

April 22, 2016

Mr. Robert Porter  
San Carlos School District  
1200 Industrial Road, Unit 9  
San Carlos, California 94070

**Subject:** Proposal to Complete a Preliminary Endangerment Assessment (PEA) in accordance with the California Department of Toxic Substances Control response of October 2015 to the Phase I ESA completed for the Central Middle School and Arroyo Bridge School campus located at 757 Cedar Street in San Carlos, California.

Dear Mr. Porter:

## INTRODUCTION

Stellar Environmental Solutions, Inc (Stellar Environmental) is proposing this scope of work to San Carlos School District based on discussions with Mr. Craig Sanchez of the Department of Toxic Substance Control (DTSC) in regards to his October 14, 2015 letter. The proposed work is to complete a Preliminary Endangerment Assessment (PEA) at the subject public school campus (Site) in San Carlos, California.

In reviewing the Phase I ESA the DTSC did not concur with the conclusion of the ESA that there are no Recognized Environmental Conditions (RECs) associated with the Site, nor with the recommendation of no further investigation at the Site. Based on the information provided, DTSC has determined that completion of a PEA is required for the Site. The purpose of the PEA is to determine whether a release or threatened release of a hazardous material or naturally occurring hazardous material may pose a threat to public health or the environment.

At a minimum, the PEA should address the following recognized environmental conditions:

- Lead from lead-based paint (Environmental Protection Agency (EPA) Method 6010B);
- Organochloride pesticides from historical termiticide use (EPA Method 8081);
- Polychlorinated biphenyls from historical transformers and from caulking associated with historical structures (EPA Method 8082); and

- Naturally occurring asbestos (polarized light microscopy/transmission electron microscopy methods; California Air Resources Board 435, Level A).

The PEA will be conducted using the following DTSC guidance:

- *PEA Guidance Manual* (DTSC, January 1994 and revised October 2013);
- *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as Result of Lead from Lead Based Paint, Organochloride Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers* (DTSC, June 2006);
- *Draft Naturally Occurring Asbestos Guidance*; and
- Education Code, Sections 17210-17224.

The subject property is the home of Central Middle School, occupying approximately 9.0 acres of land in San Carlos, California. Facilities onsite include numerous buildings, built in phases between late 1930's and 2015. The school campus includes a newly-built classroom building; portable classrooms; library; gymnasium; theater hall; administrative offices, and other supporting amenities. The outside area includes two parking lots; grass covered athletic field; and a new asphalt-paved playground.

A review of the DTSC PEA guidance (October 2015 update) and other references the interim guidance evaluation for schools sites above was used to develop the scope of work. In conformance with Education Code sections 17210, 17210.1, 17213.1, and 17213.2, specify a comprehensive environmental review process under DTSC oversight for proposed new or expanding schools. Consistent with the Education Code, DTSC utilizes a three-step process for environmental review of school sites (1) Phase I Environmental Site Assessment (Phase I ESA), (2) PEA, and (3) additional investigation and, if necessary, response action. In this case Stellar Environmental intends to use, unless DTSC disagrees, the recently completed September 16, 2015 Phase I ESA for the Central Middle School/Arroyo Bridge School Campus. The completed Phase I ESA will serve to meet the PEA background information requirements. The main focus of this work will then be on the PEA requirement to collect additional data as articulated in the DTSC letter and described in the DTSC PEA Guidance manual. Specific objectives of the PEA include:

- Determining if a release of hazardous wastes/substances/materials has occurred at a site and delineating the general extent of the contamination;
- Estimating the potential threat to public health and/or the environment posed by the site and providing an indicator of the relative risk;

- Determining if an interim action is required to reduce an existing or potential threat to public health or the environment;
- Completing preliminary project scoping activities to identify data gaps and possible remedial action strategies that would form the basis for development of a site strategy;
- Providing the data and information to DTSC; and
- Assessing and providing for the informational needs of the community—where indicated by the data.

The initial finding in the September 2015 Phase I ESA showed no potential threats or indication of public health concerns but the Phase I ESA also did not include any of the sampling that the DTSC letter of October 14, 2015 requested. To the extent the sampling findings show any contaminated soil then the item (3) additional investigation and, if necessary, response action, will be formulated as recommendations in the PEA.

### **SCOPE OF WORK**

The ESA scope of work will include the following tasks:

#### **Task 1: Project Scoping Meeting/Discussions with DTSC**

The first task includes coming to an agreement with the DTSC review as to what the appropriate scope of work is for the PEA at this specific Central Middle School and Arroyo Bridge School campus site located at 757 Cedar Street in San Carlos, California. There are no known or suspected hazardous materials or waste and thus no remediation is expected or anticipated at the Site. However, there are some data gaps that need to be filled to eliminate the potential for such items as pesticides in the soil used as part of landscaping practice, naturally occurring asbestos from upgradient geologic deposits that could have migrated to the school site location, lead (Pb) in the soil from fill or Pb-based paint or such localized impacts like PCBs near former PCB laden transformers and building caulking compounds.

Before initiating the work Stellar Environmental will discuss the scope of work with Mr. Craig Sanchez of DTSC to get his concurrence the scope and sampling density is appropriate for the project and receives DTSC approval.

## **Task 2: Subject Property Reconnaissance and Historical Land Use**

The purpose of the PEA is to determine whether a release or threatened release of a hazardous material or naturally occurring hazardous material may pose a threat to public health or the environment. Stellar Environmental will conduct a site reconnaissance of the subject property in order to observe any changes since there in 2015 and mark out potential areas for the shallow soil sampling proposed in Task 3.

The historical and nearby site use will rely on the Stellar Environmental September Phase I ESA data collected and analyses and review and present that data. The Phase I ESA ASTM 2013 guidance standards were met in the September 2015 report.

## **Task 3: Site Sampling and Analyses**

This sampling scheme is designed to address the concerns expressed in the DTSC letter, dated October 14, 2015 in conjunction with the PEA guidance requirements. The proposed sampling density and collection depths for this site is based on the site location being within a geologically homogeneous area as defined by the PEA guidance where the soils appear to be relatively uniform in composition and derived from the same parent source rock. The property is situated entirely within the geologic unit mapped as Holocene age alluvial fan and fluvial deposits and is bordered on the west by Franciscan sandstone. Based on the 9-acre size of the property, adequate coverage and assessment will be provided with the collection of samples as follows: 8 sample locations per acre with two additional sample locations near the western border adjacent to the Franciscan sandstone that has a higher potential for naturally occurring asbestos. Soil will be collected as per the PEA guidance from two depth horizons; one sample 0 - 6 inches deep and one from 36-42 inches deep for a total of 20 samples. The proposed sampling locations will be determined during the Task 2 Property Reconnaissance and additional samples may be added as deemed necessary after Reconnaissance or during the sampling field activity if fill or non-homogenous conditions are encountered.

The minimum analytical suite below has been selected for the site:

- Lead (Pb) by EPA Method 6010B (20 tests);
- Organochlorine Pesticides by EPA Method 8081 (20 tests);
- Poly Chlorinated Biphenols (PCBs) by EPA Method 8082 (20 tests); and
- Naturally Occurring Asbestos (NOA) analyses by California Air Resources Board (CARB) Method 435 Level A with a reporting limit of 0.25 % (20 tests).

- NOA analysis by Transmission Electron Microscopy (TEM) Method EPA/600/R-931116. This TEM method, has an analytical sensitivity and detection limit of 0.005% weight by dry weight or less (5 tests)

PEA guidance stipulates that if NOA is reported as trace or non-detect (ND) for samples using the Method 435, then 25% of the samples should be analyzed by the Transmission Electron Microscopy TEM method. If asbestos is detected by Method 435, then all samples should be analyzed by TEM. This proposal costs assumes that 25 % of the samples will be analyzed by TEM.

All samples locations for the upper surface 0-6-inch deep sample will be dug using a stainless steel trowel. The deeper 36-42 inch deep sample will be collected using a 2-inch stainless-steel hand auger. The soil will be picked from the auger or trowel and placed within laboratory supplied containers. The PEA Guidance allows for archiving of the deeper soil sample and omitting the NOA analysis if the surface sample shows no NOA detected, thus the surface sample will be submitted for initial analysis and the deeper sample will be retained and analyzed only if there is NOA detected in the surface sample.

Inspection of the site figures indicate that sufficient bare ground area are available for sampling and thus we have not included asphalt/concrete saw cutting in this proposal costs.

The soil samples will be transported to a California Department of Health Services (DHS), Environmental Laboratory Accreditation Program (ELAP) – certified laboratory to perform the required analyses. The NOA analysis will be performed by a National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory. This proposal assumes the soil samples will be analyzed on a standard 7-10 day standard turnaround unless requested at the time of sampling to be accelerated.

#### **Task 4: PEA Report**

Stellar Environmental will prepare a comprehensive written report summarizing the Preliminary Endangerment Assessment (PEA) activities and findings as requested in the DTSC letter. The PEA guidance allows some flexibility regarding the focus of the PEA to ensure the activities are appropriate for the project conditions and objectives. The emphasis to be placed on each part of the investigation and the limits of this flexibility will be defined by the DTSC project manager during the Task 1 scoping process. We expect that much of the DTSC required PEA reporting requirements can be extracted from the September 2015 Phase I ESA.

The elements of the PEA will include the following:

- Project description background;
- Discussion of the soil sampling objectives, protocols and analytical methods;
- Site plan figure showing the sample locations;
- Tabular summary of analytical results compared to regulatory criteria;
- Discussion of any pertinent human and ecological health and safety risk to site soils;
- Technical appendices (e.g. certified lab reports, photodocumentation, etc.);
- Report certified by a California Registered Professional Geologist or California-Registered Civil Engineer.

We will complete the documentation report of findings as an electronic “pdf” copy for you and the DTSC regulator.

### **PROPOSAL ASSUMPTIONS**

Our scope of work, cost, and schedule are based on the following assumptions:

- It is assumed that no health and safety issues or concerns will arise from the analytical results, however any issues that could potentially be discovered during the project reconnaissance or sampling will be immediately communicated to San Carlos School District.
- Stellar Environmental assumes our personnel can access the site area to do the required sampling on the campus.
- This PEA does not include any building material sampling.
- This proposal assumes a standard (10-day) laboratory reporting turnaround times. Accelerated turnaround can be arranged for a surcharged laboratory cost.
- This proposal costs assumes that only 25% of the samples will require subsequent analysis for NOA by TEM Method.

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### **ESTIMATED SCHEDULE AND COST**

Stellar Environmental has done many similar projects and will plan to conduct the field sampling, upon approval of our approach from the DTSC regulator after the Task 1 Scoping meeting. The proposed sampling is based on strict adherence to the PEA Guidance and may be decreased after the scoping meeting with DTSC. The field work as currently scoped should be completed within two days. The laboratory analytical results will be returned in 7 -10 days after sample collection. Our report of findings will be completed within 2 weeks of receipt of the final analytical results from the laboratory. The project is thus estimated to be completed within 6-8 weeks upon notice to proceed provided agreement with DTSC on the scope of work is received within 1-2 weeks.

We estimate that the cost to conduct the proposed scope of work will be \$20,520. This is presented as a fixed fee estimate not to be exceeded without prior authorization from the school district. We will invoice the project for costs incurred following the submission of our report.

If the above scope and fee are agreeable, please sign the attached Acceptance form, retain a copy for your records, and return the original to Stellar Environmental via fax or e-mail, as our notice to proceed. If you have any questions, please call.

Sincerely,



Richard S. Makdisi, P.G.  
Principal Geochemist and President

**Table1**  
**Estimated Project Costs for PEA**  
**Central Middle School and Arroyo Bridge School Campus**  
**San Carlos, California**

<b>Task Description</b>	<b>\$ Cost</b>
<b>Task 1: Project Scoping Meeting/Discussions with DTSC</b> Stellar Environmental labor	1,600
<b>Task 2: Subject Property Reconnaissance and Historical Land Use</b> Stellar Environmental labor (field day)	1,200
<b>Task 3: Site Sampling and Analyses *</b> 20 soil samples analyzed for pesticides, lead (Pb), PCBs and NOA by P LM and 5 samples for NOA by TEM Sampling equipment rental Stellar Environmental labor (2 days fieldwork)	9,775 200 2,750
<b>Task 4: PEA Documentation Report of Findings</b>	4,800
<b>Miscellaneous Other Direct Costs</b> (travel, copying, field disposables, etc.)	195
<b>Total Estimated Cost</b>	<b>\$20,520</b>

\* Accelerated turnaround can be arranged for a surcharged laboratory cost.



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## ACCEPTANCE OF PROPOSAL AND PAYMENT TERMS

Project: Proposal to Complete a Preliminary Endangerment Assessment (PEA) at the Central Middle School and Arroyo Bridge School Campus located at 757 Cedar Street in San Carlos, California.

Client: Mr. Robert Porter  
San Carlos School District  
1200 Industrial Road, Unit 9  
San Carlos, California 94070

The scope, schedule and fixed-fee cost (\$20,520) presented in the Stellar Environmental April 22, 2016 proposal are accepted and Stellar Environmental is authorized to do the specified work. Stellar Environmental will invoice the project in full, following client receipt of the completed report, which is due NET 30.

Read, Approved, and Accepted on this \_\_\_\_\_ day of \_\_\_\_\_, 2016.

\_\_\_\_\_  
Client Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title