

2020 DCA ENVIRONMENTAL MANUAL

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2020 DCA ENVIRONMENTAL MANUAL

This Manual contains the following:

- Environmental Site Assessment Standards and Reporting Requirements
- Format for Phase I Environmental Site Assessment Reports

Environmental Site Assessment Standards and Reporting Requirements

The Georgia Department of Community Affairs (“DCA”) requires site-specific environmental assessment for all development proposals being considered for funding with 9% Tax Credits, 4% Tax Credits, and/or HOME Loans. At a minimum, DCA requires a Phase I Environmental Site Assessment (“Phase I”), in accordance with, but not limited to, standards developed by the American Society for Testing and Materials (“ASTM”) and set forth in the “Standard Practice for Environmental Site Assessments, Phase I Site Assessment Process,” ASTM 1527-13. If a Phase I recommends additional review or a Phase II report, the Phase II and/or the additional review documentation must be provided. For projects which request HOME funds or list other HUD funding sources, including but not limited to Project Based Rental Assistance (“PBRA”), the Environmental Professional (see Section A(3)(a) below) must complete the HOME and HUD Environmental Questionnaire. This form can be found in the Application Forms section of the Qualified Allocation Plan Documents available on the DCA website.

I. Introduction and Overview

The Phase I serves as a screening process designed to discover environmental concerns, recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), controlled recognized environmental conditions (CRECs), and non-ASTM issues which may potentially impact the subject property, and to ensure that “all appropriate inquiry” or “AAI” (as that term is defined by the EPA in 40 C.F.R. Part 312) is conducted. By contrast, a Phase II Environmental Site Investigation (“Phase II”) is intended to further investigate any environmental issues raised by the Phase I. For Phase I Environmental Site Assessments, DCA requires the Environmental Professional to follow ASTM E 1527-13, or the most current version of the Phase I standard that has been (1) promulgated by ASTM and (2) endorsed, in writing, by EPA as meeting AAI (the “ASTM Standards”).

Please note, DCA requires additional investigations and testing that exceed the ASTM Standards and are included throughout Section II. Some of these extra requirements are referred to as “non-ASTM considerations” in Section 13 of ASTM E 1527-13.

****Where DCA guidelines are more stringent than the ASTM Standards, the DCA guidelines must be followed. ****

Any Phase I submitted to DCA must demonstrate that all appropriate inquiries (AAI) regarding previous ownership and use of the property consistent with good commercial or customary practice was conducted. In short, Applicants must make AAI to learn the property’s true environmental condition. Applicants must become familiar with federal, state, and local health, safety, and environmental laws governing the property.

Applicants, including developers and owners, must disclose their knowledge of actual or suspected environmental concerns in accordance with ASTM Standards and are strongly encouraged to contact DCA if unusual or questionable conditions exist before they submit their formal Application to DCA.

II. Environmental Assessment Requirements

A. Phase I Requirements

1. The Phase I Report **must** be in the format shown in *Section V: Required Format for Phase I Report* and include all of the information and documentation in the indicated appendices. Phase I Reports that deviate from this format may not be accepted. The inclusion of items in Appendix U, as shown on the format, or, if necessary, additional appendices to the Phase I Report is acceptable. Please note that if a prescribed sub-section or appendix is not applicable, the Environmental Professional must note “Not Applicable” or “Not Available” in that section of the report or that appendix. Please Note: During the competitive round, the Applicant may have points deducted from its score if the proper format is not followed.
2. The Phase I must substantially comply with ASTM E 1527-13 or the most current version of the Phase I standard that has been (1) promulgated by ASTM and (2) endorsed, in writing, by EPA as meeting AAI.
 - a. The Phase I Report must contain a statement that ASTM E 1527-13 (or the EPA-endorsed, updated version) was used in completing the Phase I and that “all appropriate inquiries” were conducted.
 - b. The Environmental Professional must include a description of the procedures followed while conducting the Phase I investigation in the Phase I Report, including a detailed scope of services.
 - c. Generally, most Phase I Reports are performed to qualify for one of the three landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601 *et seq.* (1980): the innocent landowner limitation; the contiguous property owner limitation; or the *bona fide* prospective purchaser limitation. The Environmental Professional must consult with the Applicant to determine the Applicant’s purpose for performing the Phase I and must set forth the purpose for which the Phase I site investigation was undertaken in the Phase I Report. In addition, the Environmental Professional must expressly state that a purpose of the Phase I is to ascertain whether the property is environmentally suitable for construction of multifamily housing.
 - d. The Applicant must submit the Phase I Report as specified in the applicable Qualified Allocation Plan.

3. The Phase I, performed under the supervision of an “Environmental Professional,” as that term is defined in 40 C.F.R. § 312.10(b), and must be reviewed, signed, and certified by the Environmental Professional using the Environmental Consultant Signature Page for Phase I Reports, which can be found in the Forms Section of the Qualified Allocation Plan Documents. The Environmental Consultant Signature Page for Phase I Reports must appear immediately following the cover page of the Phase I Report.
 - a. For DCA Applications, if the Environmental Professional’s qualifications are premised, in part, on his or her status as a licensed Professional Engineer (“P.E.”) or a Professional Geologist (“P.G.”), the P.E. or P.G. license must have been issued by the State of Georgia.
 - b. The Environmental Professional must be an employee or principal of the environmental consulting firm retained to complete the environmental assessment.
 - c. The Phase I must include the resume(s) that describe the qualifications of all personnel involved with the Phase I environmental site assessment in the appendix; the qualifications of all such personnel must also be summarized in Section 2.4 of the Phase I Report.
 - d. The Environmental Professional may not be affiliated with the developer/owner, or a buyer or seller of the property, or a firm engaged in any business that might present a conflict of interest or give the appearance of a conflict of interest.
4. The Phase I Report must include clear findings in Sections 1.2 and 7.0 regarding whether or not there are any recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), or controlled recognized environmental conditions (CRECs), as those terms are defined in Sections 3.2.18, 3.2.42, and 3.2.78 of ASTM E 1527-13.
 - a. For any RECs identified, the Phase I must indicate whether any additional testing or analysis is recommended and, in the Environmental Professional’s opinion, the rationale for recommending or declining to recommend additional testing or analysis.
 - b. For any HRECs identified, the Phase I must indicate that past remedial measures have been taken to the satisfaction of the applicable regulatory authority and/or that the property currently meets criteria established by the applicable regulatory authority permitting unrestricted use of the property without the use of any mandatory controls.
 - c. For any CRECs identified, the Phase I must indicate that the release has been addressed to the satisfaction of the applicable regulatory authority and what controls remain in place for that CREC. Note that ASTM E 1527-13 considers CRECs also to be RECs for the purpose of Phase I assessment findings.

5. The Phase I Report must include a "Site Map" (must be to scale) in the appendix showing:
 - a. An area large enough to display the relative location of the site in its orientation to adjacent properties and facilities, with existing streets and drives within fifty (50) feet of the site.
 - b. Delineation of the perimeter of any major existing structures on the site, including those designated for demolition.
 - c. Any visible or reasonably ascertainable easements on the site.
 - d. Environmental concerns or recognized environmental conditions, where applicable.
 - e. Direction (established or presumed) of groundwater flow.
 - f. The boundaries of all floodplains, wetlands, and/or potential State Waters and related buffers on or adjacent to the site.
6. The Phase I Report must include a comprehensive environmental record search, including all standard sources listed in Section 8.2.1 of ASTM E 1527-13.
 - a. The Environmental Professional must consider the additional environmental record sources listed in Section 8.2.3 of ASTM E 1527-13.
 - b. The Environmental Professional must field-verify the distance to any facilities identified in any of the standard environmental record or additional sources during the site reconnaissance and document such verification in Section 4.1.1 and 4.1.2 of the Phase I Report.
 - c. If the property, or any sites that adjoin the property, are identified in the review of the environmental records searches, the Environmental Professional must perform a review of the regulatory files related to such properties and include that information in Section 4.1.1 or 4.1.2, as appropriate. If, in the Environmental Professional's opinion, such additional regulatory review is not warranted, the Environmental Professional must (1) specifically state as such in the Phase I Report and (2) provide an explanation justifying that decision.
7. The Phase I Report must include a comprehensive historical review of the subject property.
 - a. The Phase I must include in the appendix a copy of documentation provided by the Title Company or title professional regarding reasonably ascertainable recorded land title records, judicial records and records of environmental liens and activity and use limitations.
 - (i) The Environmental Professional must discuss the chain of title, judicial records, records of environmental liens and activity and use limitations associated with the property and any other pertinent records found by the title company or title

professional in the historical records review which, when reviewed in its entirety, clearly shows a history of previous uses of the property back to 1940 or the property's obvious first developed use, whichever is earlier.

- (ii) Although some of these items are designated "user" responsibilities in ASTM E 1527-13, DCA requires that the Environmental Professional research, evaluate and assess recorded land title records, judicial records and records of environmental liens and activity and use limitations.
- b. This review *must* consider the "standard historical sources" listed in Section 8.3.4.1 through 8.3.4.8 of ASTM E 1527-13, to the extent required by ASTM. DCA may, at its sole discretion, also require the review of any sources listed in Section 8.3.4.9 of ASTM E 1527-13.
 - c. The Environmental Professional must comment on the results of the historical review and must:
 - (i) State whether information about environmental liens or activity and use limitation records were reasonably ascertainable;
 - (ii) Describe what efforts were made to identify environmental liens and/or activity and use limitations, and give a professional opinion as to any potential environmental concerns; and
 - (iii) Identify RECs, HRECs, CRECs, and/or non-scope issues uncovered during the historical review or state conclusively that no such RECs, HRECs, CRECs, and/or non-ASTM issues were identified.
8. The Environmental Professional must make reasonable efforts to conduct all interviews required by ASTM as part of the Phase I site assessment.
- a. Note that for abandoned properties, the Environmental Professional must also interview owners and occupants of neighboring properties.
 - b. The Environmental Professional must also make a reasonable attempt to interview at least one staff member at any one of the following: local fire department; state or local health department or environmental agency; the local agency responsible for the issuance of building permits; the local agency responsible for issuance of groundwater use permits; state or local agency with jurisdiction over hazardous waste disposal.
 - c. Documentation of all interviews (or documentation of attempts to complete such interviews) must be included in the appendix.

- d. The consultant preparing the Phase I Report must gather from the user(s) of the Phase I Report all information required in Section 6 of ASTM. Information obtained from the user interview(s) must be included in Section 4.3.4 of the Phase I Report, and documentation of the interview(s) must be included in the appendix.
 - e. The Applicant must be interviewed as a “user” for every Phase I Report submitted to DCA. Additionally, for purposes of Applications submitted to DCA, all of the following parties are also considered “users”: the entity that has title to the property or the entity that will take title to the property, project development partners, equity partners for the project, and any other party which would be defined as a “user” within the meaning of Section 3.2.98 of ASTM E 1527-13.
 - f. Where there are multiple users, the text of Section 4.3.4 of the Phase I Report should make clear from which user the information was obtained.
 - g. If the consultant preparing the Phase I Report was unable to interview any one or more users, the consultant must describe what attempts were made to interview such users, include documentation of these attempts in the appendix, and discuss the data gap in Section 6.0.
9. The Phase I Report (including, but not limited to, regulatory database reviews, interviews, and searches for recorded environmental liens) must be completed or updated fewer than one hundred eighty (180) days before Application submission. A Phase I Report, or an update of such report, greater than one-year-old at the time of Application submission cannot be submitted; once a Phase I Report is greater than one year old a new Phase I Report is required. For projects applying for federal funds, DCA may request an updated or new Phase I report prior to loan closing.
- a. The date of the Phase I Report shall be clearly placed on the cover page of the Phase I Report.
 - b. The date of the site reconnaissance shall be specified in Section 5.1 of the Phase I Report. The Phase I Report must be issued no more than sixty (60) days after the site reconnaissance unless waived by DCA at its sole discretion.
 - c. DCA reserves the sole right to require an update of any Phase I which is equal to or greater than one hundred eighty (180) days old at the time final approval of any Application is granted or at any time prior to commencement of construction if additional information regarding an environmental issue is discovered.

10. If an updated Phase I report is necessary because the original Phase I report is between one hundred eighty (180) days and one (1) year old at the time of Application submission, then the updated Phase I must include the following updated components, in accordance with Section 4.6 of the ASTM Standards:
 - a. Description of the new site reconnaissance, including visual inspection of the property and of adjoining properties.
 - b. Updated site photos.
 - c. Updated federal, tribal, state, and local governmental records.
 - d. Updated search for environmental liens.
 - e. New interviews with owners, occupants, and operators of the property (or of neighboring properties, in the case of an abandoned or vacant site).
 - f. All original materials and updates.
 - g. The opinion of an Environmental Professional addressing all conditions (changed and unchanged) at the site.
 - h. The Environmental Consultant Signature Page for Phase I Reports signed by all appropriate parties.
 - i. An Environmental Certification signed by the Environmental Professional who conducted the update.
11. The Environmental Professional must address any previous environmental site assessments (Phase I and/or Phase II) that were performed for the subject property in Section 5.5.7 of the Phase I Report and include the available previous Reports (text and applicable appendices only) in the appendix.
12. The Phase I Report must reflect all the Environmental Professional's investigations and findings and contain an Executive Summary setting forth clearly written conclusions, including the exact language from either Section 12.8.1 or Section 12.8.2 of the ASTM Standards, as appropriate, and recommendations. The Environmental Professional's opinions must be included in the Phase I Report in the manner described in Section E below. The Phase I Report must also identify and comment upon:
 - a. All supporting data and test results.
 - b. Any and all data gaps or data failures (collectively "Data Gaps"), as defined in Section 3.2.20 and Section 3.2.21 of the ASTM Standards. Data Gaps frequently include, but are not limited to, inability to interview the owner of the property, failure by the user to provide information specified in Section 6.0 of ASTM E 1527-13, or inability to

document historical use of the property back to 1940 or the property's obvious first developed use, whichever is earlier.

- (i) Data Gaps must be discussed in Section 6.0 of the Phase I Report.
 - (ii) The Environmental Professional must also enumerate in this section the good faith efforts made to gather the information that could not be obtained.
- c. Commonly known/reasonably ascertainable information available to the user(s) or within the local community about the property. This information must be discussed in either Section 4.3.4.4 (if obtained from the user) or Section 5.3 (if gathered by the Environmental Professional) of the Phase I Report.
13. Any deviations from DCA Environmental Site Assessment Standards or ASTM E 1527-13, or any limitations of the Phase I environmental site assessment, must be described in Section 2.6 of the Phase I Report.
 14. All data references (including, but not limited to, the following: regulatory database search references; the ASTM standard followed; floodplain maps; wetlands maps; U.S. Topographical maps; soil survey; aerial photographs; telephone interviews with agencies; and fire insurance maps, if available) used to complete the Phase I Report must be listed in Section 9.0 of the Report.
 15. The Environmental Professional must visually and/or physically observe adjoining properties and note any physical limitations to all visual inspections.
 16. In Section 4.3.4.6 of the Phase I Report, there must be a discussion of the purchase price as it relates to the fair market value of the property, in accordance with Section 6.5 of ASTM E 1527-13. Typically, the assessment of purchase price will be performed by a user and provided to the Environmental Professional. Therefore, this information should be addressed in the Owner Environmental Questionnaire and Disclosure Statement or in a separate valuation statement, as appropriate. The user is not required to disclose the purchase price, but if the purchase price is significantly less than the fair market value, s/he should disclose this to the Environmental Professional and explain why a difference exists. ASTM E 1527-13 does not require that a real estate appraisal be obtained in order to ascertain fair market value of the property.
 - a. If not provided to the Environmental Professional by the user, the Environmental Professional must address this issue, by inquiring of the seller, broker, or real estate professional associated with the project as to the fair market value of the property and as to the causes for any differential between the fair market value and the purchase price of the property. If neither the user, Applicant, seller, broker, nor real estate professional can or will disclose to the Environmental Professional whether a

differential exists between the purchase price of the subject property and the fair market value of the subject property, the Environmental Professional must assess this as a data gap and discuss it in Section 6.0 of the Report.

- b. Where the purchase price does not reflect the fair market value of non-contaminated property, the Environmental Professional must identify the potential causes, including environmental causes.
 - (i) Although this item is a designated user responsibility in ASTM E 1527-13, DCA requires that the Environmental Professional review the information provided by a user.
 - (ii) If the Environmental Professional determines that a sales price has not yet been negotiated for the property, then that fact should be referenced in Section 4.3.4.6 of the Report.
 - c. Although ASTM E 1527-13 does not require that a real estate appraisal be obtained to ascertain the fair market value of the property, DCA may, at its sole discretion, require that a real estate appraisal be obtained in order to ascertain the fair market value of the subject property.
17. Photographs documenting the current state of the property must be included in the appendix of the Phase I Report.
- a. The photographs must show the inside of any structures and the grounds of the property (including adjacent sites).
 - b. The photographs should be clearly dated and labeled with a description of the view presented.

B. Non-ASTM Issues for Phase I Reports

The Phase I Report must also address and discuss the following issues:

1. Wetlands.

As a general rule, projects will not be accepted for any DCA funding or approved for tax credits (including HOME funds and/or other HUD funding sources) if they will disturb any aquatic resources (ex. streams or wetlands) on the subject property (or on any adjacent property where disturbing aquatic resources is necessary to gain access to the subject property without evidence of prior review and concurrence of the delineation by the U.S. Army Corps of Engineers (USACE). DCA must receive evidence of submittal for concurrence by August 1, 2020. **Please note, USACE concurrence may take up to 75 days.**

According to the regulatory definition in 40 CFR 230.3(s) the term *waters of the United States* means:

- a. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. all interstate waters, including interstate wetlands;
- c. all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (i) which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (iii) which are used or could be used for industrial purposes by industries in interstate commerce;
- d. tributaries of waters identified in paragraphs a. through d. of this definition;
- e. the territorial sea; and
- f. wetlands adjacent to waters identified in paragraphs a. through f. of this definition.
- g. all impoundments of waters listed above

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are typically not considered “aquatic resources” for Corps purposes.

This evidence should include a delineation report (which shall include relevant mapping with the subject property and aquatic resource boundaries clearly marked, data sheets, and other pertinent site information) and the completed, signed (by landowner), and dated “Request for Delineation” document.¹ If USACE prior approval is not required for impacts to aquatic resources, adequate explanation and supporting documentation must be provided. ***Upon written request by the Applicant, DCA may grant additional time to receive evidence of USACE concurrence.***

¹ See Appendix:

http://www.sas.usace.army.mil/Portals/61/docs/regulatory/SAS__Appendix_1_Request_15FEB17.pdf?ver=2017-02-15-145830-340 –choose “other” in Section I and “Delineation Review of Aquatic Resources” in Section II

- a. The Environmental Professional must describe in Section 3.3 of the Phase I Report its determination regarding whether any portion of the subject property is or may be considered aquatic resources based upon:
 - (i) A review of the U.S. Fish and Wildlife Service National Wetlands Inventory (“NWI”) maps;
 - (ii) The site reconnaissance; and
 - (iii) Any other available relevant resources (including, but not limited to, the USGS topographic map and Soil Survey for the subject property).
- b. The presence of aquatic resources (including streams or any wetland areas) on the property must be clearly shown on the Site Map.
- c. If aquatic resources are suspected on the site through site reconnaissance, DCA requires that a qualified consultant perform an aquatic resources delineation. This delineation must be performed in accordance with all federal guidelines and included in the Application. The purpose of the delineation is to verify the existence of aquatic resources and to determine the extent thereof.
 - (i) A delineation concurrence issued by USACE is required only if the proposed development will disturb aquatic resources within the subject property. Evidence that a delineation concurrence review request has been submitted must be provided by August 1, 2020. Evidence may include the complete Pre-Construction Notification that was submitted to the USACE.
 - (ii) A delineation concurrence issued by USACE is required only if the proposed development will disturb aquatic resources within the subject property. Evidence that a delineation concurrence review request has been submitted must be provided by August 1, 2020. Evidence may include the complete Pre-Construction Notification that was submitted to the USACE. Applicant provide a professional opinion. In addition, the Applicant must submit to DCA documentation demonstrating that all requirements of 24 C.F.R.§ 55.12(c)(7) have been met, including, but not limited to, provision for site drainage that will not have an adverse effect on the aquatic resources. The site drainage plan is condition of funding and must be in place at the time of closing.

- d. A copy of the NWI map, USGS topographic map, soil map, any necessary aquatic resource delineation report, and USACE permits (if applicable) must be included in the appendix of the Phase I Report. These maps must also show the location of utilities in reference to the delineation, as utilities on the subject property cannot run through wetlands.
- e. If aquatic resources will be filled or impacted AND the proposed project requires completion of the HOME and HUD Environmental Questionnaire (see page 1 above), the application must include both the delineation concurrence from the USACE and evidence that the wetland management eight-step process, as set forth in 24 C.F.R. § 55.20 has been followed. **Please note that completion of the eight-step process is required to be completed before October 7, 2020.**

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2. State Waters

The Environmental Professional must identify any potential State Waters requiring a buffer (pursuant to federal or state law) and the extent of all applicable buffers that are (1) located on the subject property, or (2) located on an adjacent property where the required buffers may encroach on the subject property. The minimum buffer distance for all streams is 25 feet, with the exception of trout streams, which require a minimum 50-foot undisturbed buffer. No project involving a land-disturbing activity in a required buffer area will be accepted for DCA funding or approved for tax credits (including HOME funds) *unless* the appropriate variance(s) or exemption(s) has been applied for from all appropriate agencies with jurisdiction over such buffers, and documentation of such application for variance(s) or exemption(s) is included in the Application Submission. The Environmental Professional must identify and discuss these issues in Section 3.5 of the Phase I Report.

“State Waters” are defined as any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state, which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

The Georgia Environmental Protection Division's ("EPD's") Field Guide for Determining the Presence of State Waters That Require a Buffer and Ga. Comp. R. & Regs. § 391-3-7 set forth the standard for identifying whether State Waters will require a buffer. This guidance and these regulations must be followed in making this determination.

- a. The location and extent of any potential State Waters that require a buffer, along with all buffers and setbacks required by state and/or local law, must be described in Section 3.5 of the Phase I and shown on the Site Map.
- b. If the Environmental Professional believes that State Waters are located on the subject property using EPD's Field Guide for Determining the Presence of State Waters That Require a Buffer, DCA recommends that the Local Issuing Authority as determined by the EPD make the final State Water determination and that the letter with the Local Issuing Authority's findings be included in the Application if it has been received at the time of submission; if it has not, the letter should be submitted to DCA as soon as it has been received.
- c. DCA does not allow for the disturbance of streams with the exception for the construction of a roadway where site constraints necessitate the need to disturb the stream. Documentation of this type of condition must be provided to DCA.

3. Floodplains/Floodways.

In accordance with 24 C.F.R. § 55.1(c)(1) and (2), no funding will be approved in floodways or Coastal High Hazard Areas, as those terms are defined in 24 C.F.R. § 55.2(b), unless it is:

- (1) a functionally dependent use or floodplain function restoration activity or
- (2) a non-critical action in a Coastal High Hazard Area that is a functionally dependent use.

The Environmental Professional must review the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) to determine if any part of the subject property is located in a Special Flood Hazard Area. FIRM information is available for free download through FEMA's Map Service Center, and viewers are available from the Georgia Department of Natural Resources Floodplain Unit³ and FEMA. If a FIRM is not available for the development site, the Applicant must provide evidence that shows that the site is not prone to flooding. The exact location of the development must be clearly marked on the map.

- A. Both rehabilitation and new construction tax credit projects must meet the following requirements:

1. A copy of the FIRM for the subject property must be included in the appendix of the Phase I Report, whether or not there are Special Flood Hazard Areas identified on the subject property. The boundaries of the proposed site for development must be delineated on the FIRM.
 2. If present on the property, the presence of Special Flood Hazard Areas (including floodways and Coastal High Hazard Areas) must be clearly defined and supported by the appropriate FIRM.
 3. A Site Map that clearly defines the Special Flood Hazard Area in relation to all site improvements, including buildings, paving, and site amenities, must be included in the Phase I, Appendix A. The Conceptual Site Development Plan must clearly show where all development and incidental development lies in relation to Special Flood Hazard Areas.
 4. The Applicant must meet all requirements of any local flood damage prevention ordinance adopted by a community in the National Flood Insurance Program (NFIP) in order to be accepted for funding. Participation information for all jurisdictions is publicly available through FEMA's NFIP Community Status Book. If a development is in community that does not participate in the NFIP but the community has adopted local flood damage prevention ordinances, the Applicant must meet all requirements the community has adopted.
- B. Additionally, tax credit rehabilitation projects within the jurisdiction of a community that does not participate in the National Flood Insurance Program (NFIP) will only be eligible for funding where the existing buildings, paving, or site amenities are located in a Special Flood Hazard Area (outside of a floodway or Coastal High Hazard Area) if the following is included with the Application Submission:
1. Evidence must be provided that the elevation of the lowest existing floor is no lower than one (1) foot above the base flood elevation as given by the applicable FIRM, Flood Insurance Study (FIS), or other source.
 2. Such documentation must clearly demonstrate existing conditions and should include a land survey indicating the location of the existing buildings, paving, and site amenities, Special Flood Hazard Areas, elevation of the lowest existing floor, and base flood elevations. FEMA's "NFIP Insurance Agents' Lowest Floor Guide" offers guidance on determining lowest floor elevation information

C. If the property will be reclassified out of the Special Flood Hazard Area in all areas where site improvements will be placed, including buildings, paving, and site amenities, prior to project completion, the following documentation showing the reclassification must be included with the Application Submission to be eligible for funding:

1. For tax credit new construction projects and HOME funded new construction or rehabilitation projects:

a. All Special Flood Hazard Areas must be documented by the FIRM for the areas in which the site is located, regardless of whether the proposed site for development appears to be located in a Special Flood Hazard Area.

b. The qualified Environmental Professional or Engineer must include an opinion as to whether or not the proposed project will impact any Special Flood Hazard Areas;

c. A FEMA Conditional Letter of Map Amendment (CLOMA) or Letter of Map Revision Based on Fill (CLOMR-F) must be obtained for the property that shows that the property is eligible for reclassification out of the Special Flood Hazard Area and submitted at the time of application. A final Letter of Map Amendment (LOMA) or Letter of Map Revision-Based on Fill (LOMR-F) from FEMA along with an elevation certificate and all other information to document the reclassification must be provided to DCA at the completion of the project; and;

2. For tax credit rehabilitation projects classified as non-substantial improvements only (see Architectural Manual for the definition of substantial renovations):

- DCA may consider evidence that the property is eligible for flood insurance and that such insurance will be in place if awarded funding from DCA in lieu of a CLOMA or CLOMR-F.
- d. Additional requirements for HOME Projects and projects that have other HUD funded sources:

D. For HOME funded projects include the HUD Environmental Questionnaire in the appendix of the Phase I Report.

1. Where construction, site improvements, and landscaping activities occupy or modify the Special Flood Hazard Area, documentation for HOME Funding must

include evidence that the eight-step Floodplain Management process has been followed as mandated by 24 C.F.R. § 55.20 (Executive Order 11988).

2. Documentation from the Environmental Professional regarding direct and indirect impacts associated with constructing the project on or near a Special Flood Hazard Area.
3. Documentation from the Environmental Professional regarding the consideration of alternative locations for the development.
4. HOME-funded projects may require flood insurance. Such insurance must be in the form required by the US Department of Housing and Urban Development.

4. Noise.

All new construction projects must meet DCA requirements for interior and exterior noise limits. The DCA and HUD Noise Limitations are 45 decibels (dB) for interior locations and 65dB for exterior locations. While rehabilitation projects may be exempt from HUD Noise Limitations, a noise assessment as described below is required and DCA may require attenuation features. For HUD funded projects submitted to DCA, all new construction and rehabilitation projects must also meet the requirements set forth in the HUD noise regulations, 24 C.F.R. Part 51 Subpart B (24 C.F.R. § 51.100 *et seq.*).

Noise Assessment Requirements

- a. The Environmental Professional must discuss in Section 5.4.22 of the Phase I Report its determination regarding whether the subject property (or any part thereof as measured from the property line) is within:
 - (i) five (5) miles of a civil airport;
 - (ii) fifteen (15) miles of a military airfield;
 - (iii) 1000 feet of a major roadway or
 - (iv) 3000 feet of a railroad or rail line.
- b. If the subject property (or any part thereof as measured from the property line) is within the distances of noise sources discussed in the paragraph above, the Environmental Professional must complete a noise assessment in accordance with the HUD Noise Assessment Guidelines (“NAG”) and 24 C.F.R § 51.100 *et seq.* In addition, the Environmental Professional must provide an opinion on the results of such assessment/study, and the report must contain a complete mitigation plan for remediation of sound levels. Noise levels shall be documented using the Site DNL Calculator located at HUD’s website : <https://www.hudexchange.info/environmental-review/dnl-calculator/>

The Noise Assessment Guidelines are contained within the HUD *Noise Guidebook* which can be found at: <https://www.hudexchange.info/resource/313/hud-noise-guidebook/>

- c. The Noise Assessment must include the following documentation in the appendix:
 - (i) Map(s) that clearly delineate the distances between the subject buildings and/or exterior amenities and the above-listed noise sources (the location of the noise assessment locations (NALs) **a minimum of two NALS must be included in the assessment;
 - (ii) Documentation from the Georgia Department of Transportation detailing the most recent traffic counts for major roadways;

- (iii) Documentation from applicable railroad operators regarding daily operations, or data from the Federal railroad grade locator website/app
- (iv) Noise contours published by military or civil airports;
- (v) Noise contours constructed according to the HUD Noise Assessment Guidelines when published contours are not available for civil and military airports or use the HUD Airport Noise Worksheet which can be found at:
<https://www.hud.gov/sites/documents/AIRPORTNOISEWKSHT.PDF>
and aircraft or railway noise, the Environmental Professional should comment on potential effects from railway and aircraft traffic growth as deemed necessary
- (vi) For ten (10) year roadway traffic projections, the Environmental Professional must take currently available traffic projections and estimate a 3% per year growth until 2030 and must notate this calculation in the noise assessment.
- (vii) Alternative methods for projecting 10-year traffic projections must be accompanied by adequate documentation from state and local planning authorities.
- (viii) In cases where there are other contributing noise sources, such as factories, mills, or other sources that may emit loud levels of noise, the noise evaluation should not be limited to roadways, aircraft and railway noise. DCA reserves the right to consider any additional possible noise sources in determining whether the DCA noise requirements have been met. At its discretion, DCA will use the standard set forth in the Noise Guidelines 24 C.F.R. 51.103 to evaluate the day-night average sound levels produced by the other contributing noise sources that states: “day-night average sound level produced by the loud impulsive sounds alone shall have 8 decibels added to it in assessing the acceptability of the site.”

Noise Attenuation Plan.

If the Noise Assessment data indicates that the calculated 10-year projected noise level at any building or exterior amenity is greater than the HUD “Acceptable” standard of 65 decibels (dB), a complete noise attenuation plan is required for new construction projects. The proposed remediation must demonstrate that it will bring the interior sound levels to 45 dB and exterior sound levels to 65 dB, in accordance with the HUD Noise Assessment Guidelines (“NAG”), 24 C.F.R § 51.100 et seq.. The Attenuation Plan must be submitted with the Phase I Report in the appendix. The noise attenuation plan must contain sufficient detail to allow DCA to independently verify that the proposed interior and exterior noise mitigation measures will result in these reduced noise levels. All sound mitigation costs must be included in the construction development budget.

- a. In cases where interior noise levels are proposed to be mitigated partially or completely through the use of specified building materials, the Applicant must submit a letter, which may use HUD's Sound Transmission Classification Assessment Tool (STraCAT) assessment tool as support, from the architect and/or environmental professional that: discusses the sound transmission class of the construction materials that are to be specified for the project; contains an estimate of the interior noise levels in the interior of the buildings at the project site after construction is completed; and provides an opinion that the noise attenuation plan will reduce noise levels to an acceptable level.
- b. In cases where noise levels are proposed to be mitigated through either existing barriers or future barriers constructed on the site, the environmental professional must provide the appropriate work charts from Chapter 5 of the HUD Noise Guidebook to demonstrate the value of the barrier adjustment. HUD's on-line Barrier Performance Module may only be used to supplement the traditional work charts from the Noise Guidebook. DCA does not consider any type of tree to provide any barrier to the transmission of sound. Documentation to support the barrier performance must also be provided as follows:
 - (i) scaled diagrams of the physical situation proposed with noise barrier containing detailed heights, lengths, and angle measurements;
 - (ii) a description of the composition of the natural or manmade barrier;
 - (iii) topographic maps that support the elevations of the noise source,
 - (iv) proposed barrier, and ground floor elevation of the proposed building or amenities.

5. Water Leaks/Mold/Fungi/Microbial Growth.

The Environmental Professional must identify during the site reconnaissance any visible water leaks, mold, fungi or microbial growth in or on any on-site structures or improvements that will not be demolished or replaced. For multi-family housing structures, the Environmental Professional must evaluate water leaks, mold, fungi and microbial growth in every unit in which the Environmental Professional is conducting a lead-based paint, radon, or asbestos assessment. If no lead based paint, radon, or asbestos assessment is being performed for the multi-family housing structure, the Environmental Professional must attempt to evaluate water leaks and mold in 10% of the units on the property or, at a minimum examine at least five (5) units, including at least one unit in each of the buildings on the property.

- a. The Environmental Professional must visually examine, when such areas are readily accessible, the following areas in the selected units during the site reconnaissance and must discuss all findings in the Phase I report: (i) ventilation systems; and (ii) areas behind walls, under floors, and above ceilings. What will be considered "readily accessible" will vary

with the particular situation of the subject property and will depend on the professional judgment of the Environmental Professional. The Environmental Professional must state whether areas behind walls, under floors, and above ceilings were readily accessible, and, if not, provide an explanation.

- b. If water leaks, mold, fungi or microbial growth exist on the properties, the Environmental Professional must include recommendations for the elimination, removal, or remediation of these conditions and/or materials according to all EPA and HUD guidelines, as applicable.
- c. The Environmental Professional must complete any other investigation or testing required by EPA and HUD mold guidelines.
- d. Upon reviewing 5.4.17 of the Phase I Report, DCA may require further investigation and/or testing at its sole discretion.

6. Radon Gas.

The Phase I Report must discuss the designation of the property on the most current, updated version of the EPA Map of Radon Zones, and include the EPA Radon map in the appendix. If the Applicant's project involves the renovation or use of an existing structure, a radon test must be performed to determine radon gas levels, *unless* an EPA approved short-term radon test has been performed in the lowest public areas of the building(s) within the last twelve months which demonstrated radon levels below 4 pci/l or 0.02 WL. A copy of the Radon Report should be attached to the Phase I Report. Any confirmed radon readings that exceed the EPA limits must be mitigated in accordance with *ASTM E2121 - 13 Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Buildings*. The Application must include in the Application documentation that:

(i) mitigation has been properly conducted and verified; or

(ii) mitigation is planned as part of the work scope for the property.

- b. If the Applicant's project involves new construction, the building(s) must be constructed in accordance with current EPA requirements for radon resistant construction techniques. The buildings must be tested for radon upon completion of construction. The Phase I Report must include statements to this effect in Section 5.4.21.
- c. The minimum requirement for testing locations is one test per every 2000 square feet of ground-contact units. However, radon concentrations can be highly localized and best practice for radon testing should involve a certified radon tester (<http://www.nrsb.org/>). In addition, if elevated radon levels are detected in the ground floor units, it is recommended that at least one test be located in each building on the second floor, covering a minimum of 10% of the second floor units. Please note radon testing above the ground

floor units is only required is only required if elevated levels are found during the initial test. Radon testing is never required in units above the second floor.

7. Asbestos.

An asbestos survey must be performed on all buildings scheduled for demolition or renovation, regardless of when they were constructed. The Environmental Professional must note the condition of all presumed and suspected asbestos containing materials (“ACM”), as defined by OSHA regulations, in the Phase I Report.

- a. If any structure or improvement is suspected or presumed to have ACM, then a representative sampling is required to confirm the presence and extent of any such ACM. A minimum of one unit per building or 10% of the total units shall be tested, or whichever is greater.
- b. If a comprehensive asbestos survey was performed for the property on or after January 1, 1986 by a EPA licensed asbestos inspector, then the Environmental Professional must also review the previous survey and discuss it in the Phase I Report.
 - (i) All asbestos related assessments, testing, and remedial action programs must be performed in compliance with state and federal law and current EPA guidelines, including, but not limited to, *Guidance for Controlling Asbestos Containing Materials in Buildings*, June 1985, EPA 560/5-85-024 (a.k.a. the “Purple Book”) (available from the TSCA Hotline (202) 554-1404 or Asbestos Ombudsman (800) 368-5888.
 - (ii) DCA requires friable ACM to be remediated by removal or encapsulation.
 - (iii) An Operations and Maintenance (“O&M”) Plan will be required for any encapsulated friable ACM or any non-friable ACM that will remain in any structure or improvement. All Operations and Maintenance plans must be in conformance with current EPA guidelines, including, but not limited to, *Managing Asbestos in Place: A Building Owner’s Guide to Operations and Maintenance Programs for Asbestos Containing Materials*, July 1990, EPA 20T-2003 (a.k.a. the “Green Book”) (available from the TSCA Hotline (202) 554-1404 or Asbestos Ombudsman (800) 368-5888 and the DCA O&M Guidance Plan included in this Manual.
 - (iv) The demolition or renovation of any improvement must be completed in accordance with all applicable laws and regulations.

8. Lead-Based Paint

Lead based paint sampling is required of both the interior and exterior of the building using EPA

and HUD approved testing methods and procedures for any structure located on the subject property unless:

- a. the structure was constructed after 1978;
- b. the structure is vacant and will remain vacant until it is demolished; or
- c. the structure has a valid certificate of compliance under applicable lead-based paint laws.

If any lead-based paint is identified, then soil sampling for total lead content must conform to all requirements in Section D. Where structures formerly present on the subject property have already been demolished, lead in soil sampling for total lead is required, *unless* waived by DCA at its sole discretion. If structure is planned for demolition, a full lead paint survey is not required, but no paint chips, or planned debris may remain on site when demolition activities are completed.

Should a full lead survey be required, it must be performed by lead inspectors working for a Georgia Certified Lead firm. Lead-based paint waste from residential projects may be disposed of as household waste. Waste that contains paint chips, dust, soil and/or sludge generated from the abatement, renovation or remodeling project must be disposed of at Municipal Solid Waste Landfill with a leachate liner. Architectural building components, such as doors, window frames, banisters, flooring, porch post and other painted woodwork may be disposed of at a permitted MSWL or C&D landfill.

- a. Prior to conducting any lead in soil sampling, applicants are encouraged to submit a proposed scope of work conforming to all the requirements for Phase II investigations found in Section D of this manual. DCA requires conformance to the standards for Phase II investigations, even though, lead in soil is a non-ASTM issue, according to the ASTM Standards. Thus, is not normally under the purview of a Phase II investigation.
- b. If lead in soil sampling has already been completed, DCA may, at its sole discretion, require additional testing and analysis prior to completing the threshold review of the Application.
- c. DCA reserves the right upon reviewing the Report for any such Phase II to require that the Applicant conduct any of the following environmental activities, at DCA's sole discretion: (i) perform additional testing; (ii) perform remediation and confirmatory testing; (iii) obtain a brownfield's "limitation of liability"; or (iv) obtain a "no listing" letter under HSRA.
- d. As a general guide, lead in soil testing should be conducted at a spacing of 1 discrete/grab sample per 50 feet of building face, including at least one sample from each building face. A map showing sample locations should be included with the report. Sample should be collected in exterior play areas where bare soil is present; in dripline/foundation areas where bare soil is present; and in the rest of the yard (non-play areas) where bare soil is present. The number of

samples to be collected depends on the size and characteristics of the property. Section II.G.E of chapter 5 of the guidelines should be consulted for further recommendations. No more than 10 subsamples should be included in a composite soil sample. Subsamples should be no closer than 1 foot apart but no more than 3 feet apart, with some exceptions due to the pattern and extent of bare soil. Collection methods are either by coring or scoop. Using a coring tool, samples are taken down to 2" and then pushed out of the coring tool leaving ½" of soil collected. When scoop (using a spoon), a ½" deep hole should be dug close to the subsample collection site. This hole is used as a visual reference for scooping the top ½" of soil from the subsample collection site.

- e. If former structures have been removed and the site has been redeveloped/graded, such that sufficient soil disturbance has occurred at the locations of the previous structures, lead in soil testing is not necessary. This should be clearly documented in the report.

Any lead-based paint in excess of applicable standards must be inspected, remediated or abated in accordance with all applicable federal, state and local laws and regulations, including, but not limited to, The Rules of the Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-24, Lead Based Paint Hazard Management.

An Operations and Maintenance Plan ("O&M Plan") is required for any lead- based paint remaining in place and must conform to the O&M Guidance Plan in the Operations Section of this Manual.

9. Lead in Drinking Water

Where a local utility currently provides or may provide drinking water to the property, the Environmental Professional must review and provide in the Phase I Report the most current information documenting the local utility's compliance or non-compliance with current EPA standards for lead in drinking water. The Environmental Professional must also conduct a visual assessment of the plumbing system(s) in any buildings that will not be demolished to determine the risk of lead in drinking water due to lead solder in pipes.

- a. If the Environmental Professional's review and/or visual assessment suggests a risk of lead in drinking water at the property, testing must be performed at the tap in accordance with the EPA publication *Lead in Drinking Water in Schools and Non-Residential Buildings*, EPA 812-B-94-002, April 1994.²
- b. If the buildings at the property were built prior to 1987, or the site reconnaissance shows signs of lead plumbing/soldering, a minimum of 10 percent of the drinking water outlets, or one from each floor of the building (whichever is higher), should be tested, according to the guidelines referenced above, regardless of the results of the review or visual assessment.
- c. If lead above the drinking water standard (mcl) is detected in the drinking water, remediation is required in accordance with all applicable federal, state and local laws and regulations.
- d. If all the plumbing is removed and replaced with pipes in accordance with Section 1417(e) of the Safe Drinking Water Act (SDWA), then lead testing is not required. The SDWA states that "lead free" means those fittings and fixtures that are in compliance with the standard established under Section 1417(e) with regard to plumbing fittings and fixtures intended to dispense water for human consumption. Further, Section 1417(a)(1) of the SDWA requires that only "lead free" pipe, solder or flux may be used in the installation or repair of (1) Public Water Systems, or (2) any plumbing in a residential or non-residential facility providing water for human consumption.

10. Polychlorinated Biphenyls ("PCBs").

Documentation must be included in the Phase I report indicating the condition of any transformers or other electrical equipment observed on or adjacent to the property that could contain PCBs. The Environmental Professional must determine ownership of and responsibility for the electrical equipment and include in the Phase I Report a discussion of such ownership/responsibility and a statement as to whether or not the equipment contains PCBs.

11. Endangered Species.

The Environmental Professional must review the list of protected species from the U.S. Fish and Wildlife Service, check the occurrence records from the Georgia Natural Heritage Inventory Program, and provide comment regarding on-site habitats, the potential for the presence of endangered species and whether or not the presence of such species will be impacted by the proposed development.

² <https://www.epa.gov/sites/production/files/2015-09/documents/leadinschools.pdf>

Please note:

Endangered Indiana bat (*Myotis sodalis*) and threatened northern long-eared bat (*Myotis septentrionalis*) occur over a large portion of northern Georgia and utilize our forests in the summer to form maternity colonies and raise pups. Forests surrounding caves also provide critical habitat for northern long-eared bats in the spring and fall. The range of both Indiana and northern long-eared bats, as well as endangered gray bats (gray bats do not roost in forest but in caves only), can be found here: <http://www.georgiawildlife.com/BatSurveyGuidance> or through U.S. Fish and Wildlife Service's Information for Planning and Conservation website here: <https://ecos.fws.gov/ipac/>. Care should be taken during project planning to avoid harm to threatened and endangered bat species. Areas of greatest concern are located around caves (see attached Google Earth file), but projects that would involve extensive tree clearing, project planners may request technical assistance from the U.S. Fish and Wildlife Service's Georgia Ecological Services Field Office in Athens, Georgia. For developments in areas where the northern long-eared bat and/or Indiana bat occur, and potential suitable habitat is present, applicants must provide: a project description, a location map, and project center-point coordinates, preferably in decimal degrees, to Pete Pattavina (pete_pattavina@fws.gov) or Carrie Straight (carrie_straight@fws.gov). They can also be reached by phone at 706-613-9493. If no response is received in 30 days, the development is in compliance with the ESA.

12. Other Hazards and Considerations.

The Environmental Professional must also consider and discuss in the Phase I Report other hazards or considerations, including, but not limited to, the presence of urea formaldehyde in existing structures, existing septic tanks or wells on the property, or the absence of the availability of a municipal water or sewer system to the property, including any moratorium on new hookups.

The Environmental Professional must provide documentation that the municipal water and sewer services are available to the property, because such service is required under the DCA's Appendix I Threshold Criteria for all properties seeking DCA approval. A record of a phone conversation between the Applicant or the Environmental Professional and the relevant authority, or a copy of a letter sent to the Applicant by the relevant authority are all acceptable forms of documentation.

13. Historic Preservation.

The Environmental Professional must provide documentation regarding the effect the proposed project will have on historic resources and archaeological sites that are listed in or eligible for listing in the National Register of Historic Places.

Applicants applying for Federal funding (HOME), are required to complete the Section 106 process and clearance, as part of the NEPA process. Section 106 of the National Historic Preservation Act requires DCA to act as the Responsible Entity for the administration of federal funds and as such to identify and assess the effects of its actions on historic resources and archaeological sites.

Applicants applying for tax credits must obtain GEPA (Georgia Environmental Policy Act of 1991) clearance. This process is similar to Section 106, but applies to state agencies, rather than federal agencies.

Documentation required for Historic Preservation (both Section 106 and GEPA) can be found on Georgia DNR Historic Preservation Division's Review and Compliance site³. Required documentation includes HPD's Environmental Review Form⁴ (including required attachments) and a limited Cultural Resources survey by a Preservation Professional that identifies and assesses any effects to historic properties or archaeological sites from the proposed project. The HPD review form must be prepared and submitted to HPD **prior** to application submission. Applicants must indicate on the form whether they are seeking Section 106 or GEPA clearance. All applicants are required to submit this information to Georgia DNR Historic Preservation Division for review. Evidence of submission (a dated copy of the HPD form and all attachments) must be included in the appropriate Appendix to the Phase I ESA. Once submitted, HPD has a thirty-day review period and will contact the applicant if any additional information is needed (the period starts over if HPD has to ask for additional information). HPD's response to this review form is valid for up to 3 years from the stated review date, unless the project scope changes. DCA must receive HPD's response in order to fully review the Phase I ESA.

In most cases it will be necessary to employ a Preservation Professional that can conduct a limited cultural resources survey to assess the effects to historic properties and archaeological sites. A list

³ HPD Review and Compliance: <https://georgiashpo.org/review>

⁴ HPD Environmental Review Form: https://georgiashpo.org/sites/default/files/hpd/pdf/ER_and_compliance/EnvironmentalReviewForm.pdf

of Preservation Professionals can be found on the Georgia Department of Natural Resources Historic Preservation Consultant's Directory⁵.

The documentation at a minimum will include evidence of a thorough literature review and site file search to determine if previously known historic properties or archaeological sites are present within an Area of Potential Effect (APE). Additionally, if no historic resources survey of project area has occurred in the last five years, it will be necessary to conduct a field level cultural survey of the APE to determine if any, as yet, unrecorded historic resources or archaeological sites are present.

Tribal Historic Preservation Review (only applicable for Section 106). If it is determined that the proposed project will affect tribal historic properties, DCA will consult with THPO to determine actual effect based on criteria found in the Council's regulations. DCA shall forward gathered documentation to the appropriate Tribal Council for a thirty (30) day determination of eligibility. The letter that will be provided to the THPO by DCA must be included in the supporting documentation of the Phase I Report. More information on Tribal Consultation can be found on the HUD Exchange⁶ including a checklist that can be used to determine whether consultation is required.⁷

14. Vapor Intrusion.

If soil or groundwater contamination is identified on-site or on an abutting or adjacent property, the Phase I Report must include a Tier 1 Vapor Encroachment Screening performed in accordance with ASTM E 2600-15 standards to determine if vapors from hazardous substances or petroleum products occur in the subsurface below existing and/or proposed on-site structures.

- a. If the Tier 1 screening cannot rule out a Vapor Encroachment Condition (VEC), then a Tier 2 screening shall be performed. If the Tier 2 screening indicates that a VEC exists; then further evaluation of the vapor intrusion pathway using guidance from EPD and/or EPA shall be performed.
 - (i) Guidance from EPD is available at: <https://epd.georgia.gov/vapor-intrusion-technical-guidance>
 - (ii) Guidance from the EPA is available at: <http://www.epa.gov/oswer/vaporintrusion/>
 - (iii) Particular assessment tools may include the EPA Vapor Intrusion Screening Level Calculator, the EPA implementation of the Johnson and Ettinger Model, and media (i.e.,

⁵ Georgia DNR SHPO Consultants Directory: <http://georgiashpo.org/consultantsdirectory>

⁶ HUD Exchange, Tribal Consultation: <https://www.hudexchange.info/environmental-review/historic-preservation/tribal-consultation/>.

⁷ HUD Exchange, Tribal Consultation Checklist: <https://www.hudexchange.info/resource/3770/when-to-consult-with-tribes-under-section-106-checklist/>

groundwater, exterior soil gas, sub-slab soil gas, and indoor air) sampling. These assessment tools should be used in accordance with guidance from EPD and/or EPA.

- b. The results of the vapor intrusion evaluation shall be reported to DCA and, if necessary, shall include proposed VI mitigation measures (including a schedule) to prevent vapors from migrating into any structure or building. VI mitigation measures may include soil and/or groundwater remediation, if appropriate. Upon completion of the VI mitigation measures, a report detailing the measures employed shall be submitted to DCA within thirty (30) days of completion. Where no current structures exist, vapor mitigation measures shall be evaluated and implemented in construction of future structures. A report detailing this VI evaluation and any vapor mitigation measures employed during and/or after development shall be submitted to DCA within thirty (30) days of the evaluation and/or any required mitigation. An annual certification of compliance with the proper operation and maintenance of mitigation measures may be required.
- c. Any VI mitigation measures shall comply with applicable Georgia and EPA rules and meet all applicable appropriate industry and engineering standards and guidelines (including but not limited to ASTM Standards) and satisfy all prudent design, construction, installation and operating practices followed by experts in the industry for residential development.

C. Required Documentation That Must Be Included in All Phase I Reports.

- **Environmental Consultant Signature Page for Phase I Reports.** This document must be completed, signed by the appropriate parties, and included immediately after the cover of the Phase I Report. This form can be found within the Forms Section of the Qualified Allocation Plan Documents.
- **The Environmental Certification.** This document must be completed, signed by the Environmental Professional, and included in the appendix. This form can be found within the Forms Section of the Qualified Allocation Plan Documents.
- **Owner Environmental Questionnaire & Disclosure Statement.**
 - This document must be completed and signed by the owner of record of the proposed development site and must be signed and notarized in the spaces provided no earlier than ninety (90) days prior to Application submission. This form can be found within the Forms Section of the Qualified Allocation Plan Documents.
 - For all information to the document that is not or cannot be provided by the owner of record, the Environmental Professional must seek out the information and address the information in the Phase I Report.

- The signed and notarized Owner Environmental Questionnaire & Disclosure Statement must then be forwarded to the Environmental Professional to be reviewed and included in the appendix of the Phase I Report.
- **Property Log and Information Checklist.** This document must be prepared by the Environmental Professional and attached to the Phase I Report. All entries must be fully documented and explained in the Phase I Report. This form can be found within the Forms Section of the Qualified Allocation Plan Documents.
- **HOME and HUD Environmental Questionnaire.** This document must be included in the Phase I Report for all projects requesting HOME funding and/or HUD funding sources, including but not limited to PBRA. This form can be found within the Forms Section of the Qualified Allocation Plan Documents.
- **Proof of Insurance.** Proof of insurance in specified amounts listing GHFA and DCA as an additional insured on the general commercial liability policy and giving the proper 30-day cancellation period.
- **Comprehensive Historical Review.** This must be discussed in the Phase I Report and documentation must be included in the appendix of the Phase I Report.
- **Letters of Reference.** The environmental consulting firm that performed the Phase I (and Phase II, if required) must include in the appendix of the Phase I Report, three letters of reference attesting to the firm's prior work. At least one of the references should be from a real estate firm or law firm that used the environmental consulting firm to support a real property transaction. Letters of reference must be for work completed within the last twenty-four (24) months.
- **The Georgia Historic Preservation Division Environmental Review Form.** The Environmental Professional must prepare this document and a copy must be attached to the Phase I Report for all projects that may have an effect upon properties included in or eligible for inclusion in the National Register of Historic Places. All entries must be fully documented and explained in the Phase I Report. This form can be found within the Forms Section of the Qualified Allocation Plan Documents or on the HPD website.

D. Requirements for Phase II Investigations and Non-ASTM Testing

1. General Requirements.

- a. The purpose of a Phase II Environmental Site Assessment (Phase II) or any Non-ASTM Testing (collectively referred to as ‘testing’) is typically to determine the presence or absence of RECs, suspected environmental concern(s), extent of non-scope issue(s), or to quantify the extent of an actual or suspected release or potential release identified in the Phase I Report. Testing may require additional information gathering and/or physical sampling, if appropriate.
- b. If the Phase I Report documents a recognized environmental condition, suspected environmental concern or non-ASTM issue, a Phase II Environmental Site Assessment or Non-ASTM Testing is required in all but the most exceptional circumstances. Testing must be completed as part of the Application submission.
- c. The Phase II and Non-ASTM testing need only extend to those investigations necessary to resolve the RECs, suspected environmental concerns, or non-scope issues, or to quantify the extent of any release identified in the Phase I Report. If clear and convincing evidence exists that a property is *not* impacted by an REC, suspected environmental concern, or non-scope issue, then DCA at its sole discretion may waive the requirement for a Phase II for that issue.
- d. The Phase II and Non-ASTM testing must include thorough documentation of the methods utilized to conduct sampling and research. Good management practices and regulatory standards must be followed at all times, especially where physical sampling and laboratory analysis is involved. Groundwater sampling activities must comply with current U.S. Environmental Protection Agency and Georgia Environmental Protection Division standards and policies.
- e. DCA Review of Testing Scope of Service: If a Phase I Report recommends a Phase II Environmental Site Investigation or any other testing relating to non-ASTM items (Non-ASTM Testing) (collectively referred to in this Section as “testing”), the Applicant is strongly encouraged to submit the Phase I Report (text only), along with the proposed Phase II or other Non-ASTM Testing scope of work and the Site Map, no later than sixty (60) days prior to Application submission for DCA to review. While submittal of this documentation is not required, the strict time frame associated with Threshold Review could make it impossible for modifications testing to be completed prior to selection of a project if DCA determines that the work scope is not adequate.

- f. The proposed scope of work must be submitted to the attention of the Office of Affordable Housing - Environmental Compliance with a cover letter clearly indicating its contents and requesting approval of the scope.
- g. If the Applicant does not submit a draft of the proposed testing scope of work, or if the testing has already been completed, DCA may, at its sole discretion, require that the Applicant conduct any of the following environmental activities prior to completing the threshold review of the application: (i) perform additional testing; (ii) perform remediation and confirmatory testing; (iii) obtain a brownfield's "limitation of liability"; (iv) obtain a "no listing" letter under the Georgia Hazardous Site Response Act ("HSRA"), O.C.G.A. § 12-8-90 *et seq.*, 1992, as amended; (v) develop a Noise Attenuation Plan; (vi) develop an O & M Plan with respect to certain known, suspected, or potential environmental hazards which are discovered during the Phase I and/or Phase II reviews. If the required activities cannot be completed within the required time frame, the project will fail Threshold.
- h. DCA will review the proposed scope of work and issue its concurrence or include additional work scope items that will satisfy the threshold requirements.
- i. If the Applicant does not receive a response from DCA regarding the proposed scope of work within fifteen (15) business days prior to Application submission, the Applicant should proceed with the testing.
- j. DCA reserves the right upon reviewing the report for any such testing to require that the Applicant conduct any of the following environmental activities, at DCA's sole discretion: (i) perform additional testing; (ii) perform remediation and confirmatory testing; (iii) obtain a brownfield's "limitation of liability"; (iv) obtain a "no listing" letter under HSRA; (v) develop a Noise Attenuation Plan; or (vi) develop an O & M Plan with respect to certain known, suspected, or potential environmental hazards which are discovered during the Phase I and/or Phase II reviews.
- k. The proposed scope of work must:
 - (i) List the recognized environmental conditions, suspected environmental concerns, and or non-scope issues.
 - (ii) Specify the locations and depth of any proposed monitoring wells, soil borings, and/or samples and include a Site Map showing the same.
 - (iii) Specify the number of samples and depth of samples.
 - (iv) Specify the test methods and analytical methodology, which will be used.
 - (v) Include a cost assessment for all testing and reporting activities.

2. The Phase II or Non-ASTM Testing Report.

The Phase II Report, performed under the supervision of an Environmental Professional, must be reviewed, signed and certified by the Environmental Professional using the Environmental Consultant Signature Page for Phase II Reports, which can be found in the Forms Section of the Qualified Allocation Plan Documents. The Environmental Certification must appear immediately following the cover page of the Phase II Report. If the Environmental Professional, supervising and signing the Environmental Consultant Signature Page for Phase II Report, is not the same as the Environmental Professional who signed the Phase I Report for the property, the qualifications of such personnel should be described in the Phase II Report.

- a. The Phase II Report also must summarize in a table and/or figure format all soil and/or groundwater analytical data. Non-ASTM Testing must meet the below requirements, where applicable.
- b. The Phase II Report must summarize all applicable state and federal notification and/or cleanup standards. The Phase II Report must include an estimate of costs for any necessary environmental remediation. This cost estimate must be included in the development cost estimates and contain both the *total* estimated costs and the estimated costs for *each* separate activity.
- c. The Phase II Report must be clearly dated on the cover and must not be less than one year old at the time of formal application submittal.
- d. The Environmental Professional must thoroughly explain all investigations, analytical data, test results, findings, and conclusions in the Phase II Report. This includes the Environmental Professional's interpretations and clear recommendations.
- e. Appropriate documentation (e.g., records review data or research, photographs, interview notes, any analytical results, etc.) that supports the findings and opinions in the Phase II Report must be included in the appendices to the Report.
- f. If assessment of volatiles in soil are part of the testing scope, the Environmental Professional must utilize a photo-ionization detector ("PID"), or other appropriate field organic screening instrument, to analyze the likely presence of volatile organic compounds in any soil borings or samples taken during the performance of any Phase II or any other soil testing event and must discuss the results of the PID analysis in the Phase II Report.
- g. For any groundwater testing for metals, turbidity measurements must be performed in the field. If turbidity is greater than 5 Nephelometric Turbidity Units ("NTUs"), both a filtered and a non-filtered analysis must be completed.

- h. The Phase II Report must contain a copy of any soil boring logs and must show the depth to groundwater, except where borings are not installed to groundwater.
- i. The Environmental Professional must require any laboratory submitting analytical results relating to a project to provide the following stipulation in the report: *I stipulate that [name of laboratory] is accredited by [name of accrediting agency] and has been assigned [accreditation number]. The accreditation relates to [media - e.g., air, drinking water, hazardous waste]. The effective date of accreditation is [date] and expires on [date]. I further certify that the sample(s) for which this data is being submitted has been handled pursuant to the appropriate chain of custody.*

Signed:

Date:

E. Professional Opinion and Related Requirements for Phase I and Phase II Reports

1. Primary Requirements.

A. In any Phase I Report, the Environmental Professional must provide a professional opinion as to:

1. The existence or non-existence of any RECs, HRECs, CRECs, suspected environmental concerns, and/or non-scope issues.
2. Whether the property has known contamination or is at risk for contamination from any RECs, HRECs, CRECs, suspected environmental concerns and/or non-scope issues.
3. Whether further environmental assessment activities, testing, or a Phase II Report are necessary.
4. Whether “all appropriate inquiry,” as described in Section 3.2.6 of ASTM E 1527-13, was conducted.
5. The significance of all Data Gaps pertaining to the Environmental Professional’s ability to identify any RECs, HRECs, CRECs, suspected environmental concerns, and/or non-scope issues.

B. In any Phase II Report, the Environmental Professional must provide a professional opinion as to:

1. Whether the property is contaminated.

2. Whether any contamination discovered is from an on-site or off-site recognized environmental condition, suspected environmental concern, and/or non-scope issue.

The Phase II or Non-Scope Testing Report must list as “users” of the Phase II or Non-Scope Testing Report the same parties that the Phase I report listed as “users” and must state that they may use and rely upon the Report. These parties include: the entity that has title to the property or the entity that will take title to the property, project development partners, equity partners for the project, and any other party which would be defined as a “user” within the meaning of Section 3.2.98 of ASTM.

- C. The Phase I Report or Phase II Report and the Environmental Certification must state that DCA and GHFA may rely on the Phase I Report and Phase II Report. For Phase I Reports, this statement should be included in Section 2.6 of the Report.

2. **Additional Requirements.** In any Phase I or Phase II where contamination from an on-site or off-site source is known or has been determined, the Environmental Professional must provide a professional opinion as to:

- A. Whether any regulatory reporting or cleanup obligations are triggered.
- B. Whether any onsite or offsite contamination at or in close proximity to the subject property poses a hazard to human health and safety.
- C. Whether the subject property is likely to be listed on the Georgia Hazardous Site Inventory (“HSI”) or otherwise become part of an HSI site based on any documented soil and/or groundwater contamination.
- D. Whether the proposed project would exacerbate any existing contamination, upon reviewing the site plans.

3. **Restrictions/Limitations.** The Phase I and/or Phase II Report(s) providing the Environmental Professional’s professional opinion may not contain:

- A. Any language eliminating or disclaiming the liability of the Environmental Professional or their firm.
- B. Any language eliminating or modifying the Environmental Professional’s duties, obligations, or statement of work.
- C. The report may *not* state that it is exclusively for the use of the party who hired the Environmental Professional or that there is no accountability, obligation or liability to any third party.

F. Insurance Requirements

- a. The Environmental Professional must carry insurance that provides full coverage for all work performed. The Environmental Professional must maintain insurance policies covering all of the following types of insurance in the greater of either the following amounts of coverage or the amounts of coverage that the Environmental Professional typically carries:
 - (i) Commercial General Liability insurance, total combined single limits of \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate;
 - (ii) Professional Errors and Omissions insurance with limits of \$2,000,000.00 per claim and \$2,000,000.00 in the aggregate; and
 - (iii) Pollution Liability insurance with limits of \$2,000,000.00 per occurrence and \$2,000,000.00 in the aggregate, with coverage extended to include third party liability for death, bodily injury, diminution of value of property and property damage.
- b. The Georgia Housing and Finance Authority (GHFA) and DCA must be named as an additional insured on the commercial general liability insurance. In addition, GHFA and DCA must also be listed as a certificate holder on all policies. The insurance should be documented on an Acord 25 certificate. Such insurance, including any deductible or self-insured retention, shall by its terms be primary with respect to any insurance carried by the Applicant or any parent, subsidiary, or affiliated entities. For such policies written on a claims-made basis, the Environmental Professional must maintain such coverage for a period of at least three (3) years following the completion of the final Phase I and/or Phase II Reports.
- c. The Environmental Professional must promptly notify DCA/GHFA of any changes made to the insurance policies required by this Section.
- d. Upon written request of DCA/GHFA, the Environmental Professional must promptly deliver copies of policies evidencing the insurance coverages required by this Section (F) to DCA/GHFA.
- e. All required insurance shall be underwritten by an insurance carrier acceptable to DCA/GHFA and with an AM Best rating of not less than A-. Such insurance policies are to provide that the insurer must give DCA/GHFA at least thirty (30) days prior written notice of cancellation/termination/material change, and to provide that no action by the insured shall invalidate or diminish the insurance or bond(s) provided to DCA/GHFA.
- f. Proof of insurance must be included in the appendix of the Phase I Report.

g. For ease of processing, the project name should be included on the insurance certificate.

G. HUD Environmental Clearance & Environmental Review Process for Project Applying for HOME or Other Federal Funding.

The Georgia Department of Community Affairs, as the responsible entity referred to in 24 C.F.R. § 58.43, Environmental Review Procedures for Entities Assuming HUD Responsibilities, is responsible for undertaking environmental reviews for proposed HOME projects. In this capacity, DCA must ensure that the environmental review process is satisfied before certain HUD funds are committed to specific projects. When initial awards of HOME funds are announced, and DCA has completed all required NEPA documentation, DCA will publish notices of its intent to allocate HOME funds in local newspapers in the proposed projects' areas. After a 15-day comment period, if any, have been received, HUD will review the comments to determine if there has been a finding. After the comment period and if there are no findings, DCA will seek HUD's approval of its commitment of HOME funds to the proposed project. In order to ensure that the environmental review process is not challenged, or to avoid noncompliance with HUD's environmental procedures, Owners and/or Developer of proposed projects must, once applications are submitted, refrain from undertaking activities that could have an adverse environmental impact prior to the receipt of an environmental clearance letter from DCA removing the stipulated conditions. Such activities include acquiring, rehabilitating, converting, leasing, repairing, or constructing property. As a result, an Applicant cannot commit or expend HUD or non-federal funds until the environmental review process has been completed and the Owner and/or Developer has received a clearance letter from DCA permitting project activities. For detailed procedures for complying with this requirement and completing the HOME HUD Questionnaire, please see the HOME HUD Environmental Guidance.

III. DCA Evaluation and Conclusions

DCA conducts an independent review of the environmental materials submitted with an application. Any environmental concerns or issues identified (e.g., soil or groundwater contamination) in the Phase I or Phase II review must be addressed in accordance with these Standards. In addition, DCA will routinely conduct an independent review of publicly available information regarding the environmental condition of a property. DCA may require additional assessment of a property, including but not limited to, file review and/or Phase II sampling.

Environmental issues with the potential to impact the subject property which are not satisfactorily identified by the Environmental Professional and are later identified by DCA can be grounds for failing the threshold review. Issues that cannot be resolved during the Application period, or which present or may present a risk to the health or safety of persons or to the environment, and/or that present an unacceptable degree of lender and/or owner liability will be grounds for site rejection. Such decisions will be made at DCA's sole discretion. Increasingly, applicable law requires environmental remediation and repair work to be performed and documented according to strict regulatory standards. If proper documentation does not exist to substantiate remedial work performed prior to the commencement of the Phase I, then limited confirmatory testing or a Phase II may be required.

Upon review of the completed Phase I and/or Phase II reports, DCA, at its sole discretion, may impose additional assessments and/or environmental actions including, but not limited to, (i) performing remediation and confirmatory testing; (ii) obtaining a brownfield's "limitation of liability"; (iii) obtaining a "no listing" letter under HSRA; (iv) developing a Noise Attenuation Plan; or (v) developing an Operations and Maintenance Plan ("O&M Plan"), as a requirement for, or condition of, a funding commitment or tax credit allocation. Properties with recognized environmental conditions, potential environmental concerns, or non-scope issues that are not satisfactorily addressed by Phase II testing are unlikely to pass the threshold review or be approved for funding for tax credits. No project expenditures may be incurred or any HOME funds drawn down for any activity (other than exempt activities) prior to receipt of an environmental clearance letter releasing the conditions/funds. This may be obtained by completing an environmental review of each project as described in Part III of the 2018 Environmental Manual.

DCA reserves the right to refuse to fund or to withdraw funding from a project in which environmental hazards are discovered subsequent to DCA's completion of its threshold review.

In such situations, however, at DCA's sole discretion, applicants may be given the opportunity to (i) perform additional testing; (ii) perform remediation and confirmatory testing; (iii) obtain a brownfield's "limitation of liability"; (iv) obtain a "no listing" letter under HSRA; (v) develop a Noise Attenuation Plan; (vi) develop an O & M Plan with respect to certain known, suspected, or potential environmental hazards, which are discovered during the Phase I and/or Phase II reviews; or (vii) perform vapor intrusion mitigation. Option (vi) may be exercised when HUD and/or EPA regulations allow the environmental hazard to remain at the site.

IV. Operations and Maintenance Plans

Some properties may have conditions that are currently acceptable but must be maintained or confirmed throughout the compliance or affordability period or the life of the loan whichever is greater with an ongoing O&M Plan. Examples may include the presence of ACM, lead-based paint, or underground storage tanks. The following documentation will be necessary for properties that require ongoing operations and maintenance:

1. A written O&M Plan must be submitted to DCA by the developer/owner *immediately* upon the completion of any remedial actions required. An Environmental Professional must prepare and certify that the provisions, if carried out with diligence, are sufficient to maintain the property in accordance with the DCA O & M Guidance Plan, sound business practices, and any other applicable regulatory standards. DCA will review the O & M Plan and determine if it meets the standards set forth in the DCA O & M Guidance Plan. The developer/owner must execute a written agreement with DCA that recognizes the developer/owner's obligation to carry out the O & M Plan including, if applicable, preparing documentation necessary to demonstrate compliance. At its discretion, DCA may require additional O & M Plan provisions.
2. The developer/owner must send written certification to DCA on an annual basis that certifies the property is being maintained in accordance with any applicable O & M Plans, environmental laws and regulations. The developer/owner must make an on-site inspection and inquiry before making the certification. The scope of the certification should include both the buildings and grounds, and cover the activities of the developer/owner, tenants, sub-lessees, their agents and any other third parties. These certifications must specifically address the ongoing effectiveness and adequacy of all current remedial and maintenance actions. Such certifications must be included as part of the annual Physical Inspection Report submitted to DCA.
3. In addition, an inspection and confirmation must be made immediately following the occurrence of events that might reasonably be expected to impact

the environmental condition of the property or the efficacy of prescribed remedial or maintenance actions. Such events would include, but are not limited to fire, flood, building construction or rehabilitation, spills or leaks of hazardous wastes or substances, unusual or intense use of property facilities, and/or significant changes in custodial or management personnel.

4. If the developer/owner is unable to confirm that the property is being maintained in accordance with any applicable O & M Plans, environmental laws, and regulations, the developer/owner must take any and all remedial and maintenance actions necessary to correct these conditions. The developer/owner must promptly confirm in writing to DCA the environmental status of the property immediately following implementation of any remedial actions.
5. The developer/owner must report to DCA and the appropriate local, state, or federal authority all known violations of applicable environmental statutes and state laws on the property. In addition, the developer/owner must 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 appropriate environmental statutes and good management practices.

V. Required Format for Phase I Report

COVER

ENVIRONMENTAL CONSULTANT SIGNATURE PAGE TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

- 1.1 Location of the Property
- 1.2 Environmental Concerns and Conclusions
 - 1.2.1 On-Site
 - 1.2.2 Off-Site
- 1.3 Recommendations
 - 1.3.1 On-Site
 - 1.3.2 Off-Site

2.0 INTRODUCTION

- 2.1 Background (including purpose of the Phase I)
- 2.2 Procedures (including a detailed Scope of Services)
- 2.3 Significant Assumptions

- 2.4 Qualifications of Personnel/Documentation of qualifications as an “Environmental Professional”
- 2.5 Assessment of Specialized Knowledge or Experience of User and/or “Environmental Professional”
- 2.6 Limitations and Exceptions
- 2.7 Special or Additional Conditions or Contract Terms

3.0. SITE SETTING

- 3.1. General Description of the Site and Vicinity
 - 3.1.1. Current Site Use and Description
 - 3.1.2. Current Uses of Adjoining Properties
 - 3.1.3. Description of Structures, Roads, and Other Improvements
(including exterior and interior observations)
- 3.2. Hydrogeology
 - 3.2.1. Geologic Setting
 - 3.2.2. Surface Drainage
 - 3.2.3. Groundwater
- 3.3. Wetlands
- 3.4. Floodplain/Floodway
- 3.5. State Waters
- 3.6. Endangered Species

4.0 REGULATORY INFORMATION

- 4.1 Data Review
 - 4.1.1 Standard Environmental Record Sources
 - 4.1.1.1 Sites listed in Section 8.2.1 of ASTM E 1527-13
 - 4.1.1.2 Orphan/Unmappable Sites
 - 4.1.2 Additional Environmental Record Sources
 - 4.1.2.1 Local Land Records (for activity and use limitations)
 - 4.1.2.2 Records of Emergency Release Reports
 - 4.1.2.3 Planning Department Records
 - 4.1.2.4 Local/Regional Water Quality Agency Records
 - 4.1.2.5 Local Electric Utility Companies (for records related to PCBs)
 - 4.1.2.6 Other
- 4.2 Agency Contacts/Records
 - 4.2.1 Local Fire Department Official

- 4.2.2 State, Local, or Regional Health or Environmental Agency
- 4.2.3 Local Building Permit Agency Official
- 4.3 Interviews
 - 4.3.1 Current Key Site Manager, Occupants, or Owners of the Property
 - 4.3.2 Current Owners or Occupants of Neighboring Properties
 - 4.3.3 Past Owners, Occupants, or Operators of the Property
 - 4.3.4 User(s)
 - 4.3.4.1 Recorded Land Title Records/Judicial Records/Records of Environmental Liens and Activity and Use Limitations
 - 4.3.4.2 Specialized Knowledge of the User
 - 4.3.4.3 Commonly Known/Reasonably Ascertainable Information
 - 4.3.4.4 Reason for Performing the Phase I
 - 4.3.4.5 Relationship of Purchase Price to Fair Market Value (if Property being purchased)

5.0 SITE INFORMATION AND USE

- 5.1 Site Reconnaissance Methodology and Limiting Conditions
- 5.2 General Site Setting
- 5.3 Assessment of Commonly Known/Reasonably Ascertainable Information
- 5.4 Current Site Use
 - 5.4.1 Storage Tanks
 - 5.4.2 Hazardous Substance and Petroleum Products
 - 5.4.3 Containers/Drums/Unidentified Substance Containers
 - 5.4.4 Heating and Cooling
 - 5.4.5 Solid Waste
 - 5.4.6 Sewage Disposal/Septic Tanks
 - 5.4.7 Hydraulic Equipment
 - 5.4.8 Contracted Maintenance Services
 - 5.4.9 Electrical Equipment/PCBs
 - 5.4.10 Water Supply and Wells
 - 5.4.11 Drains and Sumps
 - 5.4.12 Pits, Ponds, Lagoons, and Surface Waters
 - 5.4.13 Stressed Vegetation
 - 5.4.14 Stained Soil or Pavement
 - 5.4.15 Odors

- 5.4.16 Utilities/Roadway Easements
- 5.4.17 Chemical Use
- 5.4.18 Water Leaks/Mold/Fungi/Microbial Growth
- 5.4.19 Asbestos
- 5.4.20 Lead-Based Paint
- 5.4.21 Lead in Drinking Water
- 5.4.22 Radon
- 5.4.23 Noise
 - 5.4.24 Vapor Encroachment Screening
 - 5.4.25 Other Site Reconnaissance Issues

5.5 Past Site Use

- 5.5.1 Recorded Land Title Records/Judicial Records/Records of Environmental Liens and Activity and Use Limitations
- 5.5.2 Aerial Photographs and Topographic Maps
- 5.5.3 Sanborn Fire Insurance Maps
- 5.5.4 City Directories
- 5.5.5 Previous Environmental Studies

5.5.6 Other

5.6 Current Surrounding Land Use

- 5.6.1 North
- 5.6.2 East
- 5.6.3 South
- 5.6.4 West

5.7 Past Surrounding Land Use

- 5.7.1 North
- 5.7.2 East
- 5.7.3 South
 - 5.7.4 West

5.8 Historic Preservation

6.0 DATA GAPS

- 6.1 Identification of Data Gaps
- 6.2 Sources of Information Consulted to Address Data Gaps
- 6.3 Significance of Data Gaps

7.0 ENVIRONMENTAL CONCERNS

7.1 On-Site

7.2 Off-Site

8.0 CONCLUSIONS & RECOMMENDATIONS

8.1 On-Site

8.2 Off-Site

9.1 DATA REFERENCES

APPENDIX A -- FIGURES AND MAPS

1. USGS Topographic Map
2. USFWS National Wetlands Inventory Map
3. Soil Survey Map
4. FEMA Map
5. Site Map (Existing Conditions)
6. Site Map (Proposed Conditions)
7. Radon Map

APPENDIX B -- PHOTOGRAPHS (including date and description of view presented)

APPENDIX C -- HISTORICAL RESEARCH DOCUMENTATION

1. Historic aerial maps
2. Fire insurance maps
3. Historical topographical maps
4. City Directories

APPENDIX D - DOCUMENTATION FROM TITLE COMPANY/TITLE PROFESSIONAL

1. Recorded land title records
2. Records of environmental liens and activity and use limitations
3. Legal description

APPENDIX E - NON-ASTM TESTING

1. Lead based paint
2. Lead in soil
3. Lead in water
4. Asbestos
5. Radon
6. Vapor Encroachment Screening

APPENDIX F --NOISE ASSESSMENT DOCUMENTATION (if applicable)

1. Noise assessment report
2. Noise attenuation plan

APPENDIX G -- REGULATORY SEARCH INFORMATION

1. Regulated Facilities Radius Map Report
2. File Review Documents (if applicable)

APPENDIX H -- RECORD OF COMMUNICATIONS AND INTERVIEWS

1. User/applicant interview
2. (abandoned properties) Interview of owners and occupants of neighboring properties
3. documentation of attempts to interview:
 - a. local fire department;
 - b. state or local health department or environmental agency;
 - c. local agency responsible for issuance of building permits;
 - d. local agency responsible for issuance of groundwater
 - e. Other Interviews

APPENDIX I -- AUTHOR CREDENTIALS, DOCUMENTATION OF QUALIFICATION AS AN “ENVIRONMENTAL PROFESSIONAL”

APPENDIX J -- OWNER ENVIRONMENTAL QUESTIONNAIRE

APPENDIX K -- PROPERTY LOG AND INFORMATION CHECKLIST

APPENDIX L -- PROOF OF INSURANCE

APPENDIX M -- LETTERS OF REFERENCE

APPENDIX N -- ENVIRONMENTAL CERTIFICATION

APPENDIX O-- CONSUMER CONFIDENCE REPORT ON WATER QUALITY

APPENDIX P-- ENDANGERED SPECIES

APPENDIX Q-- CULTURAL RESOURCE REVIEW DOCUMENTATION (if applicable)

APPENDIX R-- ADDITIONAL HOME REQUIREMENTS (if applicable)

1. HOME and HUD Environmental Questionnaire
2. HOME and HUD Questionnaire supporting documentation
3. 8-step process for floodplains and wetlands

APPENDIX S— OPERATION AND MAINTENANCE MANUAL (if applicable)

APPENDIX T – PREVIOUS REPORTS (if applicable)

1. Previous Phase I (text and pertinent appendices only)
2. Previous Phase II Reports

APPENDIX U-- OTHER (if applicable)

ATTACHMENT 1, PHASE II REPORT

1. Current Phase II Report

VI. **Common Omissions in Phase I Reports**

These lists reflect items commonly omitted from Phase I Reports, or which are commonly submitted incorrectly. This checklist is not intended to be a comprehensive checklist of all items required for a DCA approved Phase I Environmental Site Assessment and is merely a guide.

Common Omissions

- Report Date (not included on the cover).
- Environmental Certification Form.
- Signature of the Environmental Professional on the Environmental Certification form.
- Signature of the Applicant on the Environmental Certification form.
- Environmental Professional's resume, qualifications, letters of reference.
- Proof of insurance in specified amounts on appropriate certification forms; GHFA and DCA listed on the certificate as a certificate holder and as an additional insured for the commercial general liability policy.
- Owner Environmental Questionnaire and Disclosure Statement.
- Professional Opinion, conclusions, and recommendations on all matters observed on the subject site and or surrounding sites in the Executive Summary and in Sections 4.0 and 5.0 of the Report.
- Property Log.
- Geological investigation.
- Floodplain investigation and map.
- Aquatic Resources investigation, including wetlands maps.
- Groundwater flow direction on site map.
- Interviews – names and titles of interviewees; documentation of all interviews and attempts to interview in the Appendices.
- Dates on photographs in appendix.

- Noise Assessment Report and professional opinion (including NAG when noise levels exceed HUD limitations).
- Radon site classification for new construction; Radon testing in buildings for rehabilitation.
- Survey of mold conditions in buildings for rehabilitation.
- Lead in Drinking Water documentation.
- Asbestos sampling/survey.
- Lead Based Paint sampling.

Common Errors

- Incomplete HOME and HUD Environmental Questionnaire.
- Date of Site Reconnaissance not indicated.
- Historical review not performed in accordance with ASTM requirements and DCA standards (e.g., missing search for recorded environmental cleanup liens)
- Incomplete discussion of each property identified in the environmental regulatory database(s) and rationale(s) for determining whether each property presents a recognized environmental condition to the subject property.
- Map (Figure 5 in Appendix A) does not show all RECs identified in the Report
- Phase I Report is more than 180 days old and has not been updated, or report is over 1-year-old.
- DCA Required Format for Phase I Report not followed, including all appendices.
- Noise Assessment Report and professional opinion does not meet NAG requirements, including lack of 10-year traffic projections.
- Use of Disclaimer language inconsistent with requirements of these Environmental Guidelines.
- Site reconnaissance observations not sufficiently discussed.
- Observations and potential environmental impacts shown on photographs not sufficiently discussed.
- Data gaps/data failures not discussed sufficiently.

- Potential vapor encroachment not discussed and screening not followed.

VII. **Glossary of Terms and Acronyms**

HSRA:	Georgia Hazardous Site Response Act [O.C.G.A. Section 12-8-90 <u>et seq.</u>]
HSI	Hazardous Site Inventory
CERCLA	Comprehensive Environmental Response Compensation, and Liability Act of 1980 [42 U.S.C. Section 9601 <u>et seq.</u>], as amended by the Superfund Amendment and Reauthorization Act of 1986
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERCLIS NFRAP	CERCLIS—no further remedial action planned
EPCRA	Emergency Planning and Community Right to Know Act of 1986 [43 U.S.C. Section 11001 <u>et seq.</u>]
EPD	Georgia Department of Natural Resources, Environmental Protection Division
ERNS	Emergency Response Notification System [40 C.F.R. Parts 300, 370, and 372]
FINDS	Facility Index System [40 C.F.R. Section 6901 <u>et seq.</u>] LUST Leaking Underground Storage Tank Act
NPL	National Priorities List [42 U.S.C. Section 9605]
RCRA	Solid Waste Disposal Act as Amended by Resource Conservation and Recovery Act [42 U.S.C. Section 6901 <u>et seq.</u>]
RCRA CORRACTS	RCRA corrective action database
RCRIS	Resource Conservation and Recovery Information System SARA Superfund Amendments and Reauthorization Act of 1986 TRI Toxics Release Inventory