#### APPENDIX H - PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT SAMPLE

## **Phase I Environmental Site Assessment Report**

[Site Designation]
[Site Address or Major Cross Streets]
[City], California [Zip Code]
[Site Code]

Prepared for: [School District] [District Office Address] [City], California [Zip Code]

Prepared by: [Consultant Company] [Office Address] [City], California [Zip Code]



#### **EXECUTIVE SUMMARY**

The executive summary should summarize the main information presented in the Phase I Environmental Assessment Report. It should include, but not be limited to, the following information:

- Purpose of the Phase I Environmental Assessment report
- School district
- Site designation consistent with information submitted to the California Department of Education
- Site location
  - Street address or nearest cross streets
  - City and county
- Site description
  - Size of the site (preferably in acres)
  - Current and historical business activity conducted on site
- Type of school site proposed, expansion, or existing
- Type of school proposed grade levels of students
- Number of classrooms and students
- Intended use of the site whether all or a portion of the site will be used
- Recognized environmental conditions
- Conclusions
- Recommendations



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# **ABBREVIATIONS AND ACRONYMS**

Abbreviation Description or acronym



#### 1.0 INTRODUCTION

The introduction should introduce the site, present the organization of the report, and include the following information:

- School district
- Site designation consistent with information submitted to the California Department of Education (CDE)
- Site location
  - Street address or nearest cross streets
  - City and county
- Site description
  - Assessor's parcel number
  - Size of the site (preferably in acres)
  - Current and historical business activity conducted on site
- Type of school site proposed, expansion, or existing
- Type of school proposed grade levels of students
- Number of classrooms and students
- Intended use of the site whether all or a portion of the site will be used
- Proposed disposition of existing structures
- Proposed source of potable and non-potable water supply

#### 1.1 PURPOSE

This section should state the purpose of the Phase I Environmental Site Assessment (Phase I), the first step of the environmental review process for school sites. Specifically for school sites, the objective of the Phase I is to determine whether there has been or may have been a release of a hazardous material, or whether a naturally occurring hazardous material is present, based on reasonably available information about the property and the area in its vicinity (Ed. Code, § 17210, subd. (g)). This section may also include other objectives as requested by the school district, such as compliance with federal requirements for "all appropriate inquiries" (40 C.F.R. § 312) to qualify for landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

#### 1.2 SCOPE OF SERVICES

All services should be described in sufficient detail to permit another party to reconstruct the work performed. This section should list the requirements or standards complied with to meet the objectives of the Phase I, which may include, but are not limited to, the following:

- Definition of a Phase I: Education Code section 17210, subdivision (g).
- Phase I requirements and process: Education Code section 17213.1, subdivisions (a)(1) through (4).
- Guidelines for Phase Is: California Code of Regulations, title 22, division 4.5, chapter 51.5, article 1.
- Related DTSC advisories, or guidance (including this guidance manual).
- Standard Practice for Environmental Site Assessments: American Society for Testing and Materials (ASTM) Practice E 1527 (ASTM 2005)
- Federal requirements for "all appropriate inquiries" to qualify for landowner liability protections under CERCLA: 40 Code of Federal Regulations part 312.

The scope of services should also specify additional work that was included, such as a Phase I Addendum with sampling for lead in soil from lead-based paint, organochlorine pesticides (OCPs) in soil from termiticide application, or polychlorinated biphenyls (PCBs) in soil from electrical transformers.

#### 1.3 ASSUMPTIONS

Any assumptions used to conduct the Phase I or prepare the report should be specified.

#### 1.4 LIMITATIONS AND EXCEPTIONS

Limitations of the Phase I and any areas that were not addressed should be identified.

#### 1.5 SPECIAL TERMS AND CONDITIONS

Any unusual contractual conditions between the school district and the environmental consultant that may affect the quality or completeness of the Phase I should be stated. This may include an expedited time frame or special requirements specified by the school district.

#### 1.6 USER RELIANCE

A description of what the Phase I report can be relied upon for should be included.

#### 2.0 SITE DESCRIPTION

The site description should describe the physical setting of the site in relation to the surrounding area and include the following information:

- Site designation consistent with information submitted to CDE.
- Other site designations used historically.
- United State Environmental Protection Agency (U.S. EPA) identification number, if assigned.
- Department of Toxic Substances Control (DTSC) EnviroStor identification number, if assigned.

Additional detail should be provided under the headings described below.

#### 2.1 LOCATION AND LEGAL DESCRIPTION

The location and legal description should include the following information about the site:

- Street address or nearest cross streets, city or nearest community, county, state, and zip code
- School district
- Size of the site (preferably in acres)
- Assessor's parcel number
- Township, range, section, and principal meridian
- Geographic coordinates (longitude and latitude)
- Senate and Assembly Districts

#### 2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The site and vicinity general characteristics should include the following information about the site and surrounding area:

- Climatic
- Topographic
- Geologic
- Hydrogeolgic
- Hvdrologic

#### 2.3 CURRENT USE OF THE SITE

This section of the report should describe the current use of or operations on the site. Any unoccupied spaces should also be noted. The information should be specific and identify the following:

- Owner name
- Operator name
- Activities conducted
- Current uses that may result in a release of hazardous materials.

Additionally, the current land use and zoning of the site should be identified and shown on a site zoning or land use map (refer to Figures for additional information). Land use designations and zoning should be available in the general plan adopted by the city or county in which the site is located. A general plan is a comprehensive, long-term plan for the physical development of a city or county (Gov't. Code, § 65300). Land use designations vary by city and county and may include, but are not limited to:

- Agricultural
- Commercial
- Cultivated land
- Educational
- Industrial
- Institutional
- Landfills
- Meadow
- Open grass areas (e.g. parks, golf courses, cemeteries)
- Open space
- Pasture or range land
- Paved lots (e.g. parking lots, storage areas)
- Public easement or right-of-way (e.g. roads, utilities, pipelines, water canals)
- Residential (single-family, multi-family)
- Re-creational
- Wood or forest land

#### 2.4 DESCRIPTIONS OF IMPROVEMENTS ON THE SITE

This section of the report should include descriptions of any improvements on the site including, but not limited to, the following:

- Buildings and other structures, including location, size (square footage), height, stories, construction type, construction date, and surface treatment or coating (e.g. paint).
- Roads and paved areas, including location, size, construction material, and construction date.
- Heating and cooling systems, including equipment, and power source or fuel.

- Sewage disposal, including system type (cesspools, dry wells, leach fields, septic tanks, settling ponds, sumps, etc.), construction date, and use duration.
- Source of potable and non-potable water, including source (groundwater, municipal, on-site treatment, surface water, etc.) and provider.
- Other improvements.

#### 2.5 CURRENT USES OF ADJACENT PROPERTIES

This section of the report should include a description of the current uses of adjacent properties surrounding the site. Typically cardinal directions north, south, east, and west are used to organize the information; however, the information can be provided in any manner that is clear.



#### 3.0 USER PROVIDED INFORMATION

The user may be able to provide information regarding the site. Detailed information, as described below, should be provided under the following headings:

- Title records
- Environmental liens or activity and use limitations
- Specialized knowledge
- Commonly known or reasonable ascertainable information
- Valuation reduction for environmental issues
- Owner, property management, and occupant information
- Reason for performing Phase I
- Other information provided by site users

The Phase I report should reference or provide copies in the appendix of any information provided by the user to facilitate reconstruction of the assessment by another environmental assessor.

#### 3.1 TITLE RECORDS

The title records should present information found in these records. In some cases, the identified owner may indicate the activities conducted on site. This information should be correlated with other information obtained during the Phase I.

#### 3.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

Legal or physical limitations of the site may include engineering or institutional controls to prevent adverse impacts to human health or the environment resulting from contaminants or hazards. Any environmental liens or activity and use limitations should be described in this section of the report. In some cases, this information may be filed with the deed for the site at the county recorder's office. DTSC also maintains a database of sites with land use restrictions due to environmental contamination. This information can be accessed under "Deed-Restricted Sites" on the DTSC Web page for site cleanup at <a href="http://www.dtsc.ca.gov/SiteCleanup/index.html">http://www.dtsc.ca.gov/SiteCleanup/index.html</a>.

#### 3.3 SPECIALIZED KNOWLEDGE

Any knowledge the user has regarding the release of hazardous materials or presence of naturally-occurring hazardous materials should be included and discussed in this section of the report. Additionally, this section should include any information the user has regarding the following actions relating to hazardous materials in, on, or from the site:

- Any pending, threatened, or past litigation.
- Any pending, threatened, or past administrative proceedings.
- Any notices from any governmental entity regarding any possible violation of environmental laws or possible liability.

#### 3.4 COMMONLY KNOWN OR REASONABLE ASCERTAINABLE INFORMATION

Any knowledge the user has of commonly known or reasonable ascertainable information related to the release of hazardous materials or presence of naturally-occurring hazardous materials should be included and discussed in this section of the report.

#### 3.5 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

Any reduction in value of the site due to environmental issues should be discussed.

#### 3.6 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

This section of the report should include the following contact information for past and present owners, site managers, and occupants, employees, and operators of the site, as well as owners and occupants of adjacent properties if the site is abandoned:

- Name
- Street address
- City
- State
- Zip code
- Phone number
- Dates and duration of ownership, management, or occupation

#### 3.7 REASON FOR PERFORMING PHASE I

This section of the report should state the reason for performing the Phase I and may include compliance with statutes and regulations or updating a previous Phase I report.

For proposed school sites/construction projects, the reason for performing the Phase I, the first step of the environmental review process, likely includes compliance with Education Code section 17078.54, subdivision (c)(1)(A) (charter schools), or sections 17213.1 and 17268 (public schools) to receive state funding. These statutes require toxic substances review, under DTSC oversight, of proposed school site acquisitions and construction of new school buildings, except for minor additions categorically/statutorily exempt from the California Environmental Quality Act (Ed. Code, § 17268, subd. (c)), of kindergarten through grade 12 (K-12) school facilities when school districts, county offices of education, and charter entities (collectively known as local educational agencies (LEAs)) seek state funding pursuant to the Leroy F. Greene School Facilities Act of 1998 (Ed. Code, tit. 1, div. 1, pt. 10, ch. 12.5).

If a Phase I was conducted for a proposed school site more than 180 days prior to submittal to DTSC, information to verify current site conditions and describe any

changes to site conditions or site boundaries shall be submitted to DTSC. Verification activities include, but are not limited to, the following (Cal. Code Regs., tit. 22, § 69104, subsec. (e)):

- Document changes to site conditions or boundaries
- Update interviews, searches, reviews, visual inspections, and declarations as described in ASTM Practice E 1527 (ASTM 2005)

#### 3.8 OTHER INFORMATION PROVIDED BY SITE USERS

This section of the report should discuss other information provided by the site owner, property manager, or occupants that was reviewed. This may include a wide variety of records such as previous environmental assessments or investigations, business records, process diagrams, environmental compliance documents, notices of violation, manifest, material safety data sheets, permits, etc. The Phase I report should reference or provide copies of these records to facilitate reconstruction of the assessment by another environmental assessor.



#### 4.0 RECORDS REVIEW

Records reviewed should be discussed in detail under the following headings, as described below:

- Standard environmental record sources
- Additional record sources
- Physical setting sources
- · Historical use information on the site
- Historical use information on adjacent properties

Under each heading, each source used should be identified even if it revealed no findings.

#### 4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

This section of the report should identify the standard environmental record sources reviewed and the information obtained. Standard environmental record sources should be reviewed for listed sites within the minimum search distance. For site larger than a couple of acres, the minimum search distance should be applied to the distance from the boundaries of the proposed school site.

In most cases, this information is obtained from a report from a commercial database search. The database search should be conducted specifically for the site being evaluated. This section should summarize the report and discuss listed sites found within the search distance for each source and provide justification regarding the potential to impact the proposed school site. The discussion should consider potential migration of hazardous materials to or from the site based on topography, geology, hydrogeology, and hydrology, including soil type, groundwater depth, groundwater flow direction, surface water flow direction, prevailing wind direction, etc. The regulatory records database report should be provided in the appendix of the Phase I report.

#### 4.2 ADDITIONAL RECORD SOURCES

This section of the report should discuss additional record sources reviewed. Additional record sources may supplement information found from review of the standard environmental record sources. As a result, the decision to review additional record sources should consider if these sources may clarify known or suspected environmental concerns associated with the proposed school site. The Phase I report should reference or provide copies in the appendix of any additional record sources to facilitate reconstruction of the assessment by another environmental assessor.

#### 4.3 PHYSICAL SETTING SOURCES

The sources reviewed for physical characteristics of the site should be identified and discussed in the physical setting sources. The information provided in this section should be sufficient to support any conclusions regarding the potential migration of hazardous materials to or from the site. The Phase I report should reference or provide copies in the appendix of any physical setting sources to facilitate reconstruction of the assessment by another environmental assessor.

#### 4.4 HISTORICAL USE INFORMATION ON THE SITE

This section of the report should identify the source and discuss the historical information reviewed and obtained. Information regarding the historical use of the site should help identify activities that may have resulted in a known or suspected environmental conditions associated with the site. Some records pertain to adjacent properties as well.

All obvious uses of the site should be identified from first obvious developed use or back to 1940, whichever is earlier, through the present. Any gaps in the history of use should be explained. To facilitate review, this information can be compiled in table showing the chronology of historical site use that includes the following information:

- Dates covered
- Description of use
- Known or suspected environmental conditions
- Source of information

A suggested format is shown as Table 1. The table should be discussed and referenced in the text. The Phase I report should reference or provide copies in the appendix of any historical use information sources to facilitate reconstruction of the assessment by another environmental assessor. The site boundaries should be clearly shown on any figures provided in the appendices.

#### 4.4.1 Standard Historical Sources

Aerial photographs are one of the standard historical sources identified in ASTM Practice E 1527 (ASTM 2005) used to obtain information regarding historical activities at the site and its surroundings. The following guidelines supplement ASTM Practice E 1527 (ASTM 2005) and describe the reasonable levels of skill, technique, and effort that should be utilized for review and use of historical aerial photographs.

- Aerial photographs should be examined by a person familiar with and trained in the methods of examining aerial photographs. Typically, this will mean a person trained in geology, geography, civil engineering, or with appropriate types of military training.
- The person examining the aerial photographs should visit the site and vicinity
  prior to reviewing the aerial photographs and be familiar with site features that
  may be visible and to assist in interpreting features on the aerial photographs.

- The photographs reviewed should be high quality prints or original negatives. In general, photocopies of photographs are not useful for interpretation since photocopies lack the precision, tonal, and textural qualities of photographs.
- The preferred format is overlapping low- to medium-elevation vertical photographs suitable for stereoscopic viewing. Single vertical photos may be used where they are the only readily ascertainable data within a desired time range, but should not make up the bulk of the photos examined. High-quality oblique photos are useful, but should not be the only format examined where vertical photos are available.
- The reviewer should have accurate street maps and topographic maps of the site and surroundings for comparison with the photographs. If insurance maps are available, they should also be used during aerial photograph interpretation.
- The reviewer should document the library, date of visit, dates and serial numbers
  of the photos examined, type of photo, elevation, approximate scale, estimated
  sun angle and shadow direction, and provide an opinion on the quality of each
  pair of photographs. Single and oblique photos should be reported as such.
- The type of equipment used to assist interpretation should be described, for example, mirror stereoscope, zoom stereoscope, pocket stereoscope, etc. If height determinations were made by the reviewer, the method of estimation or measurement (parallax bar or similar device) should be described.
- The reviewer should describe the subject site as it appears in each pair of photos, including all discernable site features. A simple declaration that the site 'appears unchanged' is discouraged, and a careful description should be provided for each set of photos. The shape, size, pattern, tones, and textures of features should be described, especially if the feature is not immediately recognizable. Any changes between subsequent photo sets should be noted. The reviewer should describe the general vicinity of the site, and describe the adjacent properties surrounding the site. The radius of examination should be consistent with ASTM Practice E 1527 (ASTM 2005).
- Known or suspected environmental conditions at the site and within the radius of investigation should be described.
- Any mounds, depressions, ponds, accumulations of material, stains, stressed or dead vegetation or erosion features on a site, or nearby, should be reported, along with any changes to the grade or paving of the site. Any vehicles or evidence of vehicular traffic should be noted. Any obvious demolition, flooding, or fire should be reported. If industrial, commercial or agricultural activity is noted, the type and extent of activity should be discussed to the extent discernable, and any areas of suspected waste discharge noted for possible future field examination.
- Typical practice does not require examination of an exhaustive library of photos, and gaps in a typical investigation may range from a few years to more than ten years between sets of photos. Events of environmental interest are often found to have occurred in these gaps. The reviewer should request and examine additional photo sets to fill in time gaps where events of environmental interest occurred. Time intervals of less than five years are seldom necessary, but the determination of adequacy must be made on a site-by-site basis by the reviewer.

Copies of the aerial photographs reviewed should be provided in an appendix to the Phase I report. The site boundaries should be clearly shown on each photograph.

#### 4.4.2 Other Historical Sources

In addition to the standard sources identified in ASTM Practice E 1527 (ASTM 2005), the following are other historical sources that should be considered on a site-specific basis. Not all the sources listed need to be explored for each site. The review should begin with sources most likely to contain information on a proposed school site and may include, but not limited to, the following:

#### Local agencies

- City or county fire department or Certified Unified Program Agency –
   Emergency response activities or hazardous materials business plan.
- City or County Planning Department Permits for development or improvements.
- County Assessor's Office Property ownership records.
- County Health Department above or underground storage tank sites.
- County Agriculture or Pesticide Control Office Pesticide usage.
- Air Quality Management or Pollution Control Districts Air emissions permits or violations.
- School District Facility Management Office

#### State agencies

- DTSC Information on hazardous waste facilities or hazardous substance release sites, including previous assessments, investigations, or cleanup.
- Regional Water Quality Control Board Waste discharge permits, previous assessment, investigation, or cleanup activities, landfills or solid waste disposal sites, hazardous substance release, petroleum, or above or underground storage tank release sites.
- Department of Health Services Radiation information and radon gas.
- Department of Forestry, Office of the State Fire Marshal, Pipeline Safety Division – Inspection, testing, and investigation of hazardous liquid transportation pipelines to ensure compliance with all federal and state pipeline safety laws and regulations.

#### Federal agencies

- U.S. EPA Hazardous waste facilities or hazardous substance release sites.
- Other agencies
  - Utility Companies PCB content in transformers.

The Phase I report should reference or provide copies in the appendix of any other historical sources to facilitate reconstruction of the assessment by another environmental assessor.

#### 4.5 HISTORICAL USE INFORMATION ON ADJACENT PROPERTIES

Historical use on adjacent properties should be evaluated similar to historical use on the site discussed in Section 4.4.

All obvious uses of properties adjacent to the site should be identified from first obvious developed use or back to 1940, whichever is earlier, through the present. Any gaps in the history of use should be explained. To facilitate review, this information can be compiled in table showing the chronology of historical adjacent property use that includes the following information:

- Dates covered
- Description of use
- Known or suspected environmental conditions
- Source of information

Historical information for adjacent properties may be included in the suggested format shown as Table 1. The table should be discussed and referenced in the text. The Phase I report should reference or provide copies in the appendix of any historical use information sources to facilitate reconstruction of the assessment by another environmental assessor. The site boundaries should be clearly shown on any figures provided in the appendices.



#### 5.0 SITE RECONNAISSANCE

Site reconnaissance is essential to document the physical setting of the site; verify the information obtained from the user, records review, and interviews; and obtain information when no records are available. This section of the report should include the observations made during a visual inspection of the site (interior and exterior). The environmental assessor should walk-through to visually and physically observe the entire site and any associated improvements. Site reconnaissance should be discussed in detail under the following headings, as described below:

- Methodology and limiting conditions
- General site setting
- Exterior observations
- Interior observations

Site photographs and site inspection reports should be included in an appendix to the Phase I report. The site photographs should include the date the photograph was taken, location description sufficient to be recreated by another party, and a description of the photograph subject.

#### 5.1 METHODOLOGY AND LIMITING CONDITIONS

This section of the report should describe the method used to observe the site and associated improvements. Additionally, any areas not observed should be identified and justification should be provided. Limitations imposed by physical obstructions or conditions should also be identified.

#### 5.2 GENERAL SITE SETTING

Consistent with ASTM Practice E 1527 (ASTM 2005), this section of the report should include observations made during the site visit regarding the following:

- Site boundaries
- · Current and historical use of the site
- Current and historical use of adjacent properties
- Current and historical use in the surrounding vicinity
- Geologic hydrogeologic, hydrologic, and topographic conditions
- Site improvements (structures, roads, heating and cooling systems, sewage disposal, source of potable and non-potable water, and other improvements).

#### 5.3 EXTERIOR OBSERVATIONS

This section should include exterior observations made during the site visit regarding release of hazardous materials or presence of naturally-occurring hazardous materials. Documentation should include a description of observation, location, and date with sufficient detail to facilitate relocation by another environmental assessor.

#### 5.4 INTERIOR OBSERVATIONS

This section should include exterior observations made during the site visit regarding release of hazardous materials or presence of naturally-occurring hazardous materials. Documentation should include a description of observation, location, and date with sufficient detail to facilitate relocation by another environmental assessor.



#### 6.0 INTERVIEWS

Interviews should be conducted to obtain information regarding uses and conditions, historical documents, or proceedings involving the site. This section of the report should include information obtained from interviews with the following individuals:

- Owner (past and present)
- Property Manager (past and present)
- Occupants (past and present)
- Local Government Officials
- Employees and Operators (past and present)
- Owners and occupants of adjacent properties if the site is abandoned
- Others

These interviews may provide information regarding uses and historical characteristics of the site. This information may provide insight regarding facility operation, confirm information found in records review, or provide missing details about the site. In cases where the information obtained from interviews differ from other records, additional research may be required to determine which information is accurate. Notes taken during interviews should be included in an appendix to the Phase I report. The notes should include the following information:

- Date of the interview
- Interviewer
  - Name
  - Title or affiliation
  - Company
  - Contact information
- Person being interviewed
  - Name
  - Title or affiliation
  - Company
  - Contact information
- Information discussed during the interview

#### 7.0 FINDINGS

All of the findings should be supported by documentation that is provided in the report or adequately referenced to facilitate reconstruction by another environmental assessor. Any excluded documentation and the reason for exclusion should be identified. Sources that revealed no findings also shall be documented.

This section of the report should identify known or suspected environmental conditions associated with the site based on user provided information, records review, site reconnaissance, and interviews.

If lead in soil from lead-based paint, OCPs in soil from termiticide application, and/or PCBs in soil from electrical transformers are the only potential sources of contamination at the site, an evaluation may be submitted in a Phase I Addendum (Cal. Code Regs., tit. 22, § 69102, subd. (f)). The Phase I Addendum may be submitted along with or after submittal of the Phase I (Cal. Code Regs., tit. 22, § 69102, subd. (f)). If the Phase I Addendum is submitted along with the Phase I as an appendix, this section should also include the findings from the Phase I Addendum.



#### 8.0 OPINION

This section of the report should include the environmental assessor's professional opinion of impact on the site from known or suspected environmental conditions identified in the findings section of the Phase I report. A discussion of the reasoning used to evaluate information reviewed during the Phase I should be included. Complete justification should be provided as to whether each known or suspected environmental condition is a recognized environmental condition or not.



# 9.0 DATA GAPS

Identify significant data gaps that affect the identification of recognized environmental conditions. Also, identify the information sources that were consulted to address the data gaps.



#### 10.0 CONCLUSIONS AND RECOMMENDATIONS

This section of the report should include conclusions that summarize all recognized environmental conditions identified in the opinion section of the report and provides associated recommendations.

Similar to ASTM Practice E 1527 (ASTM 2005), one of the following statements should be included in the report:

- "We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the Education Code (Ed. Code, §§ 17210, subd. (g), and 17213.1, subds. (a)(1) through (4)), California Code of Regulations (Cal, Code Regs., tit. 22, div. 4.5, ch. 51.5, art. 1), and ASTM Practice E 1527 (ASTM 2005) of [insert address or legal description], the site. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the site."
- "We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the Education Code (Ed. Code, §§ 17210, subd. (g), and 17213.1, subds. (a)(1) through (4)), California Code of Regulations (Cal, Code Regs., tit. 22, div. 4.5, ch. 51.5, art. 1), and ASTM Practice E 1527 (ASTM 2005) of [insert address or legal description], the site. Any exceptions to, or deletions from, this practice are described in Section [ ] of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following: (list)."

A Phase I, that does not include sampling and analysis results, shall contain one of the following recommendations (Cal. Code Regs., tit. 22, § 69108):

- (a) A further investigation of the site is not required since the Phase I demonstrates that neither a release of hazardous material nor the presence of a naturally occurring hazardous material, which would pose a threat to public health or the environment, was indicated at the site.
- (b) Lead in soil from lead-based paint, OCPs in soil from termiticide application, and/or PCBs in soil from electrical transformers are the only potential sources of contamination at the site and an evaluation is recommended but has not yet been completed. Results of this evaluation will be submitted to DTSC in a Phase I Addendum.
- (c) A Preliminary Environmental Assessment (PEA) is needed to determine one or more of the following:

- (1) If a release of hazardous material has occurred and, if so, the extent of the release.
- (2) If there is a threat of a release of hazardous materials.
- (3) If a naturally occurring hazardous material is present.

The Phase I Addendum may be submitted along with or after submittal of the Phase I (Cal. Code Regs., tit. 22, § 69102, subd. (f)). If the Phase I Addendum is submitted along with the Phase I as an appendix, this section shall contain one of the following recommendations (Cal. Code Regs., tit. 22, § 69109):

- (a) A further investigation of the site is not required. A Phase I Addendum that contains data from evaluation of lead, OPCs, or PCBs in soil may recommend that further investigation of the site is not required if all of the following apply:
  - (1) The Phase I Addendum demonstrates that lead in soil from lead-based paint, OCPs in soil from termiticide application, and/or PCBs in soil from electrical transformers are the only potential sources of contamination at the site; and
  - (2) concentrations of lead, OCPs, and/or PCBs in soil do not exceed concentrations determined by DTSC on a case-by-case basis to be protective of public health and the environment.
- (b) A PEA is needed to determine one or more of the following:
  - (1) If a release of hazardous material has occurred and, if so, the extent of the release.
  - (2) If there is a threat of a release of hazardous materials.
  - (3) If a naturally occurring hazardous material is present.



## 11.0 DEVIATIONS

All deletions and deviations from or additions to the following should be listed individually and discussed in detail:

- Definition of a Phase I: Education Code section 17210, subdivision (g).
- Phase I requirements and process: Education Code section 17213.1, subdivisions (a)(1) through (4).
- Guidelines for Phase Is: California Code of Regulations, title 22, division 4.5, chapter 51.5, article 1.
- Related DTSC advisories, or guidance (including this guidance manual).
- Standard Practice for Environmental Site Assessments: ASTM Practice E 1527 (ASTM 2005)
- Federal requirements for "all appropriate inquiries": 40 Code of Federal Regulations part 312. Incorporate if the purpose (Section 1.1) includes compliance with federal requirements for "all appropriate inquiries" to qualify for landowner liability protections under CERCLA.



# 12.0 ADDITIONAL SERVICES

Any additional services contracted for between the user and the environmental assessor, including a broader scope of assessment, more detailed conclusions, liability or risk evaluations, recommendations for additional sampling, remediation techniques, etc., are beyond the scope of this practice, and should only be included in the report if so specified in the terms of engagement between the user and the environmental assessor.



#### 13.0 REFERENCES

The report shall include a references section to identify published referenced sources relied upon in conducting the Phase I and preparing the report. Each referenced source shall be adequately annotated to facilitate retrieval by another party.

American Society of Testing and Materials (ASTM). 2005. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Designation E 1527. Approved on November 1, 2005.

Department of Toxic Substances Control (DTSC). 2006. Interim Guidance, Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers. Revised June 9, 2006, non-substantive revisions made September 12, 2006.



#### 14.0 SIGNATURE OF ENVIRONMENTAL ASSESSOR

The environmental assessor responsible for the Phase I shall sign the document and include the following information as proof of qualifications:

- Class II Registered Environmental Assessor (REA): REA Number, signature, and expiration date.
- Professional Engineer registered in the State of California (civil (including geotechnical and structural), electrical, and mechanical): License number, signature, seal or stamp, and expiration date (Bus. & Prof. Code, §§ 6735, 6735.3, and 6735.4).
- Professional Engineer registered in the State of California (agricultural, chemical, control system, corrosion, fire protection, industrial, manufacturing, metallurgical, nuclear, petroleum, or traffic): License number, signature, and optional seal or stamp.
- Professional Geologist registered in the State of California: License number, signature, seal or stamp, and expiration date (Bus. & Prof. Code, § 7835).
- Certified Engineering Geologist registered in the State of California: License Number signature, seal or stamp, and expiration date (Bus. & Prof. Code, § 7835).
- Licensed Hazardous Substance Contractor: Contractor's license number, HAZ (Hazardous Substance Removal) certification, signature, and expiration date.

Similar to ASTM Practice E 1527 (ASTM 2005), this document should include the following statement of the environmental assessor(s) responsible for conducting the Phase I Environmental Site Assessment and preparation of the document:

• "[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of environmental assessor as defined in Education Code, section 17210, subsection (b) and have the experience required by California Code of Regulations, sections 69104, subsection (b) and 69103, subsection (a)(1)."

The following statements of environmental professional(s) responsible for conducting the Phase I Environmental Site Assessment and preparation of the report are not required for DTSC approval of the Phase I pursuant to the Education Code (Ed. Code, § 17213.1, subd. (a)). However, the statements are consistent with ASTM Practice E 1527 (ASTM 2005) and are required by 40 CFR 312.21(d) if the school district is seeking to qualify for landowner liability protections under CERCLA by conducting "all appropriate inquiries:

- "[I, We] declare that, to the best of [my, our] professional knowledge and belief, [I, we] meet the definition of environmental professional as defined in §312.10 of 40 CFR 312."
- "[I, We] have the specific qualifications based on education, training, and experience to assess a property of the nature history, and setting of the subject property. [I, We] have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."



#### 15.0 QUALIFICATIONS OF ENVIRONMENTAL ASSESSOR

The qualifications of the environmental assessor responsible for the Phase I should be provided and should be consistent with the minimum qualifications listed in this section.

School districts are required to contract with a qualified environmental assessor, as defined in Education Code section 17210, subdivision (b), before acquiring a school site or engaging in a construction project for which facility funding is being sought. An environmental assessor must possess the following qualifications:

- Class II Registered Environmental Assessor registered by the DTSC.
- Professional Engineer registered in the State of California.
- Professional Geologist registered in the State of California.
- Certified Engineering Geologist registered in the State of California.
- Licensed Hazardous Substance Contractor certified pursuant to Chapter 9
   (commencing with Section 7000) of Division 3 of the Business and Professions
   Code. A licensed hazardous substance contractor shall hold the equivalent of a
   degree from an accredited public or private college or university or from a private
   postsecondary educational institution approved by the Bureau for Private
   Postsecondary and Vocational Education with at least 60 units in environmental,
   biological, chemical, physical, or soil science; engineering; geology;
   environmental or public health; or a directly related science field.

Proof of the qualifications (signature and seal/stamp, as appropriate) listed above should be provided in Section 14.0 of the report.

An environmental assessor must also possess at least three years of experience preparing Phase Is. Although the Education Code requires a minimum of two years of experience (Ed. Code § 17210, subsec. (b)), subsequent regulations (Cal. Code Regs., tit. 22, §§ 69104, subsec. (b) and 69103, subsec. (a)(1)) refer to ASTM Practice E 1527 (ASTM 2005) which requires three years of relevant experience for environmental professionals. ASTM Practice E 1527 (ASTM 2005) was prepared in conjunction with federal regulations for "all appropriate inquiries" that also requires an environmental professional to have three years of relevant experience (40 C.F.R. § 312.10(b)). As proof of qualifications, the number of years of relevant experience for the environmental assessor should be identified in this section.

In addition to qualifications and experience required to work on school sites, requirements exist for specific work that may be conducted during environmental assessments, investigations, or cleanup of school sites:

- All engineering work shall be conducted in compliance with the Professional Engineers Act (Bus. & Prof. Code, § 6700 et seq.) and Rules of the Board for Professional Engineers and Land Surveyors (Cal. Code Regs., tit. 16, § 400 et seq.).
- All geologic work shall be conducted in compliance with the Geologist and Geophysicist Act (Bus. & Prof. Code, § 7800 et seq.) and Rules of the Board for Geologists and Geophysicists (Cal. Code Regs., tit. 16, § 3000 et seq.).
- Contractors engaging in removal or remedial actions must be a licensed hazardous substance contractor with the Contractors' State License Board (Bus. & Prof. Code § 7058.7).



#### FIGURE 1 SITE LOCATION MAP

**Site Maps and Photographs**: Include, at a minimum, a site location map and a site specific map (facility diagram). The site location map should show the general location of the site relative to its surrounding area (scale 1:2400). The site location map should identify major highways, surface waters, land use, sensitive populations and critical habitats. The site specific map should include all significant site features (buildings, tanks, ponds, sumps, etc), both current and historical, and should be drawn to a scale appropriate for the site size. All maps should be oriented with north at the top of the page. In addition, available photographs of the current or historical site conditions should also be included.

This map should include a north area, be to scale, and show the general location of the site relative to its surrounding area, including major highways, surface water bodies, land use, sensitive populations, and critical habitats. The site location should be clearly indicated.

#### FIGURE 2 SITE VICINITY MAP

This map should include a north arrow, be to scale, and be of sufficient detail to show adjacent features (roads, surface water bodies, land use, sensitive populations, critical habitats, utility easements) and adjacent property uses. The site boundaries should be clearly indicated.

#### FIGURE 3 SITE PLAN

This plan should include a north arrow, be to scale, and be of sufficient detail to show significant site features, including boundaries, land use, paved areas, improvements (structures, roads, sewage system, storm drain system), drainage patterns, current use of the site, operational areas, and recognized environmental conditions. The site plan should provide sufficient detail and be of scale to facilitate placement of future sampling locations, if necessary, so that the correlation between sampling locations and recognized environmental conditions is clear. For larger or more complicated sites, additional figures will be necessary to show sufficient detail.

#### OTHER FIGURES

Other figures may include the following:

- Site Zoning or Land Use Map This figure should show the current land use and zoning of the site and adjacent properties with the site boundaries should be clearly shown.
- Assessor's Parcel Map This map should show the Assessor's Parcel Number for the site with the site boundaries should be clearly shown.

## TABLE 1 HISTORICAL USE OF SITE AND ADJACENT PROPERTIES

Chronology of historical use of the site and adjacent properties. See Table 1 for an example.



# TABLE 1 HISTORICAL USE OF SITE AND ADJACENT PROPERTIES SITE DESIGNATION

CITY

DATES (to and from)	OBSERVATIONS/FINDINGS	SOURCE
Entries should be in chronological order.	Include observations and findings for the site and adjacent properties.  Site  Adjacent Properties North (or Northwest, etc. as appropriate): South: East: West:	Identify the source of the observation or finding and provide copies in the appendix of any historical use information sources to facilitate reconstruction of the assessment by another environmental assessor.

#### APPENDIX A USER PROVIDED INFORMATION

Appendix A should include any information provided by the user, such as

- Grant deeds
- Easements
- Leases
- Land contracts
- Liens, etc.

#### APPENDIX B RECORDS REVIEW

Appendix B should include copies of records reviewed, such as

- Regulatory records database report
- Regulatory records documentation
- Aerial photographs including site boundaries clearly shown
- Historical maps such as oil and gas, Sanborn® fire insurance maps, topographic, geologic, etc. – including site boundaries clearly shown

#### APPENDIX C SITE RECONNAISSANCE

Appendix C should include documentation of site reconnaissance, such as

- Site photographs including the date the photograph was taken, location description sufficient to be recreated by another party, and a description of the subject of the photograph
- Site inspection reports

#### APPENDIX D INTERVIEWS

Appendix D should include interview documentation with the following information:

- Date of the interview
- Interviewer(name, title or affiliation, company, contact information)
- Person being interviewed (name, title or affiliation, company, contact information, and information discussed during the interview)

#### APPENDIX E PHASE I ADDENDUM

Appendix E should include the Phase I Addendum Report, if conducted, with results from sampling for lead in soil from lead-based paint, OCPs from termiticide application, or PCBs in soil from electrical transformers

# APPENDIX F SPECIAL CONTRACTUAL CONDITIONS BETWEEN USER AND ENVIRONMENTAL ASSESSOR

Appendix F should include any special contractual conditions between user and environmental assessor.

#### APPENDIX G QUALIFICATIONS OF ENVIRONMENTAL ASSESSOR

Appendix G should include the qualifications of the responsible environmental assessor.

#### APPENDIX H OTHER INFORMATION

Appendix H or subsequent appendices should include any other information relevant to the Phase I.

