water analyses.
Correction: Eliminate well and provide new well. Contact Environmental Health Division
3. Nitrates exceeding the EPA limit.
Correction: Replace well with one meeting acceptable limits.
4. Defective surface construction features.
Correction: Repair.
5. Below grade well casing.
Correction: Extend well casing at least one foot above grade or known flood levels whichever is greater.
6. Public water available for domestic purposes.
Correction: Connect property to public water supply.
7. Well located less than 50' from a septic system.
Correction: Relocate well and/or septic system to provide adequate separation.

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8. Abandoned well present.
Correction: Eliminate abandoned well pursuant to Environmental Health Division requirements.
9. Wells lacking adequate annular seals. Adequacy will depend on the well location in relation to possible sources of contamination.
Correction: Provide adequate annular seal. The annular should be 20 feet deep or comply with the standards at time of construction, whichever depth is greater.
10. Well located in well pit.
Correction: Raise well casing above grade and eliminate pit.
11. Unprotected cross-connection (i.e. well on property served by public water).
Correction: Provide approved backflow prevention device.
12. Connection to public water system operating without state or local permit.
Correction: Provide connection to approved water supply.
13. Deteriorated well casing.
Correction: Repair or replace well.
14. Unfinalized permits issued after July 1, 1992 on file.
Correction: Obtain final approval.
15. Uncorrected notice of violations on file.
Correction: Eliminate violations.
16. Well located less than 25' from sewer lines or 10' from interior wastewater plumbing.
Correction: Relocate well and/or sewer lines.

ITEMS REQUIRING DISCLOSURE

If the following conditions exist they should be disclosed:

1. Well lacking record of permit or well driller's report.
2. Well located less than 100' from septic systems.
3. Well lacking concrete well slab.

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4. Well which exceeds secondary drinking water standards (i.e., iron, sulphur gas, manganese, total dissolved solids or hardness).
5. Wells with a sustained yield of less than 3 gallons per minute.
6. Wells located less than 25' from interior wastewater plumbing.
7. Wells located less than 50' from sewer lines or storm sewers.
8. Unfinalized permits issued prior to July 1, 1992 on file.
9. Future well replacement or reconstruction will require waiver of setback or construction standards by the Environmental Health Division.

NOTE: Septic system or well work may require a permit from the Environmental Health Division. Please contact the division if you have any questions.

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