

MSHDA ENVIRONMENTAL REVIEW REQUIREMENTS FOR 2011

Table of Contents

I	Introduction and Site Selection Criteria	Page	2
II	New or Revised for 2011	Page	3
III	Special Instructions:	Page	3
	Tax Credit and Pass-Through Applications		
	Use of Federal Funds		
IV	MSHDA Phase I Environmental Site Assessment	Page	4
V	Phase II / BEA / Due Care	Page	13
VI	Federal Environmental Assessment (NEPA)	Page	14
VII	Selecting an Environmental Professional	Page	14
VIII	MSHDA User's Environmental Questionnaire and Disclosure Statement	Page	16
IX	MSHDA Phase I Summary Cover Sheet	Page	19
X	MSHDA Phase I Letter of Reliance	Page	22
XII	Required Phase I Report Format	Page	23

SECTION I INTRODUCTION AND MSHDA SITE SELECTION CRITERIA

The Michigan State Housing Development Authority (MSHDA) requires site-specific environmental screening for all development proposals being considered for financing. The Phase I Environmental Site Assessment (ESA) is an intake requirement that must be submitted before any proposal can be formally accepted for MSHDA mortgage loan processing. The MSHDA Phase I ESA is designed to satisfy the Underwriting guidelines of the Authority by addressing environmental requirements of both federal (24 CFR Part 58) and state (NREPA PA 451) regulations where applicable. The MSHDA Phase I ESA also requires additional elements beyond those solely required in the standard scope of ASTM E1527-05 Practice, including but not limited to the ASTM E 2600-10 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.

This document explains in detail the Authority's environmental review requirements and is written to guide the Environmental Professional who will be performing the ESA. The Environmental Professional should carefully review this document before agreeing to provide a site assessment for submission to MSHDA. An ESA assessment that does not satisfy the Authority's environmental review requirements or is otherwise incomplete will be returned to the sponsor for correction and may delay formal processing of the loan application. **Questions concerning the Authority's environmental review requirements should be directed to Bruce Jeffries, Environmental Review Officer, MSHDA, 735 East Michigan Avenue, Lansing, MI, 48912, phone: 517.335.0183, fax: 517.335.6565, e-mail: jeffriesb@michigan.gov or Mike Vollick, Environmental Review Officer, MSHDA, Cadillac Place, 3028 W. Grand Blvd, Suite 4-600, Detroit MI, 48202, phone: 313.456.2596, fax: 313.456.3571, email: vollickm2@michigan.gov .**

The ASTM E 1527-05 Standard defines "good commercial and customary practice" for conducting an environmental site assessment, thereby allowing the user to satisfy one of the requirements to qualify as an innocent landowner, a contiguous property owner, or bona fide prospective purchaser limitations for CERCLA liability. These defenses are also referred to as "Landowner Liability Protections" (LLPs). The ASTM E1527-05 practice satisfies the "due diligence" requirements established by 40 CFR Part 312 for conducting All Appropriate Inquiry (AAI).

Proposed development sites should exhibit no obvious negative site impacts or Recognized Environmental Conditions (RECs) which cannot be cost-effectively corrected or mitigated to residential standards. RECs defined by ASTM are "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

Negative site impacts include, but are not limited to: excessive noise or physical hazards from railroad, vehicular, or air traffic; high tension power lines or high pressure gas transmission pipelines, sanitary landfills or auto salvage yards; sewage treatment plants; stored hazardous materials on or near sites; above ground or underground storage tanks; buried or spilled hazardous wastes/plumes; operating oil wells; mine shafts; gravel pits; wetlands; orchards; and prime agricultural soils classification.

The Authority will not approve developments requiring construction in the Special Flood Hazard Area (SFHA) unless all necessary governmental permits are obtained and all buildings, parking areas, and pedestrian and vehicular ingress and egress areas are elevated at least one foot above the base flood

elevation (also referred to as the 100-year flood plain) when the development is completed. SFHA is defined as an area with a 1 percent annual chance of flooding at or above base flood elevation; this is equivalent to a 26 percent chance of flooding over the life of a 30-year mortgage. Developments receiving any federal funding source (Home, CDBG, Risk Sharing, etc.) will be required to satisfy HUD's "Eight Step" procedure if the proposed construction will impact either the 100-year flood plain or a wetland area. This process can be costly and can require a significant amount of time to complete.

SECTION II REVISED OR NEW FOR 2011

MSHDA Phase I Environmental Review requirements **have been substantially revised for 2011** to reflect the recent amendments in Part 201 while incorporating significant changes in the MSHDA review process. The changes are too numerous to summarize here and the Environmental Professional is encouraged to read this document carefully before agreeing to provide any environmental services to MSHDA Developers. A few of the more significant changes are highlighted below.

1. MSHDA now maintains a list of qualified consultants for performing Phase I ESA's for MSHDA programs. The Qualified Consultants List is available for download on MSHDA's web site. The sponsor is encouraged to obtain bids for environmental services from qualified consultants' on the approved list. While the use of an approved consultant is not mandatory; the sponsor is responsible for costs incurred if MSHDA retains additional technical help reviewing reports from non-approved environmental consultants.
2. Numerous modifications to our Phase I ESA requirements have been made to reflect recent changes in MDEQ's Part 201 Amendments.
3. Phase I ESA reports **must** follow the report format outlined in this document. Reports not meeting this requirement will be returned to the project sponsor for correction and resubmission.
4. Generation of NEPA documentation for projects requiring the use of federal funds is now the responsibility of the sponsor. A **sample NEPA Report** will soon be available on the MSHDA website to aid the qualified consultant in preparing this document.

SECTION III SPECIAL INSTRUCTIONS

Tax Credit and Pass-Through Applications

Tax Credit and Pass-Through applications must have all elements of the MSHDA Environmental Review Requirements completed when the application is submitted. Environmental Site Assessments (ESAs) that do not satisfy the Authority's environmental review requirements or are incomplete will result in processing delays. **Negative site impacts or Recognized Environmental Conditions (REC's) must be adequately resolved and all associated cost for remedial activities must be accurately documented and submitted with the project application.** Abatement cost for Asbestos, Lead-Based Paint, UST/LUST remediation, soil remediation and/or soil vapor remediation must be reported as a separate line item in the Sponsor's Trade Payment breakdown. Remedial work must be performed by licensed and insured contractors and must be accurately documented.

Use of Federal Funds

Authority financed developments and/or Tax Credit proposals requesting federal funding or housing vouchers are required to be in compliance with the National Environmental Protection Act (NEPA) 24 CFR Part 58. To award these resources, MSHDA is required to document compliance with HUD's Environmental Review (ER) process to satisfy both the NEPA mandated items and the additional federal statutory and regulatory requirements under EPA, SHPO, etc. The Sponsor is responsible for retaining a qualified consultant from the list of MSHDA approved consultants to produce a NEPA report conforming to our "Sample NEPA Report" document. MSHDA is responsible for making the environmental determination and maintaining the environmental review record as required by HUD for audit purposes.

The NEPA sequence has three components requiring that; 1) written approvals from various federal and state agencies be obtained, 2) MSHDA makes determination and publishes a public notice including a public comment period and address any public comment if received, and 3) MSHDA obtain written approval from HUD before any choice limiting actions are taken. The publication process for the Combined Notice routinely requires 45 days to complete after the NEPA record has been completed and reviewed by MSHDA. Incomplete or inaccurate NEPA documentation increases the amount of time necessary to complete our review and ultimately delays the publication process.

Development proposals that involve construction in environmentally sensitive areas identified under NEPA such as wetlands, floodplains or near adverse impacts such as, landfills, railroads, above ground or underground storage tanks, or freeways may disqualify your proposal from using federal funds or require additional review time beyond the time periods noted above. Sponsors utilizing the competitive tax credit process will need to anticipate these delays and plan accordingly.

Design responsive mitigation measures will be required to address impacts identified through the NEPA review. The cost for the mitigation measures need to be identified in the project budget and any resulting architectural/engineering modifications incorporated into the project plans and specifications. Any construction activities proposed in a wetland (regulated or unregulated) or in a 100 year flood plain area or where site contamination cannot be efficiently remediated or mitigated are strongly discouraged and may prohibit the use of federal funds.

SECTION IV MSHDA PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

The Phase I ESA must be conducted in a manner consistent with the meaning of the phrase "all appropriate inquiry into previous ownership and uses of the property consistent with good commercial or customary practice" [42 USC 9601 (35) (B)] and comply with MSHDA's environmental Review Requirements and the ASTM E 1527-05 standard including the report format. Not every property will warrant the same degree of investigation, and the level of environmental review will be guided by the nature of the property and its' prior use history. The Environmental Site Assessment must be prepared in accordance with, **but not limited** to the ASTM Environmental Site Assessment Standards for Commercial Real Estate Transactions, E 1527-05, ASTM E 2600-10 Standard Guide Vapor Encroachment Screening on Property Involved in Real Estate Transactions, and with additional MSHDA requirements as may be applicable. Copies of the ASTM standards may be obtained by contacting ASTM, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428-2959, phone: 610.832.9535, web: www.astm.org.

Documentation and Continued Viability.

The report of findings for the Environmental Site Assessment will meet the recommended report format outlined in this document. The report ***must include all documentation*** that supports the analyses, opinions, and conclusions of the Environmental Professional. All sources, including those that reveal no findings, should be well documented, and included in the report. The Phase I ESA and the consultants' Letter of Reliance must be current at the time of submission. A Phase I ESA is "presumed valid" for 180 days prior to the date of acquisition. If the "user" changes within this time period, the subsequent user must satisfy the User's Responsibilities. An assessment for which the data was collected or updated within 1 year prior to the acquisition date is also "presumed valid." A Phase I ESA Update can be completed for reports meeting ASTM E 1527-05 standards that are more than 180 days and less than 1 year from the date of acquisition. For further information see Sec 4.6 and Sec 4.7 in the ASTM E 1527-05 standard.

A. Federal and State Environmental Database Review for the Subject Site and Adjoining Properties

Regulated sites identified within the specified search radius for each of the databases listed in ASTM's E1527-05 Section 8.1 Standard Environmental Record Sources must be geo-coded to a scaled map showing the location of the listed facilities and the subject site and included in the Phase I ESA report. Findings and any data failures are to be discussed in Section 5.1 of the Phase I ESA report with supporting documentation provided in Section 10.5 of the Phase I Appendices.

B. Local Environmental Database Review

The environmental site assessment will document local environmental records for the subject property and adjoining parcels. This review will minimally include a search of available records on file with:

- City Fire Marshall Department
- City or County Public Health Department

Consultant's findings and any identified data failures are to be discussed in Section 5.2 of the Phase I ESA report with supporting documentation provided in Section 10.6 of the Phase I Appendices.

C. Prior Land Use History

Document current and past uses of the property from the present back to the property's obvious first use or to 1940; whichever is earlier. The Environmental Professional's review shall at a minimum satisfy the requirements of ASTM Section 8.3, and the requirements noted herein. **Historical site use must be thoroughly documented and discussed in Section 5.4 of the Phase I ESA report, and the consultant must identify any "data gaps" and indicate if they are significant.** All proposed development sites require a historical review of available fire insurance maps (Sanborn, etc.) The Phase I ESA must include true copies of available fire insurance maps and the maps are to be included in report appendices (Appendix 10.4). If historical fire insurance maps are not available on intervals sufficient to satisfy

ASTM E 1527-05 requirements, a review of Street Directories for the area covered by the subject property and adjoining parcels may be included to supplement historical use review. Street Directory review will be conducted on street address ranges appropriate for the period of historical development.

Fire insurance map searches and street directories searches are deemed to be "**reasonably obtainable**" and may be ordered from:

- Environmental Data Resources Inc., 3530 Post Road, Southport, CT 06490, phone: 800-352-0050, fax: 800-231-6802, web: www.edrnet.com/
- First Search Inc., 10 Cottage Street, Norwood, MA 02062-2101, phone: 888-748-0400, fax: 781-551-0471

The location of the proposed development site boundaries must be noted on all photos and fire insurance maps. Reports with unmarked maps will be returned for correction which could delay the processing of the application. If fire insurance map coverage does not exist for the subject site, please provide a copy of the "No Coverage" certificate.

D. Site Visit

Site reconnaissance including all interior and exterior spaces shall at a minimum be performed to satisfy the requirements of Section 9 of ASTM E 1527-05. The consultant's findings will be discussed in Section 6 of the Phase I report and supporting documentation will be included in Appendix 10 of the report.

General site setting:

- Review of past and present uses of **subject site and neighboring properties** that use, treat, store, dispose of, or generate hazardous substances or petroleum products. Approximate quantities involved, types of containers, and storage conditions shall be described in the report.
- Type of business currently and previously conducted at the facility (commercial, multifamily housing, industrial, etc.).
- Identification of the source of potable water supplied within ½ mile and the sewage disposal system.
- Geologic, hydrogeologic, hydrologic, and topographical conditions are to be analyzed to determine if hazardous substances or petroleum products are likely to migrate to or from the property
- **A color copy of current USGS 7.5 min. Topographic Map is required**
- Identification of all structures or other physical improvements to the property
- Empty and occupied user spaces, recreational facilities, parking lots, roads and surface water.
- Photographs of site interior, exterior, and adjoining properties. **All aerial photos must be marked to show approximate site boundary.**
- Strong, pungent or noxious odors, metallic or plastic storage drums (usually 55-gallon), other containers with hazardous substances, petroleum products, or unidentified substances, whether or not leaking, and pools of liquid. Containers identified as containing hazardous substances are to be noted on the site map.

Interior areas:

- Accessible common areas, occupant spaces, maintenance and repair areas, utility rooms, and boiler rooms are to be observed.
- All areas that were not or could not be inspected must be identified.
- Identify the means of heating and cooling the buildings, including fuel sources
- Stains or corrosion on floors, ceilings, or walls, including mold.
- Aboveground storage tanks, underground storage tanks, or related structures, such as vent pipes, fill pipes, and access ways must be identified
- Location of floor drains, sumps etc. should be noted in the report and depicted on the site plan.

Exterior observations:

- The periphery of the property and all structures on the property shall be observed from all adjacent public thoroughfares, adjoining structures and their uses to be noted on site plan.
- Hazardous substance or petroleum product storage areas on subject property and adjacent parcels.
- Aboveground storage tanks, underground storage tanks, or related structures, such as vent pipes, fill pipes, and access ways must be identified
- Pits, ponds, or lagoons on the property or adjoining properties
- Areas of obviously stained soil or pavement, leachate break-outs from waste disposal facilities or stressed vegetation (from sources other than lack of water).
- Electrical generators, transformers, power transmission lines, and hydraulic equipment that may contain PCBs. If transformers are present, please identify their age and owner.
- Site filling or grading suggesting trash, waste products or other fill materials are potentially present on site.
- Waste water, or other liquid, discharging into a ditch, drain, underground injection system, or stream on or adjacent to property.
- All wells and septic systems observed should be described in the report

E. Interviews with Past and Present Owners and Occupants

The property owner, key site manager, and user interview must at a minimum conform to ASTM requirements as detailed in Section 10 of ASTM E 1527-05 standard. Those interviewed should be prior to the site visit to indicate whether helpful documents may exist that the environmental professional should review prior to the site visit and if they have any knowledge of (1) any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the property; (2) any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property; (3) any notices from any government entity regarding and possible violation of environmental laws, or possible liability relating to hazardous substances or petroleum products. The Environmental Professional will discuss their findings in Section 7 of their Phase I report and will provide supporting documentation in the report appendices.

F. Interviews with State and/or Local Government Officials

Interviews with representatives of state and/or local government agencies will conform to ASTM requirements as detailed in Section 11 of ASTM E 1527-05 standard and will at a minimum include the local fire department that serves the property, the state and/or local health agency. The Environmental Professional will discuss their findings in Section 7 of their Phase I report and will provide supporting documentation in the report appendices.

G. Compliance with Activity and Use Limitations (AULs)

The Environmental Professional must include all relevant information revealed by the discovery of any Activity and Use Limitations” (AULs) in the Phase I Executive Summary and supporting documentation provided in the report appendices. If Activity and Use Limitation(s) (AUL) have been identified the Environmental Professional will also interview state and or local agencies responsible for the issuance of building permits or groundwater use permits.

H. ASTM “Non-scope” Considerations

The “non-scope” issues listed below are to be discussed by the Environmental Professional in Section 9 of the Phase I ESA report. Supporting documentation is to be included in the report appendix. **For all Tax Credit and Pass-Through applications, complete documentation (including bids) supporting the proposed abatements/remediation work must be submitted with the application. Specific details are noted below.**

- 1. Friable and non-friable Asbestos Containing Materials (ACM’s):** For structures undergoing renovation, the cost for abatement (removal / encapsulation) from an Asbestos professional certified as a Michigan Asbestos Abatement Contractor must be provided. Asbestos documentation submitted will at a minimum include: 1) a NESHAP survey from a licensed asbestos contractor/supervisor, 2) asbestos abatement plan including provisions for independent third party air monitoring, 3) bid(s) from licensed asbestos abatement contractor(s) to perform the proposed abatement plan, 4) a copy of the trade payment breakdown identifying all cost associated with the asbestos abatement activities and identified as a separate line.
- 2. Lead-Based Paint (LBP):** For structures with building permits issued before Jan 1, 1979 a Lead Based Paint inspection and Risk Assessment must be included. Lead-Based Paint Hazard documentation submitted will at a minimum include: 1) completed Lead Based Paint Inspection meeting HUD’s “Guidelines for the Evaluation and Control of Lead-Based Paint in Housing.” from a licensed Michigan Lead Risk Assessor, 2) a Lead-Based Paint abatement/encapsulation plan including provisions for licensed independent third party lead dust clearance sampling, 3) bid(s) from licensed and insured Lead Based Paint abatement contractor(s) to perform the proposed abatement/encapsulation activities, 4) a copy of the trade payment breakdown identifying all cost associated with the proposed Lead Based Paint abatement/encapsulation activities and identified as a separate line
- 3. Formaldehyde insulation:** If formaldehyde insulation is observed, and the structure is to be renovated, the extent and cost for abatement of the insulation (removal / encapsulation) must be included and identified as a separate line.

4. **Radon:** Radon mitigation measures must be documented in the Phase I report for all developments located in the following counties: Branch, Calhoun, Cass, Hillsdale, Jackson, Kalamazoo, Lenawee, St. Joseph, and Washtenaw. Radon documentation submitted will at a minimum include sampling for all “at grade” residential units. Information on Radon Resistant Construction Standards is available at http://www.michigan.gov/deq/0,1607,7-135-3310_4105_4196-10570--,00.html. You may also contact Mr. Leslie E. Smith, III, Indoor Radon Specialist, Radiological Protection Section, Resource Management Division, Department of Environmental Quality, 815 Filley Street, Lansing, MI 48906, ph: 1.800.723.6642. **For the counties noted above, the Phase I ESA must include a copy of plans/specifications showing the radon mitigation measures. The proposed abatement plans must be consistent with the Radon resistant code requirements as detailed in Appendix F of the Michigan Residential Code.**

5. **Special Flood Hazard Area:** Geological, hydro-geological, and hydrological data for the property, including the base flood elevation and flood way elevation as determined by FEMA. If published, you must include a copy of the FEMA Flood Hazard map including the Community Panel Number in your report. **The site boundaries on the FEMA map must be clearly noted. FIRMette Floodplain maps** are available online from FEMA at <http://www.msc.fema.gov>. All buildings, parking areas, and pedestrian and vehicular ingress and egress areas must be elevated at least one foot above the base flood elevation when the development is completed. For additional information on Special Flood Hazard Areas, please contact the Flood Plain Management Unit, Geological and Land Management Division, 525 West Allegan Street, South Tower, First Floor, Lansing, MI 48933, phone: 517.241.1515. **For all applications, the base flood elevation boundary and its relation to the building footprint must be clearly located on the proposed development site plan and included in the Phase I report.**

6. **Wetlands:** The Phase I ESA must address the presence of any suspect regulated or non-regulated wetlands on the subject site; these areas must be accurately noted on the development site plan. For wetland areas hydraulically connected to other wetland resources or for wetland areas larger than 3 acres, the sponsor will need to provide a jurisdictional delineation or a **Level 2 or Level 3 Wetland Assessment** review from DNR. For more information contact: Land and Water Management Division, Inland Lakes and Wetlands Unit, P.O. Box 30458, Lansing, MI 48909-7958, Wendy Veltman, phone; 517.241.8485. **For all applications, any wetlands and their relation to the building footprint must be clearly located on the proposed development site plan and included in the Phase I report.**

7. **EMF:** Sites containing or in close proximity to high power transmission lines (60 kV and higher) will require a set back sufficient to achieve a 3 mG exposure limit. The EMF setback requirement is for high power transmission lines only. Contact the Authority for site-specific instructions for determining acceptable setback distances. **For all applications, any applicable setback and its relation to site buildings must be clearly indicated on the proposed development site plan and included in the Phase I report.**

8. **High pressure buried gas lines:** Sites located within 1000 feet of a buried high-pressure gas transmission line (4” diameter or larger and 400 p.s.i. or higher) must comply with the MSHDA’s setback requirements. The location and capacity of any high-pressure utility systems located on or near the proposed development site must be noted in your report and located on the development site plan. Contact the Authority for site-specific instructions for determining acceptable setback distances. **For all applications, any applicable setback and its relation to site buildings must**

be noted on the proposed development site plan and included in the Phase I report.

- 9. Noise analysis:** For development sites located within 1000 feet of a limited access highway, or near a busy roadway (four lane or more roadway with posted speeds at or above about 45 mph), or within 3000 feet of a railroad line, or within 15 miles of an airport (civil and military) will require a noise assessment. Your noise assessment **must** follow HUD's worksheets as detailed in their publication entitled; "The Noise Guidebook," and included in your report. Sites with rail lines within 100 feet of proposed or existing building structures will have to complete the Federal Transit Administration (FTA) Vibration Impact Analysis and satisfy any applicable isolation requirements. Sites requiring noise mitigation barriers (sound walls or vibration barriers) must provide a sound analysis of the isolation barrier as outlined in HUD's noise manual. **For all applications, any applicable setback and its relation to site buildings must be located on the proposed development site plan and included in the Phase I report.**

- 10. Vapor Encroachment Screening (VEC):** For the purposes of a MSHDA Phase I ESA, the Environmental Professional **will at a minimum complete both the Tier I and non-invasive Tier II components of the ASTM E 2600-10 Standard Guide for Vapor Encroachment Screening if applicable.** As indicated in Section 9.2 of the ASTM Standard, the contaminated plume test evaluates Contaminants of Concern (COCs) within the appropriate critical distance, assuming that well defined boundary conditions have been documented in prior Phase II investigations. Please note that the proposed state guidance for Michigan (MDEQ Operational Memorandum No. 4, Attachment 4 – Soil Gas and Indoor Air) does not automatically rule out petroleum hydrocarbon Chemicals of Concern (COC) beyond 30 feet. For the purposes of the MSHDA Phase I ESA, the Environmental Professional should use 100 foot screening distance for all listed COCs, including petroleum hydrocarbons when evaluating for VEC.

Sites exhibiting a VEC finding will require invasive Tier II sampling. The invasive Tier II/TierIII sampling strategy will be consistent with the requirements of MDEQ OpMemo 4 (ASTM E 2600-10; Sec 9.1 & 10.2). This sampling is beyond the scope of the Phase I ESA and will be undertaken as part of a Phase II investigation. The Environmental Professional is encouraged to seek additional input from MDEQ and MSHDA prior to undertaking soil gas sampling. For more information contact Mr. Matt Williams, Vapor intrusion Specialist, MDEQ, WILLIAMSM13@michigan.gov

A. Underground Storage Tanks (UST's) and Aboveground Storage Tanks (AST's)

- 1. Underground Storage Tanks (UST's).** UST's require additional assessment and must include cost to close the tank according to Part 213 requirements. Historical tank removals lacking Part 213 closure documentation are deemed to be an "REC" and will require characterization. UST characterization and related remediation cost are to be documented separately in the Phase II investigation. For a list of qualified UST consultants please contact the Waste and Hazardous Materials Division, Storage Tank Unit, PO Box 30241, Lansing, MI 48909. **For all applications, the project documentation needs to include a copy of the proposed closure plan and the associated cost is to be identified.**
- 2. Aboveground Storage Tanks (AST's).** Sites containing or adjoining to above ground storage

tanks must be evaluated according to procedures set forth in HUD's guidebook entitled 'Siting of HUD-Assisted Projects Near Hazardous Facilities.' The proposed development site plans must reflect any required setbacks identified through the hazard analysis. **For all applications, any applicable setback and its relation to site buildings must be clearly located on the proposed development site plan.**

J. Development Site Plan Requirements

The Phase I ESA **must include** a development site plan, to scale, noting features previously outlined. **The site map will identify adjoining property uses and show adjoining structures.** Identified REC's and other potential areas of concern identified in the Phase I report must be noted on the site map.

Location and size of gas and electric transmission utilities, wetlands, and flood plain boundary's must be noted. An aerial photo may be used as a base map for the site plan, however the plotted scale should not exceed 1": 100' and be of sufficient resolution to distinguish site features. The annotated site plan is to be included in Section 10 of the Phase I report.

K. User's Environmental Questionnaire and Disclosure Statement

This document is to be completed by the appropriate entity, reviewed by the Environmental Professional, and incorporated into their Phase I ESA report. Please see Section VIII of this document for the required format.

L. Environmental Professional's Opinion and Report

1. Findings and Opinions

The Environmental Professional's report of findings and opinions shall conform to the ASTM E 1527-05 Standard. The EP's "Conclusions" section must follow exactly the prescribed language contained in the Standard. The consultant shall set forth clearly written explanation of identified "data gaps," including historical "data failures" as defined by ASTM, shall opine on their effect upon the Environmental Professional's ability to identify RECs, and shall state if the Environmental Professional considers them to be "significant".

2. Report Format and Continued Viability.

The report of findings for the Environmental Site Assessment will follow the recommended report format outlined in Section XI of this document. The report ***must include all documentation*** that supports the analyses, opinions, and conclusions of the Environmental Professional. All sources, including those that reveal no findings, should be well documented, and included in the report. The Phase I ESA and the consultants' Letter of Reliance must be current at the time of submission. A Phase I ESA is "presumed valid" for 180 days prior to the date of acquisition. If the "user" changes within this time period, the subsequent user must satisfy the User's Responsibilities. An assessment for which the data was collected or updated within 1 year prior to the acquisition date is also "presumed valid." A Phase I ESA Update can be completed for reports meeting ASTM E 1527-05 standards that are more than 180 days and less than 1 year from the date of acquisition. For further information see Sec 4.6 and Sec 4.7 in the

ASTM E 1527-05 standard.

Two paper copies and a pdf version on disk should be submitted to MSHDA.

3. The "Letter of Reliance and Phase I Summary Cover Sheet"

Must be completed and signed by the Environmental Professional performing the Environmental Site Assessment and submitted with their Phase I report. The Consultant's Letter of Reliance and Phase I Summary Cover Sheet *must be in the format* supplied in this document and included in the Phase I report. Any omissions, changes, or deviations to the supplied forms will result in delays and or return of the report for correction.

M. Insurance Requirements

The Environmental Professional must carry insurance which 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:

- a. Commercial General Liability insurance, total combined single limits of \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate; and
- b. Professional Errors and Omissions insurance with limits of \$1,000,000.00 each claim and \$2,000,000.00 in the aggregate; and
- c. Pollution Liability insurance with limits of \$1,000,000.00 per occurrence and \$2,000,000.00 in the aggregate, with extended coverage including third party liability for death, bodily injury, diminution of value of property and property damage.

2. MSHDA must be a listed certificate holder on both the Professional Errors and Omissions and Pollution Liability insurance policies. Proof of insurance will be documented on an **Acord 25** certificate, and will provide that the insurer must give MSHDA at least thirty (30) days prior written notice of cancellation/termination/material change, and that no action by the insured shall invalidate or diminish the insurance against any claim by MSHDA. The proof of insurance must be included in Section 10 of the Phase I Report.

3. Each policy of 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 policies written on claims-made basis, the Environmental Professional must maintain coverage in effect for a period of at least three (3) years following the completion of the final Phase I ESA and/or Phase II Report.

4. The Environmental Professional must promptly notify MSHDA of any changes made to the insurance policies required by this Section.

5. Upon written request of MSHDA, the Environmental Professional must promptly deliver complete copies of policies evidencing the insurance coverage's required by this Section M to MSHDA.

6. All required insurance shall be underwritten by an insurance carrier with an **AM Best rating of not less than “A-, VII.”** MSHDA prefers that insurance carriers be licensed in Michigan; however MSHDA will accept surplus lines insurance companies with an A.M. Best rating of no less than “A-, VIII.”

SECTION V PHASE II / BEA / DUE CARE

Recognized Environmental Conditions (REC’s) require additional investigation. REC’s or “other concerns” that are inadequately investigated, that present a potential health hazard to residents of the proposed development, that fail to reliability characterize the extent of contamination, and/or present an unacceptable degree of lender or owner liability, will be the basis for termination of processing of the proposal.

REC’s identified in the Phase I ESA must be adequately resolved through a Phase II investigation and documented separately from the Phase I ESA report. The Environmental Professional shall follow ASTM Phase II standard for REC characterization such that the Environmental Professional can opine whether **“the data provides sufficient information to support a professional opinion that there is no reasonable basis for suspecting the disposal or release of hazardous substances or petroleum products at the site with respect to the recognized environmental conditions assessed, and that no further assessment is necessary or that with respect to the recognized environmental conditions assessed, hazardous substances or petroleum products have been released or disposed at the property (ASTM E-1903.)”**

The use of **HREC** (Historically Recognized Environmental Concerns) designation is limited to historical impacts that have been previously remediated *and* for which closure documentation from a regulatory agency exist. If a HREC exists on site, please include a copy the closure documentation with your report. HRECs lacking appropriate closure documentation are to be treated as an REC and will need to be resolved accordingly.

Phase II sampling should utilize the Data Quality Objectives (DQO) process as outlined by the US EPA (www.epa.gov/quality/qs-docs/g4hw-final.pdf) or MDEQ’s Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria (www.michigan.gov/documents/deq/deq-erd-stats-s3tm_250015_7.pdf). DQOs for Phase II sampling events including but not limited to sample location, quantity of samples, and analytical procedures must be chosen to be consistent with the identified REC’s and the exposure pathways for residential land use. The sampling design must be sufficient in scope to **reliably characterize the nature and extent of the impact and all relevant and applicable exposure pathways**. Analytical methods, detection limits, QC/QA procedures and sampling plans will satisfy applicable federal, state, and MSHDA technical guidance. Sampling plans that do not comply with the guidance or lack sufficient data quality standards to ensure reliable results will be deemed incomplete and returned to the Environmental Professional for additional work. Sampling events to include trip blanks, soil bore logs, laboratory QA/QC reports, and Chain of Custody documents.

Proposed developments sites with “facility” status will require the disclosure of a **BEA and Due Care Plan to MDEQ. The proposed response activities in the Due Care must comply with applicable federal (HOME) requirements and Authority standards and are to be submitted to DEQ for Response Activity Plan review process. MDEQ has 150 days to respond to submittals so it is important that investigations and reports are complete and thorough in order to avoid potential delays.**

When a Due Care Plan is required to be reviewed by MDEQ, it will include a discussion of the items

required for the “No Further Action Report”. The Due Care Plan at a minimum will describe:

- the components of the Post Closure Plan
- any proposed Restrictions
- if Post Closure Agreement is required,
- if any ongoing Remedial Actions will be necessary

SECTION VI FEDERAL ENVIRONMENTAL ASSESSMENT (NEPA)

This assessment is undertaken to satisfy the review requirements of 24 CFR Part 58 (NEPA) and related federal regulatory requirements and is required for any proposal requesting the use of federal funding (Sec. 8, HOME, etc). The NEPA review must be completed and HUD’s signoff (7015.16) obtained before any choice limiting actions can be undertaken by the Sponsor.

The Sponsor will retain an Environmental Professional approved by MSHDA to complete the Environmental Assessment report. The NEPA report will contain the required elements as outlined in the “**Sample NEPA Report**” document which is available on our web site. The NEPA review emphasizes preservation of the natural and historical and cultural features. The NEPA review requires review and concurrence from other regulatory agencies such as Michigan Department of Environmental Quality, Michigan Department of Natural Resources, and State Historic Preservation Office. The NEPA review includes all of the following natural resources, (and in certain circumstances may require additional detailed studies):

- Historic Preservation
- Coastal Areas
- Noise Assessment
- Floodplain Management
- Endangered Species
- Wild and Scenic Rivers
- Wetlands
- Prime Ag. Land

The NEPA report is separate from the Phase I document and is not to be included in the Phase I report. Two paper copies of the NEPA document and a PDF copy on disk are to be submitted to MSHDA.

SECTION VII SELECTING AN APPROVED ENVIRONMENTAL PROFESSIONAL

Environmental Site Assessments require the use of professional consulting firms specializing in identifying and analyzing environmental conditions. It is important to select a consultant who can perform an acceptable environmental assessment as outlined in this document, who meets the definition of an **Environmental Professional** pursuant to 40 CFR Section 312.10(b), and who has prior *experience* working with the MSHDA. **While not mandatory, it is strongly recommended that you use an approved consultant from MSHDA’s Qualified Consultants list. If MSHDA elects to retain technical help in reviewing reports from non-qualified consultants the expense incurred will become the responsibility of the sponsor. The list of Qualified Consultants is available for download on our website.**

Several factors, which should be considered in selecting an Environmental Professional, include the following:

- (1) The consultant should have sufficient personnel with the necessary technical capabilities to perform an Environmental Site Assessment in a timely fashion (approximately six to eight weeks)
- (2) The developer should screen résumés of key individuals in the consulting firm and

ask for a list of recently completed work to verify the firm's reputation, adherence to budget, compliance with schedules and deadlines, etc.

The MSHDA Qualified Consultants List was developed to provide developers with a list of environmental consultants to provide necessary reports and documentation needed to meet MSHDA Environmental Review Requirements. These consultants were chosen through an RFQ process and are entrusted to provide adequate and timely information to expedite the development process for both MSHDA and the Developer. Next to each consultant's name are the category of services for which they are approved, including Environmental (Phase I, Phase II, BEA, Due Care, etc), NEPA (for development utilizing federal resources), Asbestos and Lead (for developments needing asbestos or lead paint inspection or abatement).

If you are developing urban renewal property or a Brownfield site, your consultant should have demonstrable experience working with urban renewal sites. Ask to see examples of prior residential redevelopment sites comparable to your intended development that were delivered on time and on budget. Identify and speak with the project manager(s) responsible for overseeing your project, not only the corporate staff. Review the credentials and work experience of your project manager.

If you suspect that your site may contain abandoned UST's be sure your consultant has the appropriate experience and credentials for closing a UST. For a list of UST consultants please contact the Environmental Response Division, Waste and Hazardous Materials Division, Storage Tank Unit, PO Box 30241, Lansing, MI 48909, phone: 517.335.2690.

No reputable Environmental Professional will unequivocally certify a site to be environmentally clean. However, your consultant is expected to provide a professional opinion regarding the probability of contamination being present at a site. At that time, risk levels may be assessed and accepted or a determination made to proceed with a Phase II Environmental Site Assessment.

SECTION VIII 2011 - USER'S ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE STATEMENT

The Authority requires the completion of its "User's Environmental Questionnaire and Disclosure Statement" to fulfill Section 6, User's Responsibilities of the ASTM Standard E 1527-05. **The checklist is to be completed and signed by the sponsor (developer), and returned to the Environmental Professional conducting the Phase I. This questionnaire is to be reviewed by the Environmental Professional and incorporated into their Phase I report (the completed User's Questionnaire is to be included in Appendix 10.6 of the Phase I report) Failure to properly complete this process will result in delays.**

In preparing this document, the "User" (Sponsor) must make a good faith effort to answer the questions in the checklist. The preparer presents that to the best of his/her knowledge the above statements and facts are true and correct and that to the best of the preparer's knowledge no material facts have been omitted or misstated. Time and care should be taken to check whatever records are in the user's possession. If any of the following questions are answered in the affirmative or if answers are unknown, are qualified, or cannot be obtained, the burden is on the Environmental Professional to determine whether further inquiry is appropriate. The property user should document the reason for any affirmative answer to provide the consultant with all appropriate information. Moreover, the Environmental Professional must determine if further inquiry in any area where the property owner provides incomplete information is warranted, providing written explanation for their recommendation(s).

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments"), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

User's (Sponsor's) Name: _____

User's (Sponsor's) Telephone No.: _____

User's (Sponsor's) Fax No.: _____

Subject Property: _____

Property Address: _____

City: _____ State: _____ Zip: _____

1.0 **Environmental Cleanup Liens:**

Are you aware of any environmental cleanup liens against the property that are filed, recorded, or unrecorded under federal, tribal, state, or local law?

___ YES ___ NO (If "YES," please describe)

2.0 **Activity and Land Use Limitations:**

Are you aware of any activity and land use limitations, such as engineering Controls, land use restrictions or institutional controls that are in place at the site and/or have been filed, recorded or unrecorded in a registry under federal, tribal, state or local law?

YES NO (If "YES," please describe)

3.0 **Specialized Knowledge or Experience of the User:**

(a) As the user of this ESA do you have any knowledge or experience related to the property or nearby properties that could be material to any environmental conditions of this property?

YES NO (If "YES," please describe)

(b) Are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

YES NO (If "YES," please describe)

4.0 **Relationship of Purchase Price to Fair Market Value:**

(a) Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

YES NO (If "YES," please describe)

(b) If you conclude that there is a difference, have you considered whether the lower price is because contamination is known or believed to be present at the property?

YES NO (If "YES," please describe)

5.0 **Commonly Known or Reasonably Ascertainable Information:**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

(a) Do you know the past uses of the property? Please List: _____
_____.

(b) Do you know the specific chemicals that are present or once were present at the property?

___ YES ___ NO (If "YES," please describe)

(c) Do you know of spills or other chemical releases that have taken place at the property?

___ YES ___ NO (If "YES," please describe)

(d) Do you know of any environmental cleanups that have taken place at the property?

___ YES ___ NO (If "YES," please describe)

6.0 **Presence or Likely Presence of Contamination:**

As the user of this ESA, and based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

___ YES ___ NO (If "YES," please describe)

User's Signature: _____ Date _____

User's Printed Name: _____

SECTION IX

2011 - MSHDA Phase I Summary Cover Sheet

Project Name: _____

Sponsors Name: _____ Sponsor's Fax: _____

Consultants' / Firm Name: _____

Consultants' Fax No.: _____ Email: _____

Project #: _____ Report Date: _____

Please answer all questions below, noting the appropriate page or appendix in your report that contains the supporting documentation. **Summary Cover Sheets containing unknown or incomplete responses will not be processed and will be returned for correction.**

1. Report Findings

- a. The site contains Wetland area(s). Yes No
(See requirements in Sec. IV, H.6)
- b. The site or a portion of the site is in the Special Flood Hazard Area Yes No
(See requirements in Sec. IV, H.5)
- c. The site contains a UST(s) or AST(s). Yes No
(See requirements in Sec. IV, I)
- d. The Phase I ESA revealed a REC(s). Yes No
(See requirements in Sec. IV, D.5)
- e. There any high power electrical transmission lines with in 500 feet of the subject site. Yes No
(See requirements in Sec. IV, H.7)
- f. There are buried high-pressure gas transmission lines (4" in diameter and 400 psi or greater) within 1000 feet of the subject site. Yes No
(See requirements in Sec. IV, H.8)
- g. The subject site is near a busy roadway or within 1000 feet of a limited access freeway or 3000 feet of a rail line, or within 15 miles of an airport. Yes No
(See requirements in Sec. IV, H.9)
- h. For structures undergoing renovation/remodeling, an Asbestos survey was performed. Yes No

i. An Asbestos inspection satisfying NESHAP and MSHDA requirements for demolition/remodeling activities as documented in the Sponsor's Comprehensive Needs Analysis or the Architect's Plans and Specifications for the project was preformed.

Yes No

(See requirements in Sec. IV, H.1)

j. For structures undergoing renovation/remodeling, a LBP survey was performed.

Yes No

k. The LBP inspection satisfies HUD and MSHDA requirements for the proposed demolition/remodeling activities as documented in the Sponsor's Comprehensive Needs Analysis or the Architect's Plans and Specifications for the project.

Yes No

(See requirements in Sec. IV, H.2)

l. For developments located in Branch, Calhoun, Cass, Hillsdale, Jackson, Kalamazoo, Lenawee, St. Joseph, and Washtenaw counties Radon mitigation measures are documented in the report.

Yes No

(See requirements in Sec. IV, H.5)

m. A "Recorded Land Records" search was preformed.

Yes No

(See requirements in Sec. IV, C)

n. A Phase II investigation is required.

Yes No

(See requirements in Sec. V)

o. A Tier I and non-invasive Tier II Vapor Encroachment Screen were preformed?

Yes No

(See requirements in Sec. IV, H.10)

p. An invasive Tier II investigation is recommended for Vapor Encroachment Conditions.

Yes No

(See requirements in Sec. IV, H.10)

2. Report Documentation Check List. If any of the responses below are "NO," do not submit report.

a. MSHDA Phase I Letter of Reliance completed? Yes

No

b. User's Disclosure Statement completed? Yes

No

c. Certificate of insurances included? Yes
 No

d. FEMA Flood Plain Map Included? Yes
 No

e. Fire Insurance Maps or N.C. Letter Included? Yes
 No

f. Development Site Plan Included? Yes
 No

I represent that this Summary Cover Sheet accurately reflects the environmental information contained in the above captioned document.

_____/_____
Signature of Environmental Professional / Date Print or Type Legal Name

SECTION X

2011 MSHDA PHASE I LETTER OF RELIANCE

(DATE)

PRIVILEGED AND CONFIDENTIAL

Bruce Jeffries
Environmental Review Officer
Design & Technical Resources Division
Michigan State Housing Development Authority
735 East Michigan Avenue
Lansing, Michigan 48912

RE: Phase I ESA for: *(Insert Development Name)*, *(Report #)*, *(Date of Report)*

Dear Mr. Jeffries:

Please find enclosed the Phase I Environmental Site Assessment for the subject property dated () to the Michigan State Housing Development Authority.

It is my understanding that the information contained in the Phase I Environmental Site Assessment will be used by the Authority in considering proposed financing of residential development of the subject property and, furthermore, that the Authority may rely upon the Phase I Environmental Site Assessment as if it were issued to the Authority.

I **represent** that the attached is a true, correct and complete copy of the Phase I Environmental Site Assessment for the above captioned property and that the report represents my professional opinion of the site as of this date and that I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. I also **represent** that the Phase I Environmental Site Assessment including the evaluation, recommendations, and conclusions as of this date has been performed in conformance with the scope and limitations of the ASTM Practice E 1527-05, ASTM Practice E 2600-10, and MSHDA'S Environmental Review Requirements for 2011.

Sincerely,

(Environmental Professional's signature)

SECTION XI

Required MSHDA Phase I Report Format - 2011

Please note all sections listed below are required.

Report Cover Sheet
Table Contents
MSHDA Phase I Summary Cover Sheet

Section 1 - Executive Summary

- 1.1 Phase I ESA Summary and Conclusions including any identified REC's
- 1.2 Identified Data Gaps
- 1.3 Identified Liens or Activity and Use Limitations

Section 2 - Introduction

- 2.1 Purpose
- 2.2 Detailed Scope-of-Services (see ASTM E 1527-05 Sections 12.4)
- 2.3 Significant Assumptions
- 2.4 Limitations and Exceptions
- 2.5 Special Terms and Conditions
- 2.6 User Reliance

Section 3 - Site Description

- 3.1 Location and Legal Description
- 3.2 Site and Vicinity General Characteristics
- 3.3 Current Use of the *Property*
- 3.4 Descriptions of Structures, Roads, Other Improvements on the Site (including heating/cooling system, sewage disposal, source of potable water)
- 3.5 Current Uses of the Adjoining Properties

Section 4 - User Provided Information

- 4.1 Title Records
- 4.2 Environmental Liens or Activity and Use Limitations
- 4.3 Specialized Knowledge
- 4.4 Commonly Known or Reasonably Ascertainable Information
- 4.5 Valuation Reduction for Environmental Issues
- 4.6 Owner, Property Manager, and Occupant Information
- 4.7 Reason for Performing *Phase I ESA*
- 4.8 Other

Section 5 - Records Review

- 5.1 Standard Environmental Record Sources
- 5.2 Additional Environmental Record Sources
- 5.3 Physical Setting Source(s)
- 5.4 Historical Use Information on the *Property*
- 5.5 Historical Use Information on Adjoining Properties

Section 6 - Site Reconnaissance

- 6.1 Methodology and Limiting Conditions
- 6.2 General Site Setting
- 6.3 Exterior Observations
- 6.4 Interior Observations

Section 7 - Interviews

- 7.1 Interview with Owner
- 7.2 Interview with Site Manager
- 7.3 Interviews with Occupants
- 7.4 Interviews with Local Government Officials
- 7.5 Interviews with Others

Section 8 - Evaluation and Report Preparation (see ASTM E1527-05 Section 12)

- 8.1 Findings (see ASTM E 1527-05 Section 12.5)
- 8.2 Opinion (see ASTM E 1527-05 Section 12.6)
- 9.3 Additional Investigation (see ASTM E 1527-05 Section 12.6.1)
- 9.4 Data Gaps (see ASTM E 1527-05 Section 12.7)
- 9.5 Conclusions (see ASTM E 1527-05 Sections 12.8.1 and 12.8.2)
- 9.6 Additional Services (see ASTM E 1527-05 Sections 12.9)
- 9.7 Deviations (see ASTM E 1527-05 Section 12.10)
- 9.8 References (see ASTM E 1527-05 Section 12.11)
- 9.9 Signature(s) of Environmental Professional(s) (see ASTM E 1527-05 Section 12.12)
- 9.10 Qualification(s) of Environmental Professional(s) (see ASTM E 1527-05 Sections 12.13)

Section 9 - Non-Scope Considerations

- 9.1 Friable and Non-friable Asbestos Containing Materials (ACMs)
- 9.2 Lead-Based Paint
- 9.3 Formaldehyde Insulation
- 9.4 Radon Gas
- 9.5 100-year Floodplain
- 9.6 Wetlands
- 9.7 EMF
- 9.8 High Pressure Buried Gas Lines
- 9.9 Noise analysis
- 9.10 Vapor Encroachment Screen, ASTM E 2600-10.

Section 10 - Appendices

- 10.1 Site (Vicinity) Map
- 10.2 Site Plan
- 10.3 Site Photographs
- 10.4 Historical Research Documentation (aerial photographs, fire insurance maps, historical topographical maps, street directories, etc.)
- 10.5 Regulatory Records Documentation
- 10.6 Interview Documentation
- 10.7 Special Contractual Conditions between User and Environmental Professional (asbestos, LBP, radon, floodplain,

wetlands, EMF, etc.)

10.8 Qualification(s) of the Environmental Professional(s)

10.9 MSHDA Phase I Letter of Reliance

10.10 Copy of Environmental Professional Insurance Certificates