61.1 Seller/Servicer environmental responsibilities (06/30/16)

Unless Freddie Mac requires otherwise, SBL Seller/Servicers must refer to Chapter 62SBL, SBL Physical Risk Report Requirements, to obtain the environmental requirements for a Property secured by an SBL Mortgage. Chapter 62SBL will reference this Chapter 61 specifically for any requirements that apply to the completion of the Form 1104, SBL Physical Risk Report.

Seller/Servicers of MHC Mortgages must refer to the specific environmental requirements for Manufactured Housing Communities found in Section 22.6 in addition to the requirements stated in this Chapter.

This chapter

- Sets forth the requirements, duties and responsibilities of the Seller/Servicer, the Borrower and the environmental consultant to evaluate the potential environmental hazards associated with a Property and report this information to Freddie Mac.

- Provides information regarding the requirements for conducting an environmental assessment, preparing an environmental report for a Mortgage to be purchased by Freddie Mac, resolving identified risks to qualify for the purchase of the Mortgage, developing operations and maintenance programs, and selecting an environmental consultant.

a. General Seller/Servicer environmental requirements (02/07/06)

The Seller/Servicer must exercise due diligence when evaluating a Property, make appropriate inspections and inquiries to learn its true condition and take responsible actions to manage the risk of loss from environmental hazards. To that end, Freddie Mac requires that the Seller/Servicer retain a qualified environmental consultant and submit an acceptable environmental report before Freddie Mac will issue a Letter of Commitment or accept an early rate-lock application to purchase a Mortgage.

b. Specific Seller/Servicer environmental responsibilities (09/01/16)

For each Property, the Seller/Servicer must

1. Retain and direct the environmental consultant

   The Seller must review and verify the environmental consultant’s credentials, licensing, certifications, memberships and affiliations. For new consultants, the Seller must check at least three references from lenders who have retained or employed the environmental consultant to sufficiently evaluate the consultant’s capabilities and performance. The Seller...
must maintain a separate environmental consultant file for Freddie Mac’s use that includes the Seller’s ongoing evaluations of each consultant’s performance, as well as the consultant’s current resume, required references and current certificate(s) of liability insurance in accordance with the requirements of Section 11.5.

The Borrower is permitted to pay the cost of all environmental consultant services, but may not retain or direct the environmental consultant. However, Freddie Mac will accept an environmental report prepared by an environmental consultant retained or directed by the Borrower only if all of the following conditions are met:

- The transaction is under a Forward Commitment.
- The Mortgage is being originated for the purpose of new construction.
- The environmental report is submitted to Freddie Mac in the full underwriting package prior to Freddie Mac’s issuance of the Forward Commitment.
- The report meets the industry standards for environmental assessment in specified Section 61.2(b), and was prepared no earlier than 12 months prior to the submission of the full underwriting checklist.

2. Obtain an environmental report of the Property prior to delivery of the full underwriting package for all Mortgages as well as prior to Conversion for a Mortgage purchased under a Forward Commitment

3. Determine whether the environmental report meets Freddie Mac's requirements

4. Disclose if the State where the Property is located has a law that would allow environmental authorities to place a first priority lien on the Property (an "environmental superlien law")

Because an environmental superlien could take precedence over the Mortgage, the Seller/Servicer must highlight the existence of the superlien law when the Seller/Servicer brings to Freddie Mac’s attention any conditions that could result in such a lien being imposed on the Property.

5. Disclose to Freddie Mac any knowledge of actual or suspected environmental problems, knowledge of Mold problems affecting the Property or knowledge of unusual or questionable conditions

For all programs and products, the Seller/Servicer must make this disclosure to the Applicable Freddie Mac Multifamily Regional Office. TAH Seller/Servicers must make this disclosure to the Multifamily TAH Underwriter.
6. Provide copies of the completed environmental report to the appraiser so that the appraiser may appropriately incorporate the environmental condition into the economic evaluation of the Property.

7. Ensure the appropriate risk management actions have been undertaken for identified environmental hazards.

8. Determine if an operations and maintenance (O&M) program is required and obtain an O&M program that is acceptable to Freddie Mac.

9. Assess the Borrower's ability to successfully execute an O&M program.

10. Keep abreast of local health, safety and environmental laws governing the Property.

### 61.2 Environmental assessment requirements

**a. Use of an environmental consultant (05/31/11)**

An environmental consultant that meets the qualifications and requirements set forth in Section 61.18 must perform the environmental assessment and complete the environmental report.

**b. Environmental report elements (10/14/16)**

1. **Age of environmental report**

   The environmental report must be dated within six months prior to the date on which the full underwriting package is delivered to Freddie Mac. At initial submission of the full underwriting package to Freddie Mac, the supporting database report and the site inspection must be dated within 30 days prior to the date of the environmental report. Freddie Mac may require that the environmental report be updated if the environmental report is dated more than six months prior to the date that the Letter of Commitment or adjustment letter for an early rate-lock application is issued.

2. **Methodology**

   The methodology for each environmental assessment must follow the requirements of Sections 61.5 through 61.16 for scope, protocol and issue resolution. In any instance where the environmental consultant determines the need for testing or corrective actions beyond the scope of the minimum requirements set forth in Sections 61.5 through 61.16, the Seller/Servicer must ensure that the scope of the environmental assessment incorporates the consultant's recommendations and is based on the consultant's professional judgment.

   At a minimum, the environmental consultant must inspect the following number of units:

   - For properties with less than 100 units, the greater of five units or 10 percent of all units
   - For properties with 100 units or more, the greater of 10 units or five percent of all units
• For properties with multiple buildings that were constructed over time or in phases, the sampling protocol above applies to each group of buildings that are of similar design and construction and those constructed within the same time period or phase.

• Regardless of the minimum sampling noted above, the environmental consultant’s inspection must be sufficient to test as required for asbestos, lead-based paint (LBP), radon and mold.

Any testing as required in Sections 61.5 through 61.16 must be conducted in accordance with applicable local, State and federal regulations and licensing requirements.

Section 61.3 summarizes the reporting requirements for an environmental assessment.

3. Permission of Borrower or property manager

The environmental consultant must conduct all property inspections with the permission of the Borrower or property manager.

4. Limitations of environmental report and reliance

The environmental report must clearly state any limiting conditions and the intended purpose of the report. In addition, the Seller/Servicer must direct the environmental consultant to include the following language in the environmental report:

“This report is for the use and benefit of, and may be relied upon by

a. the Seller/Servicer, Freddie Mac and any successors and assigns ("Lender");

b. independent auditors, accountants, attorneys and other professionals acting on behalf of Lender;

c. governmental agencies having regulatory authority over Lender;

d. designated persons pursuant to an order or legal process of any court or governmental agency;

e. prospective purchasers of the Mortgage; and

f. with respect to any debt (or portion thereof) and/or securities secured, directly or indirectly, by the Property which is the subject of this report, the following parties and their respective successors and assigns:

• any placement agent or broker/dealer and any of their respective affiliates, agents and advisors;

• any initial purchaser or subsequent holder of such debt and/or securities;
• any Servicer or other agent acting on behalf of the holders of such debt and/or securities;
• any indenture trustee;
• any rating agency; and
• any institutional provider from time to time of any liquidity facility or credit support for such financings.

In addition, this report, or a reference to this report, may be included or quoted in any offering circular, information circular, offering memorandum, registration statement, private placement memorandum, prospectus or sales brochure (in either electronic or hard copy format) in connection with a securitization or transaction involving such debt (or portion thereof) and/or securities."

5. **Industry standards for environmental assessment**

The environmental report must comply with industry standards such that the scope is no less than that established by the

- The latest version of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessment Process, and
- United States Environmental Protection Agency (EPA) regulations

### 61.3 Environmental report requirements (05/31/11)

Each environmental report must include information disclosed by a comprehensive inspection of the Property. This inspection and the report documentation must meet the requirements of Sections 61.5 through 61.16. For every recognized environmental condition that is identified, the consultant must provide a suggested remedy and cost for remediation or indicate if further study is needed. If costs cannot be identified without further analysis, the consultant must identify the scope of the analysis recommended as well as the estimated cost of such analysis.

Each report must include the following information:

a. **Property description (05/31/11)**
   
The Property description portion of the environmental report must contain the following:

1. A description of the Property, including the number of buildings, number of apartment units, amount of land, surface water bodies (such as ponds and streams), and major improvements (such as pools and play lots)
2. Identification of the use of adjoining properties and any commercial usage
3. Description of the sewerage disposal system, location of any floor drains and sump areas
4. Brief description of heating, ventilation and air conditioning (HVAC) system type
5. List of inspected areas, number of units inspected, building addresses and unit numbers

6. Weather conditions at the time of the inspection

b. **Scope of work (05/31/11)**

Each environmental report must describe the scope of work performed in analyzing the environmental hazards at the Property. This scope of work must include the risks evaluated, as listed in Section 61.5, and the methodology used, as described in Sections 61.6 through 61.16.

c. **Findings and results (12/15/16)**

Findings and results must be organized by covering all the risks in the order specified in Section 61.5. This portion of the environmental report must

- Note any findings and regulatory compliance requirements; advise if the findings are likely to create clean-up liability for the Property owner, or health and safety concerns for the tenants
- Reference any sampling results and operations and maintenance (O&M) programs
- Cite maps and photographs that were reviewed

If there is no evidence of a particular environmental hazard, the environmental consultant must state this information in the findings.

d. **Recommendations and O&M programs (12/15/16)**

Section II of the Environmental Site Assessment – Form 1103 must detail any recommendation for response to the presence of any environmental hazard (for example, the removal of the hazard and/or the implementation of an O&M program) and the estimated costs associated with any mitigation. The minimum requirements for an O&M program for asbestos or LBP are specified in Sections 61.6(f) and 61.9(f) respectively.

e. **Information to be provided with the report (05/31/11)**

The environmental report must identify the information the consultant reviewed and the sources and contacts that were consulted:

- For each information source, the environmental report must identify the contact's name, title, and agency and the date of contact. For databases, the environmental report must cite the database name, agency that supplied it, date of last update and other relevant information.
- The consultant must list all supplemental information the consultant reviewed, including but not limited to all documentation provided by the Borrower and documentation reviewed in accordance with Sections 61.6 through 61.16.
- The consultant must determine the number of standard-size color photographs necessary to illustrate the conditions discussed in the report. The consultant must provide the appropriate photographs and a description for each photograph.
• The consultant must provide a site plan(s) to adequately locate the Property and provide an indication of the site layout.

• The report appendix must include the resume of the individual who performed the on-site inspection. If a different individual reviews the report, the resume for that individual must be included as well.

d. **The Environmental Site Assessment – Form 1103 (07/01/14)**

Form 1103 must be completed and submitted as described in Section 61.17.

### 61.4 Acceptability of Mortgage purchase

a. **General requirements for acceptability for Mortgage purchase (02/07/06)**

Freddie Mac requires an environmental report for each Property that will act as security for a Mortgage. Both the environmental report and the environmental condition of the Property must be acceptable to Freddie Mac.

The environmental report must identify an appropriate resolution for each identified hazard. If remediation is required, the environmental report must identify the scope of work involved and the estimated cost.

Upon Freddie Mac's review of the completed environmental report, Freddie Mac may impose additional evaluation requirements.

b. **Remediation and retesting (09/01/16)**

If a Property fails to meet the standards set forth in this Chapter 61, the Borrower may, in some cases, be able to correct the deficiency through remedial actions and retesting of the Property. The environmental consultant must advise on, and submit a written endorsement of, the remediation and retesting plan.

1. If the Borrower already owns the Property, the Borrower must complete the remedial action and the Seller/Servicer must confirm its effectiveness before Freddie Mac will issue a Letter of Commitment or accept an early rate-lock application. The remediation must be completed in accordance with all regulatory requirements and good management standards. The Borrower must notify local authorities, if appropriate. In addition, Freddie Mac may require additional remedial actions.

2. Freddie Mac will consider issuing a Letter of Commitment or accepting an early rate-lock application before the completion of remedial work provided that the following conditions are met:

   • The remediation can be completed within 90 days after the Origination Date (or within a timeframe agreeable to Freddie Mac)

   • The environmental consultant, when submitting the written endorsement of the remediation and retesting plan, does each of the following:
Identifies how long the remediation will take, given the circumstances of the Property, the scope of the remediation, and the geography and climate at the Property’s location

States that the work will make the Property eligible under the environmental standards set forth in this chapter

- The Borrower has signed a fixed-fee contract, with a qualified firm, that provides a clear timeline for completion of the remediation. The Seller/Servicer must establish a Repair Reserve in the amount of at least 125 percent of the gross contract amount, or in the case of an SBL Mortgage, a Repair Reserve of at least 100 percent of the gross contract amount.

When the work is complete, the environmental consultant must state in writing that

- The work has been satisfactorily completed

- The Property meets the environmental eligibility standards

c. Operations and maintenance (O&M) program (06/29/17)

Freddie Mac may, in certain circumstances, purchase a Mortgage secured by a Property that contains certain environmental hazards, provided that the Borrower has or will have in place an acceptable O&M program to manage the risk. Freddie Mac must review and approve any O&M program. Throughout the life of the Mortgage, the Borrower must adhere to the O&M program, and the Seller/Servicer must ensure that the Property continues to meet Freddie Mac’s requirements.

While Freddie Mac has not established O&M guidelines for all possible environmental hazards, Freddie Mac O&M guidelines for asbestos-containing materials (ACM) are set forth in Section 61.6, guidelines for underground storage tanks are set forth in Section 61.8 and guidelines for lead-based paint (LBP) are set forth in Section 61.9.

The Borrower must identify the costs associated with the O&M program for a Property as a component of the property management costs and/or other operating expenses of the Property. These costs must reflect the need for personnel training, tenant notification, any equipment necessary to implement the program activities and added inspection costs.

The Seller/Servicer must determine that the O&M program responds to Freddie Mac requirements and that the Borrower is financially and organizationally capable of performing necessary O&M functions.

For all non-SBL Mortgages, Freddie Mac must approve any O&M program before the Origination Date.

61.5 Environmental issues to be evaluated (05/31/11)

Each environmental assessment must include an evaluation of the following potential environmental hazards or issues using the methodology described in this chapter:
1. Asbestos (see Section 61.6)
2. Hazardous materials (see Section 61.7)
3. Storage tanks (see Section 61.8)
4. Lead-based paint (LBP) (see Section 61.9)
5. Drinking water quality (see Section 61.10)
6. Polychlorinated biphenyls (PCBs) (see Section 61.11)
7. Prior use (see Section 61.12)
8. Neighborhood hazardous waste activity (see Section 61.13)
9. Mold (see Section 61.14)
10. Radon (see Section 61.15)
11. Superlien status (see Section 61.16)

If the environmental consultant finds on the Property any of the environmental hazards discussed in this chapter, the environmental report must state the corrective steps that must be taken.

61.6 Asbestos-containing materials (ACM)

a. ACM—environmental assessment scope of work (12/14/17)

The environmental consultant must inspect the Property for friable asbestos-containing materials (ACM). The purpose of the inspection is to discover whether significant quantities of ACM were used in the construction of the building or added subsequently and to determine the approximate quantity and condition of such materials.

As discussed in Guidance for Controlling Asbestos-Containing Materials in Buildings [U.S. Environmental Protection Agency (EPA), 1985], the environmental consultant must focus particular attention during the inspection on identifying friable asbestos-containing material in pipe and boiler insulation, texture-finished ceiling and wall materials (popcorn type), sprayed- or troweled-on structural coverings, floor and ceiling tiles, dry-wall/sheet rock, joint compound and siding and roofing materials.

Friable ACM (that is, material that releases fibers when subjected to finger pressure) is of greatest concern.

b. ACM—environmental assessment protocol (12/14/17)

The environmental consultant must inspect the Property for evidence of ACM, identify the location and condition of any suspect materials and collect samples of materials suspected of containing friable ACM, regardless of location. The opinion that the Property contains no ACM cannot be based on the Property’s construction date.
A qualified professional must analyze the samples utilizing polarized light microscopy and dispersion staining. The number and quantity of samples must be sufficient to provide meaningful results, with samples taken throughout the apartment building or complex. If friable ACM is suspected within the residential units, the environmental consultant must take bulk samples from the greater of five units or 10 percent of all units, not to exceed 12 units. However, if undamaged friable ACM is suspected in an encapsulated condition, then a more limited sample may be appropriate, as determined by the consultant. In any case, if undamaged, encapsulated wall and ceiling joint compound is a suspect material, samples of the joint compound need not be taken.

c. **ACM—issue resolution by environmental consultant (12/14/17)**

If friable ACM is found in the interior of the building, the environmental report must specifically state:

- Whether an ACM inventory is needed
- Which materials must be removed and the cost of such removal
- Which materials must be repaired and the cost of such repairs

The consultant must substantiate in the environmental report the reason for not removing any friable ACM, and must recommend an O&M program for the friable ACM that the consultant recommends be allowed to remain in place.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

If previous ACM abatement work was performed improperly, the environmental consultant must identify any resultant contamination.

d. **ACM—issue resolution by Borrower (12/14/17)**

In general, the Borrower must remove all friable ACM, including sprayed-on "popcorn-type" ceiling textures. Undamaged friable ACM may remain in place if the Borrower institutes an O&M program developed by an environmental professional that is acceptable to Freddie Mac, and only if all the following conditions exist:

- The concentration or amount of asbestos in the material must be less than 10 percent by weight.
- The friable ACM must be in good condition as determined by the environmental consultant.
- The friable ACM must be sufficiently covered with paint or other material to help prevent the future release of asbestos into the air.

Non-friable ACM and undamaged, fully encapsulated wall and ceiling joint compound that is assumed to contain asbestos may remain in place. Borrowers must test all suspect materials before any alterations or renovations.
Under most circumstances, before the Origination Date, the Borrower must remove all friable ACM that is required to be removed. Freddie Mac will consider agreeing to removal of the ACM after the Origination Date only under certain circumstances. Examples in which this would be acceptable include qualified ACM abatement/removal firms not being immediately available to remove the ACM, or the extent or location of the ACM in the building does not present an imminent life safety hazard.

In order for the ACM removal to be performed after the Origination Date, the conditions in Section 61.4(b)(2) must be met. In addition, Freddie Mac will require the following:

1. A binding, fixed-fee ACM-removal contract from a qualified ACM abatement/removal firm that provides for the firm to remove the ACM within 90 days after the Origination Date (or within a timeframe agreeable to Freddie Mac), in strict accordance with prudent industry standard practices and all federal, State and local requirements governing the removal, transport and disposition of ACM

2. A Repair Reserve in the amount of at least 125 percent of the cost of removal, or in the case of an SBL Mortgage, a Repair Reserve of at least 100 percent of the gross contract amount

3. Before the funds are released from the Repair Reserve, proper evidence provided by the Borrower to the Seller/Servicer that the ACM removal was performed by properly trained individuals in accordance with prudent industry standard practices and complied with all federal, State and local requirements governing the removal, transport and disposition of ACM

e. ACM—environmental report documents (05/31/11)

The environmental report must include tabulations of the type of material tested, exact location of the sample, condition and approximate quantity of the material, and asbestos concentration. If the samples were positive, the environmental report must include photographs of typical conditions of the areas tested. The environmental consultant must attach a copy of the laboratory analytical report to the environmental report.

If the Borrower undertakes ACM abatement or removal prior to the Origination Date, the Borrower must submit proper documentation to the Seller providing evidence that the work was performed by properly trained individuals in accordance with prudent industry standard practices and all federal, State and local requirements. For all programs and products, the Seller must submit this documentation to the Applicable Freddie Mac Multifamily Regional Office. TAH Seller/Servicers must submit this documentation to the Multifamily TAH Underwriter.

f. ACM—O&M program (12/14/17)

After inspecting and testing a Property for ACM, the environmental consultant may need to develop an asbestos O&M program. The principal objective of an asbestos O&M program is to minimize exposure of building occupants to friable asbestos fibers.

The environmental consultant must develop a specific O&M program for the Property and tailor it to the standard management practices at the Property and the types of ACM present.
An essential component of an ACM O&M program is the appointment of an asbestos program manager, usually a building engineer, superintendent or facilities manager. This person must be properly qualified, through training and experience, and be actively involved in all asbestos-related activities at the Property, including inspections, O&M activities and removal and repair of ACM.

A second key component of an ACM O&M program is an inventory of the ACM. The environmental consultant must record in the O&M program the specific locations of ACM, the condition and the potential for disturbance.

1. **Standard ACM O&M program requirements**

After the appointment of the asbestos program manager and the completion of the ACM inventory, the Borrower must implement the O&M program. An ACM O&M program must include the following elements:

a. **Notification**

   A program to inform workers, tenants and building occupants not to disturb or damage existing ACM

b. **Surveillance**

   Regular inspections of the condition of the ACM

c. **Controls**

   A permit system or other work control program to control activities that might disturb ACM

d. **Work practices**

   Procedures to avoid or minimize fiber release during activities affecting ACM

e. **Recordkeeping**

   Documentation of O&M activities

f. **Worker protection**

   Medical and respiratory protection programs, as applicable

g. **Training**

   Training for the asbestos program manager, custodial and maintenance staff

61.7 Hazardous materials

a. Hazardous materials—environmental assessment scope of work (02/07/06)
   The environmental consultant must physically inspect the buildings and grounds of the Property for evidence of potential hazardous material contamination.

b. Hazardous materials—environmental assessment protocol (09/01/16)
   Areas to be inspected include, but are not limited to
   1. Stained or discolored soil
   2. Graded areas that are not associated with construction projects
   3. Sparse, stressed or dead vegetation
   4. Hazardous waste or hazardous material storage drums or other containers
   5. Discolored surface water
   6. Unusual or noxious odors
   7. Stained, corroded or malodorous drains
   8. Roads or pathways with no apparent outlet or purpose
   9. Groundwater-monitoring wells

   The environmental consultant must identify in the environmental report any hazardous chemicals stored or used at the Property. Such chemicals include pesticides, cleaning compounds, boiler water treatment chemicals and swimming pool water treatment chemicals.

   In the environmental report, the environmental consultant must describe in detail any physical evidence of hazardous materials, including
   • Sizes and locations of stains and graded areas
   • Number, size, condition and any label information on storage containers
   • Location and nature of unusual odors

   If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. Hazardous materials—issue resolution by environmental consultant (02/07/06)
   If the environmental consultant finds evidence of hazardous material contamination, the environmental report must describe the additional steps needed to remediate the problem.
If the environmental consultant finds that the contamination of the Property exceeds either applicable government standards or the concentrations listed in the following table, the environmental report must describe the steps needed to remediate the contamination and the associated costs.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration -- PPM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metals</strong></td>
<td></td>
</tr>
<tr>
<td>In soil</td>
<td>In groundwater</td>
</tr>
<tr>
<td>Chromium</td>
<td>100</td>
</tr>
<tr>
<td>Zinc</td>
<td>350</td>
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<td>Lead</td>
<td>100</td>
</tr>
<tr>
<td>Copper</td>
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</tr>
<tr>
<td>Nickel</td>
<td>100</td>
</tr>
<tr>
<td>Boron</td>
<td>--</td>
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<tr>
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<td>--</td>
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<tr>
<td>Silver</td>
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</table>

<table>
<thead>
<tr>
<th>Organic</th>
<th>Concentration -- PPMs</th>
</tr>
</thead>
<tbody>
<tr>
<td>In soil</td>
<td>In groundwater</td>
</tr>
<tr>
<td>Total Volatile Organic Compounds (VOCs)</td>
<td>1</td>
</tr>
<tr>
<td>Total Hydrocarbons</td>
<td>100</td>
</tr>
<tr>
<td>Total Petroleum Hydrocarbons</td>
<td>100</td>
</tr>
<tr>
<td>Total Organic (volatiles and base neutrals)</td>
<td>--</td>
</tr>
</tbody>
</table>

**d. Hazardous materials—issue resolution by Borrower (05/31/11)**

In general, the Borrower must remove documented contamination that exceeds federal or State cleanup standards or is in excess of the levels indicated in the table in Section 61.7(c). The Borrower must report the findings and the remediation actions to the appropriate governmental authorities and must obtain an indication of satisfactory completion from the same authority.

**e. Hazardous materials—environmental report documents (02/07/06)**

The environmental consultant must attach to the environmental report photographs of hazardous material contamination or areas where odors were noted.
The environmental consultant must document and photograph the condition of the storage areas and note the general housekeeping conditions. The environmental consultant must include the documentation, photographs and notes with the environmental report.

61.8 Storage tanks

a. Storage tanks—environmental assessment scope of work (02/07/06)

The environmental consultant must determine whether above-ground storage tanks (AGTs) or underground storage tanks (USTs) exist or have existed in the past on the Property and whether there is any indication of leaking or prior discharges.

b. Storage tanks—environmental assessment protocol (09/01/16)

The environmental consultant must

1. Inspect the Property for evidence of AGTs and USTs, including
   a. Retaining walls in basements behind which storage tanks may be located
   b. Vaults that may contain tanks
   c. Manhole covers associated with USTs
   d. Fill or vent pipes
   e. UST-sized patched areas of asphalt or cement
   f. Pumping equipment
   g. Manometers or other volumetric indicators
   h. Petroleum or chemical odors in basements
   i. Leaks of petroleum or other products through cracks in exterior or retaining walls

2. Contact local officials, such as fire marshals or fire prevention officials, because these officials are likely to have records of the locations of USTs in the area

3. Review information held by the State agency responsible for the inventory of UST registrations mandated by the Resource Conservation and Recovery Act (RCRA), generally the office of the State fire marshal (This information may be available via database search or telephone inquiry.)

4. Review available fire insurance maps (These maps are detailed scale drawings, showing a history of the location and use of buildings and structures on a site and often show the existence of USTs.)
5. Check information provided by the national database entitled Leaking Underground Storage Tank (LUST) to determine whether the Property is included in the listing.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. **Storage tanks—issue resolution by environmental consultant (02/07/06)**

If the environmental consultant discovers a storage tank, the environmental consultant must determine whether the tank is currently in use. Even if the tank is not currently in use, the environmental consultant must determine whether any hazardous material has leaked from the tank.

The environmental consultant must provide sufficient evidence (including a review of historical tightness tests) to indicate that the tanks on the Property have never leaked, or the environmental consultant must perform subsurface borings to identify potentially contaminated soils associated with the tank. If the tank was installed on or after January 1, 1989, and routine tightness tests have been performed, including one within six months of the date of the property inspection, the environmental consultant may recommend against subsurface borings.

The environmental consultant must determine if an unused tank must be removed or abandoned in place in accordance with applicable federal and State requirements. The environmental report must include as much information as possible to support the decision either to remove or to abandon the tank. This information must include the location, installation date, contents and size of the tank.

d. **Underground storage tanks—issue resolution by Borrower (05/31/11)**

Unused underground storage tanks (USTs) must be removed or abandoned in place in accordance with applicable federal, State and local requirements.

For any active UST, the Borrower must obtain a tightness test to assess the stability of the tank vessel and determine if there are any active leaks. The manner of testing must comply with American Society for Testing and Materials (ASTM) standards and applicable State law. Freddie Mac may waive the tightness test if an acceptable tightness test has been performed within six months of the date of the property inspection.

The Borrower must monitor and maintain USTs in accordance with an O&M program as defined in Section 61.8(f) as well as the requirements of all federal, State and local authorities.

e. **Storage tanks—environmental report documents (02/07/06)**

The environmental consultant must obtain and attach to the environmental report copies of documents relating to compliance with applicable regulations (such as registration, tank tightness test results, records of monthly monitoring or records of installation of corrosion protection systems).
f. **Storage tanks—O&M program (05/31/11)**

For any tank remaining in use, the Borrower must institute an O&M program to provide that the Borrower will

- Implement precautionary measures prescribed by the environmental consultant to ensure that spills do not occur

- For all tanks, complete periodic tightness testing complying with ASTM standards or as required by applicable State law. For all USTs, Freddie Mac requires these tests to be conducted at intervals not to exceed every three years. The Borrower must report all test results to the Seller/Servicer and/or Freddie Mac in accordance with the terms of the O&M program

- Report all material spills to applicable authorities and to Freddie Mac. Timely remediation must be conducted in accordance with requirements imposed by applicable authorities, and cleanup must be achieved such that contaminant concentrations are below the levels identified in Section 61.7(c) at a minimum

All tanks that become inactive must be removed or abandoned in place in accordance with requirements imposed by applicable authorities.

61.9 **Lead-based paint (LBP)**

a. **LBP—environmental assessment scope of work (05/31/11)**

The environmental consultant is not required to test for LBP in a Property built in 1978 or later.

A Property built before 1978 is considered to contain LBP unless testing proves otherwise. If the Property's original certificate of occupancy or legal equivalent was issued before January 1, 1978, Freddie Mac considers the Property to be built before 1978 (pre-1978 Property).

For a pre-1978 Property, the Borrower may choose to test for LBP or to presume LBP is present and implement an O&M program to manage the hazard in place in accordance with the requirements of Section 61.9(f). Regardless of which course of action the Borrower chooses (testing for LBP or implementing an O&M program), the environmental consultant must comment on the paint condition for all pre-1978 Properties. If the environmental consultant conducts LBP testing, it must do so in accordance with the minimum standards set forth in Section 61.9(b).

All pre-1978 Properties must satisfy applicable federal, State and local LBP laws and ordinances.
b. **LBP—environmental assessment protocol (09/01/16)**

The environmental consultant must follow the testing protocols in this section as a minimum standard and report on the condition of the painted surfaces observed.

The following testing methods are acceptable:

- Use of X-ray fluoroscope (XRF) technology (which indicates a presence of lead exceeding 1.0 mg/cm²)
- Approved laboratory analysis of scraping samples (Samples must be sufficient to produce meaningful results.)

The environmental consultant must test a representative sampling of painted surfaces of both the units and the common areas. Suggested surfaces to be tested include:

1. Windows, unless replaced with metal windows having a factory-applied finish
2. Window frames and sills
3. Doors and door frames
4. Painted woodwork
5. Walls
6. Balcony railings
7. Rails in common areas and staircases
8. Other painted surfaces that could be "chewable" to a small child

The required minimum number of samples depends on the size of the Property:

- For a Property with 100 or fewer units, the environmental consultant must take the following samples:
Ten common area samples

Samples from the greater of 10 percent of the living units or five living units (In each living unit sampled, the environmental consultant must take at least three LBP samples.)

For a Property with more than 100 units, the environmental consultant must take the following samples:

- Ten common area samples
- Samples from the greater of 5 percent of the living units or 10 living units (In each living unit sampled, the environmental consultant must take at least three LBP samples.)

The environmental consultant must take paint samples using the following protocol for the minimum number of samples:

- Entrances/hallways
  - One paint sample from one wall
  - One trim/railing paint sample (floor trim, chair rail or crown moldings or painted railings)
  - One paint sample from painted floor/step surfaces
  - One paint sample from any fire doors or door trim (Freddie Mac assumes the trim and door are painted with the same material.)
  - One paint sample from one painted windowsill (If the windows have been replaced with metal windows with a factory-applied finish, no sampling is necessary.)

- Apartment units
  - One paint sample from the front door or front door trim (Freddie Mac assumes the trim and door are painted with the same material.)
  - One paint sample from one windowsill (If the windows have been replaced with metal windows with a factory-applied finish, no sample testing of the sill is necessary.)
  - One paint sample from a wall surface in each room
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- One paint sample from any surface with evidence of peeling or chipping paint

- Resident community facilities
  - Paint samples from common areas, collected in a manner similar to that of an individual unit (Common areas include community/recreation rooms, swimming pool clubhouses and bathhouses.)
  - In each laundry room, one paint sample each from one wall, the floor and window or windowsill
  - One paint sample from any storage area floors and any painted storage bin doors

- Exterior surfaces and equipment
  - One paint sample from playground equipment
  - One paint sample from hand railings
  - One paint sample from painted parking bollards and parking stops

Properly trained personnel must perform all LBP testing, and the environmental consultant must supervise all such testing. To the extent required by federal, State or local law or the regulations of the EPA, individuals and firms collecting paint samples or conducting on-site testing must meet the relevant certification requirements.

The environmental consultant must perform LBP testing using state-of-the-art techniques and in accordance with manufacturer’s recommendations. Each laboratory used to conduct LBP analysis must be accredited under the EPA’s National Lead Laboratory Accreditation Program.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. LBP—issue resolution by environmental consultant (02/07/06)

If LBP testing is conducted, the environmental consultant must conclude that the testing indicates no hazard (an acceptable level of LBP is defined as less than 0.5 percent by weight as measured by laboratory analysis or 1.0 mg/cm² as measured by XRF) or make one of the following recommendations:
• Additional environmental investigation of the LBP hazard

• LBP remediation

• An O&M program

• A combination of these options

The environmental consultant's recommendations must be based upon (among other factors)

• Pervasiveness of the LBP

• Concentration levels of the LBP

• Location of the LBP (that is, on which surfaces)

• Condition of the LBP surfaces in the Property

d. LBP—issue resolution by Borrower (01/31/14)

Freddie Mac does not require any specific Borrower actions if

• The Property was built in 1978 or later, or

• A “lead free” certificate has been issued by a qualified environmental professional in accordance with EPA, HUD or State requirements, and the environmental consultant has reviewed all supporting documentation, or

• All painted surfaces have been properly tested as specified in Section 61.9(a) and found to contain acceptable levels of LBP (less than 0.5 percent by weight as measured by laboratory analysis or 1.0 mg/cm² as measured by XRF), and

• The Property satisfies State and local LBP laws.

For untested Properties built prior to 1978 and for Properties with documented LBP, the Borrower must maintain all painted surfaces according to an O&M program that meets the requirements set forth in Section 61.9(f).
e. LBP—environmental report documents (01/31/14)

The environmental consultant must attach to the environmental report:

- All test results and photographs of damaged paint conditions, and
- A copy of the "lead free" certificate, if applicable.

f. LBP—O&M program (02/07/06)

The environmental consultant must certify that the O&M program is appropriate to address the LBP hazard of the particular Property. In establishing an appropriate O&M program for consideration by Freddie Mac, the environmental consultant must consider the following factors:

- Age of the Property
- Condition of the painted surfaces
- Type of windows, window frames, doors and door frames

The environmental consultant must include the following components in the LBP O&M program:

- Surveillance
  Regular inspections of the condition of the LBP
- Controls
  A permit system or other work control program to control activities that might disturb LBP
- Work practices
  Procedures to avoid or minimize disturbance of LBP
- Recordkeeping
  Documentation of O&M activities
• Worker protection

Medical and respiratory protection programs, as applicable

• Training

Training for the O&M program manager, custodial and maintenance staff

In particular, an LBP O&M program must include the following:

a. The program must provide for training of all maintenance staff persons, supervisors and property managers who may perform any of the tasks included in the O&M program. Maintenance supervisors and property managers must attend at least one day of LBP training and must maintain certification of successful course completion.

The trainees may complete any training program that meets the following requirements:

• Employs an EPA- or U.S. Department of Housing and Urban Development (HUD)-model training curriculum

• Is accredited by the EPA or the State for training abatement workers and/or supervisors

• Is sponsored by an appropriate State or local agency

b. A properly trained individual (as described in item "a" of this section) must complete a thorough initial inspection of the entire complex, including common areas and all occupied and vacant units to assess the condition of the painted surfaces.

c. The property manager must establish a re-inspection schedule for the term of the Mortgage. The schedule must include a re-inspection of each living unit at least annually. The inspector must perform a thorough wet wipe-down of all horizontal surfaces at each re-inspection, even if the painted surfaces are in excellent condition.

d. The Borrower must have any damaged surfaces remediated using appropriate methods that will not create a release of LBP chips or dust into the living space.
e. The remediator must thoroughly wipe all horizontal surfaces with a wet cloth or sponge, changing the wash water often. Horizontal surfaces of greatest concern include windowsills and hard flooring near windows.

f. The Borrower must give the highest priority to the scheduling of repair work in dwelling units occupied by children aged six or younger, or by pregnant women.

61.10 Drinking water quality

a. Drinking water quality—environmental assessment scope of work (02/07/06)

For a Property serviced by a municipal water system, testing is not required.

b. Drinking water quality—environmental assessment protocol (06/27/19)

The environmental consultant must determine if the Property is serviced by a municipal water system and must identify and verify the drinking water supplier for the Property. If the Property is not serviced by a municipal water system, the environmental consultant must determine if the drinking water is in compliance with applicable federal, State, and local requirements, which will include reviewing test results that are no more than 180 days old at the time of the site visit. If the consultant cannot determine the compliance of the water system, then the environmental consultant must obtain and analyze drinking water samples for the Property that include a first draw sample. The environmental consultant must test and compare these samples to State drinking water quality standards to determine whether compliance is currently achieved. If no State program exists, Federal Safe Drinking Water Act standards apply.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. Drinking water quality—issue resolution by environmental consultant (05/31/11)

For Properties not serviced by a municipal water system, the environmental consultant must analyze available water test results, determine the adequacy of past testing and verify that the water meets the standards identified in Section 61.10(b). If previous testing was insufficient, inconclusive or revealed that the water quality is below the identified standards, the environmental consultant must identify the need for additional testing as well as recommended remedial actions.

d. Drinking water quality—issue resolution by Borrower (10/14/16)

If a Property is not serviced by a municipal water system, the Borrower must ensure the Property meets all of the following requirements:

- The lateral water supply line must be "stubbed" at the Property's boundary.
- The current water supply must have been tested and found to be in compliance with all federal, State and local drinking water requirements.
• The Borrower must provide the cost estimate of the connection or conversion to the municipal water system, as prepared by a contractor capable of performing the work.

Freddie Mac will require the Borrower to establish a Reserve of at least 125 percent of the estimated cost to convert to municipal water, or in the case of an SBL Mortgage, converting to municipal water must be listed in the SBL Physical Risk Report as a Priority Repair.

Regardless of the water source, lead associated with water service lines, joints and fixtures can impact water quality. The Borrower must provide a tenant-awareness package to current and future tenants, to include a document that discusses the potential risks associated with lead. The U.S. Environmental Protection Agency provides information on lead poisoning in drinking water on its website at www.epa.gov.

e. Drinking water quality—environmental report documents (02/07/06)

The environmental consultant must append the water testing data to the environmental report.

61.11 Polychlorinated biphenyls (PCBs)

a. PCBs—environmental assessment scope of work (12/14/17)

The environmental consultant must inspect the Property for equipment that may contain significant amounts of PCBs, such as hydraulic elevators and electrical transformers and capacitors. Fluorescent light ballasts need not be inspected.

While the manufacture of PCBs was prohibited after July 2, 1979, non-PCB equipment can become contaminated (defined as containing more than 50 parts per million (PPM), but less than 500 PPM) with PCBs during servicing (for example, servicing transformers and oils can become contaminated from servicing other PCB-containing transformers), and thus the consultant may not assume that such equipment does not contain PCBs.

If the environmental consultant finds PCB-containing equipment on the Property, the environmental consultant must determine who owns the PCB-containing equipment and whether the equipment is leaking.

b. PCBs—environmental assessment protocol (12/14/17)

If there is any equipment on the Property that was manufactured on or before July 2, 1979, and

• The equipment is not owned by a utility, then the environmental consultant must determine the PCB content.

• The equipment is owned by a utility, then the environmental consultant must

  o Confirm ownership with the local utility via a documented phone call or a written statement,

  o Attempt to determine the PCB content of any equipment,
o Report to the utility any leaks associated with any equipment that may contain PCBs (documented or unknown), and

o Develop an appropriate cleanup plan.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. **PCBs—issue resolution by environmental consultant (12/14/17)**

If the environmental consultant finds PCBs in excess of 50 parts per million (PPM) in nonutility-owned equipment on the Property, the consultant must

- Report the PCB spill or leak to the State or local authorities and identify appropriate cleanup action, in accordance with the Toxic Substance Control Act (TSCA) Spill Cleanup Policy, 40 CFR Section 761.120 et seq.

- Make a recommendation as to whether the equipment must be removed or managed in place with an O&M program. Freddie Mac may allow the PCB-containing equipment not owned by a utility to remain on the Property subject to a documented O&M program.

At a minimum, any O&M program for PCBs must include a requirement for frequent visual inspections of each piece of equipment for indications of leakage, an issues log, and appropriate contact information to report detected leaks. The recommendation must be based on the type, size, age, condition, location and ownership of the equipment, as well as any other pertinent factors.

d. **PCBs—issue resolution by Borrower (12/14/17)**

The Borrower must remove any equipment as recommended by the environmental consultant. If contamination is documented, the Borrower must remediate the contamination before the Origination Date.

The Borrower must manage in-place any property-owned PCB-containing equipment remaining on the Property, in accordance with an O&M program.

e. **PCBs—environmental report documents (02/07/06)**

The environmental consultant must attach to the environmental report any documentation of ownership or PCB content, test results and photographs of representative pieces of leaking equipment.

### 61.12 Prior use

a. **Prior use—environmental assessment scope of work (02/07/06)**

The environmental consultant must determine the prior uses of the Property to a period when the Property was in its natural state or to 1940, whichever is earlier.
The environmental consultant must focus particular attention on identifying past owners, occupants or operations at the Property that may have generated, treated, stored or disposed of solid, hazardous or radioactive wastes, substances or materials.

The environmental consultant must determine from its inspection and information sources whether there is any indication of

- Prior uses associated with petroleum products (other than home heating oil for consumption on the premises), or
- Prior use or generation of hazardous or radioactive materials or storage of waste products

b. Prior use—environmental assessment protocol (09/01/16)

To come to a definitive determination, the environmental consultant must investigate relevant information sources, to include, but not be limited to, the following:

1. Fire insurance maps [see Section 61.8(b)]
2. Recorded land title records
3. Historic aerial photographs (These photographs can be used to identify property boundaries, structures and indications of past usage. These photographs may also help to identify evidence of hazardous material contamination that may have occurred at the Property. Ideally, the scale of the photographs should not exceed 200 feet per inch.)
4. Historic topographic maps (These maps can be used to identify property boundaries, structures and indications of past usage.)
5. Interviews with zoning, planning and other local officials
6. Building permits and other pertinent records
7. Interviews with persons familiar with the Property for their specialized knowledge, including documentation regarding proceedings involving the Property, and identification of environmental issues known to have diminished the value of the Property
8. Soil and ground water sampling, as appropriate
9. Local street directories
10. Property tax files

The environmental consultant must request information regarding environmental liens that pertain to the Property filed under federal, State or local law and document such lien in the report.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.
c. Prior use—issue resolution by environmental consultant (02/07/06)

The environmental consultant must comment on the following and explain the rationale for the opinion:

- The impact of the prior use on the Property
- The extent to which value or occupancy of the Property could be or has likely been impacted by the prior use

If the environmental consultant discovers or suspects a prior use that suggests the presence of hazardous material contamination of the Property, the environmental consultant must perform appropriate investigation (possibly using soil borings) to determine whether the Property is contaminated.

d. Prior use—issue resolution by Borrower (05/31/11)

In general, the Borrower must remove documented contamination that exceeds federal or State cleanup standards or is in excess of the levels indicated in the table in Section 61.7(c). The Borrower must report the findings and remediation actions to the appropriate governmental authorities and must obtain an indication of satisfactory completion from the same authority.

e. Prior use—environmental report documents (02/07/06)

The environmental consultant must document all contacts and provide copies of all maps, photographs and previous testing results that were reviewed.

61.13 Neighborhood hazardous waste activity

a. Neighborhood hazardous waste activity—environmental assessment scope of work (10/07/08)

The environmental consultant must determine the potential impact on the Property from hazardous waste activities at neighboring properties.

The environmental consultant must review the most recent information available on waste sites. The review must meet the most recent standards established by the American Society for Testing and Materials (ASTM), as modified from time to time.

b. Neighborhood hazardous waste activity—environmental assessment protocol (09/01/16)

The environmental consultant must review, at a minimum, the following data sources:

1. National Priorities List (NPL or Superfund)—an EPA database of uncontrolled or abandoned hazardous waste sites most likely to have an adverse effect on human health or the environment, identified for priority remedial actions under the Superfund program
2. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)—an EPA database of potential NPL sites that lists uncontrolled or abandoned hazardous waste sites and the CERCLIS No Further Remedial Action Planned (NFRAP) database for the Property and adjoining properties.


4. Toxic Release Information System (TRIS)—an EPA database of facilities required to report estimated releases of toxic chemicals to the environment under Section 313 of the Superfund Amendments and Reauthorization Act, 42 USC 1101 et seq.

5. Facility Index System (FINDS)—list of sites or facilities that the EPA has investigated, reviewed or become aware of in connection with various regulatory programs.

6. Appropriate State and local solid and hazardous waste databases.

7. Leaking Underground Storage Tank (LUST) database for the Property and adjoining properties.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. Neighborhood hazardous waste activity—issue resolution by environmental consultant (02/07/06)

The environmental consultant must determine the compliance status of all sites found and must address significant violations in the findings and results portion of the environmental report.

The environmental consultant must determine from its inspection whether any identified neighborhood site has impacted, or is likely to impact, the Property. In the environmental report, the environmental consultant must detail how the determination was made and must make appropriate recommendations if further action is required.

d. Neighborhood hazardous waste activity—environmental report documents (02/07/06)

The environmental consultant must document its database search and attach that documentation to the environmental report.

61.14 Mold

a. Mold—environmental assessment scope of work (02/07/06)

The environmental consultant must investigate for hazards associated with Mold and report on all findings related to the evidence of Mold, water intrusion and conditions that could lead to Mold growth.
b. **Mold—environmental assessment protocol (09/01/16)**

   The environmental report must include evidence that the environmental consultant has completed the following tasks:

   1. Searched for visual and olfactory evidence of Mold in all areas inspected

   2. Made inquiries of the property owner, manager or other knowledgeable property staff regarding whether there has been Mold as a result of water intrusion or leaks or whether there have been any tenant complaints regarding health problems or musty odors

   3. Inspected all areas reported to have evidence of Mold as a result of water intrusion or leaks

   4. Determined the potential impact that existing Mold may have on the Property

   If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. **Mold—issue resolution by environmental consultant (12/14/17)**

   If the environmental report indicates that there is evidence (observed or reported) of substantive current or past water intrusion or mold or that the climate, geography or geology are indicative of water intrusion problems, the environmental consultant must:

   - Recommend that the source of all current and past water intrusion be identified and corrected.

   - Recommend that any observed substantive Mold issues be remediated in accordance with EPA guidelines for cleanup and remediation.

   - Make a professional judgement if a Moisture Management Plan (MMP) is required to address potential ongoing water and mold issues.

d. **Mold—issue resolution by Borrower (12/14/17)**

   In general, prior to the Origination Date, the Borrower must correct all issues related to water intrusion, leakage and Mold. If the Borrower has not corrected these issues prior to the Origination Date, Freddie Mac will require the Borrower to establish a Repair Reserve for this correction, cleanup and remediation.

   In addition,

   - If recommended by the environmental consultant, the Borrower must have established a Moisture Management Plan prior to the Origination Date and in accordance with the requirements set forth in Section 8.3(a) or Section 8SBL.3(a), as applicable.

   - A Property with evidence of water intrusion, leakage or Mold is subject to
o The Increased Scrutiny for Moisture or Mold Issues requirements set forth in Section 8.3(b) or Section 8SBL.3(b), as applicable, and

o The Special Moisture or Mold Issues Inspection requirements set forth in Section 8.3(c) or Section 8SBL.3(c), as applicable

e. Mold—environmental report documents (02/07/06)

The environmental consultant must attach to the environmental report photographs of Mold evidence.

61.15 Radon

a. Radon—environmental assessment scope of work (02/28/20)

The environmental consultant must either test for radon, or provide a justification for not testing and render a professional opinion that:

- The Property is unlikely to have radon concentrations above actionable levels in its residential areas, and

- The Property is in compliance with all applicable laws and regulations related to radon.

The environmental consultant may conclude that testing is not required, based on a physical inspection of the Property, the characteristics of the buildings and other valid justifications. Other valid justifications may include any combination of data, research, experience, etc., provided all are consistent with standard industry practices and must be sufficient for the consultant to conclude that radon above actionable levels is unlikely to be a risk at the Property.

Freddie Mac will not accept use of the Environmental Protection Agency radon map designation as the sole or primary reason for not testing.

If the loan is a refinance of an existing Freddie Mac Mortgage or the acquisition of a Property which has an existing Freddie Mac Mortgage, the consultant may choose to rely on previous testing, provided it was completed in compliance with Freddie Mac guidelines, applicable laws and regulations, and the Borrower certifies that there have been no substantive changes to the Property that would impact potential vapor intrusion into the residential spaces.

Should the environmental consultant determine that testing is warranted, then testing must be completed in compliance with all applicable laws, codes and regulations as well as the requirements of Section 61.15(b). The environmental consultant must review all test results and render an opinion. If test results reveal elevated radon levels, the environmental consultant must provide resolution as required in Sections 61.15(c) and/or 61.15(d). If the jurisdiction in which the Property is located does not have a policy regarding radon testing, then, at a minimum, the environmental consultant must perform the testing based on guidance provided in Section 61.15(b) below.
b. Radon—environmental assessment protocol (12/17/19)

At a minimum, the environmental consultant must have tested the Property for the presence of radon or must have provided oversight for testing done by others within six months prior to the Origination Date. If testing cannot be completed within this time frame, then Freddie Mac may allow for testing to be completed after the Origination Date.

1. Location of units for testing

The radon testing must be conducted in units on the lowest habitable floor.

2. Number of units tested

The number of units on the lowest habitable floor tested must be the greater of

- A minimum of 10 percent of the units on the lowest habitable floor, or
- One unit per building

3. Radon testing methods

The following radon testing methods are acceptable:

- Use of short-term or long-term alpha-track detectors with a minimum residence time of 48 hours
- Use of short-term charcoal canister detectors with a residence time of 48 to 96 hours

4. Testing conditions

a. Room selection for testing

The test is to be conducted in rooms that are likely to be used regularly, such as family rooms, living rooms, playrooms, dens, or bedrooms (but not kitchens, bathrooms, laundry rooms, or hallways that are used only periodically). Freddie Mac does not require radon testing for public areas that will be used only periodically.

b. Closed building conditions

The environmental consultant must conduct short-term tests under closed-building conditions with (to the extent reasonable) all windows, outside vents, and external doors closed (except for normal entrance and exit use) for 12 hours prior to the radon test and during the radon test. Normal entrance and exit use includes opening and closing a door. An external door must not be left open for more than a few minutes.

c. Air exchange conditions during testing

Internal-external air exchange systems (other than a furnace), such as high-volume attic and window fans must not be operating during radon tests and for at least 12 hours before measurements are initiated. Air conditioning systems that recycle interior air may...
be operating. Normal operation of permanently installed air-to-air heat exchangers may also continue during closed-building conditions.

If the environmental consultant determines that remediation is necessary, the requirements of Section 61.4(b) apply.

c. Radon—issue resolution by environmental consultant (02/28/20)

If the initial radon tests indicate radon concentrations less than 4 pico Curies per liter of air (4 pCi/L), Freddie Mac does not require further screening.

If any of the initial tests indicate radon concentrations greater than or equal to 4 pCi/L, then at a minimum, the environmental consultant must conduct a long-term (at least 91 days in duration) alpha-track test in the same area(s) in which the initial short-term test was conducted. The level of additional testing recommended by the consultant should be commensurate with the risk identified by the short-term test results.

If the long-term alpha-track testing subsequently yields results below 4 pCi/L, the environmental consultant must state in writing that the Property meets environmental eligibility standards of radon concentrations below 4 pCi/L.

If the results of any of the long-term alpha-track radon tests indicate concentrations greater than or equal to 4 pCi/L in any habitable area of the Property, the environmental consultant must include in the environmental report a description of what mitigation methods will be used to reduce these concentrations to below 4 pCi/L. The consultant must review any mitigation contract(s) and comment on the appropriateness of the scope, cost and schedule for the required work.

If long-term alpha-track testing cannot be completed prior to the Origination Date, the consultant must provide a written estimate of the cost of mitigation that would be necessary if the Property is determined by testing to have radon concentrations greater than or equal to 4 pCi/L. In this situation, Freddie Mac may, in its sole discretion, require the Seller/Servicer to establish a Repair Reserve in the amount of 125 percent of the estimated cost of mitigation.

d. Radon—issue resolution by Borrower (12/17/19)

Freddie Mac requires that a Property with long-term alpha-track test results greater than or equal to 4 pCi/L at any of the units be mitigated by a qualified radon mitigation firm. This mitigation may include ventilation of living spaces, sealing off radon infiltration sources, and/or soil vapor extraction from beneath the slab of the building.

If a Property has radon concentrations greater than or equal to 4 pCi/L at any test location and cannot be mitigated prior to the Origination Date, the requirements of Section 61.4(b) apply. The Borrower must have a signed, binding, fixed-price radon mitigation contract with a qualified service provider to mitigate the radon issue on the Property within 90 days of the Origination Date (or other timeframe agreeable to Freddie Mac). In addition, the Seller/Servicer must establish a Repair Reserve in the amount of at least 125 percent of the estimated cost of mitigation. If the initial round of testing cannot be completed prior to the Origination Date, any mitigation system that may be required must installed within a timeframe agreed to by Freddie Mac.
When the mitigation is complete, the Borrower must submit written documentation prepared by a qualified environmental consultant (see Section 61.18) that states what mitigation steps have been taken, that the work has been satisfactorily completed, that a minimum of 48 hours of confirmation testing has been conducted and that the Property now meets the environmental eligibility standards of radon concentrations below 4 pCi/L.

e. Radon—environmental report documents (12/15/16)

The environmental report must include all radon screening and test results and the EPA radon zone designation for the county in which the Property is located. The environmental report must also include the details of any recommended radon mitigation and their costs.

61.16 Superlien status (05/31/11)

The environmental consultant must determine and the environmental report must indicate if the State where the Property is located has an “environmental superlien” law that would allow environmental authorities to place a first priority lien on the Property as a result of environmental hazards.

61.17 The Environmental Site Assessment – Form 1103 (06/27/19)

The environmental consultant must complete the Form 1103 and sign it. The following chart lists the sections of Form 1103:

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<tr>
<td>Section III</td>
<td>Unit Inspection and Certification</td>
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</tbody>
</table>

a. Summary (12/15/16)

Section I of the Form 1103 must indicate the environmental consultant's determination of whether each environmental issue is acceptable or not, and if mitigation is required. Further, the consultant must indicate the O&M programs (or Moisture Management Plan) that are required, as well as whether additional information is required with respect to that specific issue.

b. Private Wells and Attachments (06/27/19)

In Section II, the environmental consultant must provide information on private wells, and provide the attachments in the order in which they are listed on Form 1103. If the environmental consultant does not include a particular attachment with the environmental report, the environmental consultant must provide an explanation.
c. Unit Inspection and Certification (12/15/16)

The environmental consultant must provide a list of units inspected, and the certification must be signed by an authorized representative of the consulting firm.

61.18 Environmental consultant qualifications and requirements (02/07/06)

The environmental consultant performing the environmental investigation and preparing the environmental report must meet the minimum qualifications and requirements specified in this section.

Because Freddie Mac does not approve environmental consultants, the Seller/Servicer must not consider any representation that an individual or firm is approved or qualified by Freddie Mac to perform environmental reports. The Seller/Servicer must take appropriate steps to ensure that the environmental consultant is qualified to perform the required work.

The Seller/Servicer is responsible for selecting the environmental consultant and solely accountable for the environmental consultant's performance.

a. Education, training and experience (07/01/14)

A broad range of environmental expertise is essential to conduct an environmental investigation and prepare an environmental report. For firms performing multifamily environmental reports, both managers and those actually inspecting the Property must have adequate and appropriate education and training to perform consulting duties. This includes a minimum of three years of experience if licensed by the federal, State or local government and a minimum of five years of experience if not licensed but holding a bachelor's or higher degree in a relevant discipline. Additional training must include a 24-hour asbestos inspection course and an annual refresher course that, at a minimum, meets the EPA Guidelines for Asbestos Model Accreditation Plan Annual Refresher Training. Subsurface soil service providers must also complete the 40-hour Health and Safety Training for Hazardous Waste Operations course, with annual 8-hour refresher courses.

Personnel directly involved with the environmental report must also have expertise in at least the following relevant areas:

1. Soil and/or ground water contamination
2. Soil and/or ground water sampling
3. Asbestos identification and abatement
4. PCB contamination
5. UST identification, abandonment and removal supervision
6. Radon measurement and mitigation
7. LBP identification and abatement design and supervision
8. Familiarity with applicable federal, State and local environmental and public health laws and regulations

9. Development of O&M programs

For LBP, radon and asbestos work, some States and municipalities require a license or certificate. The environmental consulting firm must have a sufficient number of properly licensed or certified employees to complete the project.

Advanced technical degrees, experience working at regulatory agencies and certification, licensing or membership in relevant professional associations are desirable.

b. References (07/29/11)

The environmental consultant must have extensive experience completing environmental reports substantially similar in nature, size and complexity to that being performed on the Property. The Seller/Servicer must check at least three client references from the environmental consultant's previous projects to determine whether the projects were

- Similar in scope and purpose to the proposed project
- Completed on time
- Of sufficient quality

A standard environmental report format or sample environmental report must be readily available, indicating that the company performs environmental assessments on a regular basis.

Freddie Mac will not accept an environmental report from an individual or firm that has been excluded from EPA-assisted programs. The Seller/Servicer must check the Excluded Parties List System (EPLS) at https://www.epls.gov for the names of individuals and firms that are excluded by federal government agencies from receiving

- Federal contracts
- Federally approved subcontracts
- Certain types of financial and non-financial assistance and benefits

The Seller/Servicer must retain these references in its files for review by Freddie Mac.

c. Conflicts of interest/providers of related services (02/07/06)

The environmental consultant must not be affiliated with the Borrower, Seller/Servicer, or seller of the Property, or engaged in business that might present a conflict of interest. One possible conflict of interest is business with environmental enforcement agencies, where the environmental consultant's future contract awards from the agency depend on maintaining a cordial relationship with agency representatives. In remediation work requiring negotiations with the agency, such a relationship could conflict with the environmental consultant's representation of the client.
d. **Insurance (06/30/16)**

The environmental consultant must provide the Seller/Servicer with an original certificate(s) of liability insurance at its own expense, which evidences coverage meeting the requirements of Section 11.5.

The Seller/Servicer must retain the original certificate(s) of liability insurance in its files.

e. **Unacceptable consultants (07/01/14)**

The Seller/Servicer must send written notification immediately to the Applicable Freddie Mac Multifamily Regional Office or the Multifamily TAH Underwriter if the Seller/Servicer discontinues the use of a consultant for cause and such consultant has completed environmental reports within the past 12 months for Mortgages purchased by Freddie Mac.

In addition, Freddie Mac reserves the right to refuse to accept environmental assessments reports completed by any specific consultant. Freddie Mac will maintain, on FreddieMac.com, the Multifamily Restricted Vendor List. If a consultant appears on the Multifamily Restricted Vendor List, the Seller/Servicer may not use that consultant to prepare environmental assessment reports for a Mortgage to be purchased by Freddie Mac until notified otherwise by Freddie Mac. The decision to place a third-party vendor on the List is solely within Freddie Mac’s discretion.

The Multifamily Restricted Vendor List is made available to Seller/Servicers for the sole purpose of ensuring that unacceptable consultants do not prepare reports for Multifamily and shall constitute “Confidential Information” as defined in Section 2.8.

### 61.19 Mortgage Servicing (05/31/12)

Using the Freddie Mac Annual Inspection Form (AIF) (see Chapter 40), the Seller/Servicer must confirm annually that the Borrower is maintaining the Property according to any applicable O&M program, environmental law or regulation. The Seller/Servicer is not expected to obtain an environmental report along with the assessment inspection. However, the Seller/Servicer must make an on-site inspection prior to advising Freddie Mac of the environmental status of the Property. The Seller/Servicer must inspect the buildings and grounds and review the activities of the Borrower, tenants, sublessors, their agents and any other third parties. These confirmations must specifically address the continuing effectiveness and adequacy of all current remedial and maintenance actions.

In addition, the Seller/Servicer must complete an AIF immediately following the occurrence of any event that might reasonably be expected to impact the environmental condition of the Property or the adequacy of prescribed remedial or maintenance actions. Such events would include fire, flood, building construction or rehabilitation, spills or leaks of hazardous wastes or materials, unusual or intense use of property facilities, or significant changes in custodial or management personnel.

The Borrower must comply fully with all applicable environmental laws and report any violations of such laws to the Seller/Servicer and the appropriate federal, State or local authority.
The Seller/Servicer must require that the Borrower take all necessary actions to ensure that all violations are promptly corrected and that the Property is brought back to and maintained in full compliance with all appropriate environmental statutes and good management practices.

61.20  **Representations and warranties (09/28/18)**

The Seller/Servicer is deemed to make the warranties regarding the environmental report and the consultant set forth in Section 5.4.