



**Matthew Rodriguez**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Barbara A. Lee, Director  
1001 "I" Street  
P.O. Box 806  
Sacramento, California 95812-0806



**Edmund G. Brown Jr.**  
Governor

September 20, 2016

Mr. Josh Ewert, PG  
Geocon Consultants, Inc.  
3160 Gold Valley Drive, Suite 800,  
Rancho Cordova, California 95742

### COMMENTS ON THE DRAFT SAMPLING AND ANALYSIS PLAN FOR AIR SAMPLING AT VARIOUS LOCATIONS - CONTRACT 15-T4124

Dear Mr. Ewert:

Thank you for submitting to the Department of Toxic Substances Control (DTSC) the *Draft Sampling and Analysis Plan (SAP)- Air Monitoring at Various Metal Shredding Facilities Statewide*, dated September 1, 2016, which was prepared in accordance with contract 15-T4124. DTSC was aided in its review of the draft SAP by the assistance of the Air Resources Board, the South Coast Air Quality Management District, the Bay Area Air Quality Management District, the Ventura County Air Pollution Control District, and the San Joaquin Valley Air Pollution Control District.

DTSC requests that Geocon address each of the comments listed in the Enclosure in a revised SAP, either by inclusion in the revised SAP, or by written explanation in a separate document. DTSC would like to review these comments with you at your earliest convenience prior to your preparation of the final SAP. As you are aware, DTSC requires that the Final Sampling and Analysis Plan be approved by DTSC before Geocon can begin any additional work on the contract beyond Task 1. Once the Final SAP is approved a subsequent letter will serve as Geocon's authorization to commence any additional work.

Please contact me at your earliest convenience to schedule a review of these comments, or for any further information, at (916) 324-6564 or via email at [Edward.Benelli@dtsc.ca.gov](mailto:Edward.Benelli@dtsc.ca.gov).

Sincerely,

Edward Benelli  
Hazardous Substances Engineer  
Hazardous Waste Management Program

Enclosure

Mr. Josh Ewert  
September 20, 2016  
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cc: Mr. Rick Brausch, Chief  
Policy and Program Support Division  
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Ms. Megan Cambridge  
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## ENCLOSURE

DTSC COMMENTS AND REQUESTED CHANGES TO THE  
DRAFT SAMPLING AND ANALYSIS PLAN  
AIR MONITORING AT VARIOUS METAL SHREDDING FACILITIES STATEWIDE  
PREPARED BY GEOCON CONSULTANTS, INC.  
(September 1, 2016)

1. Cover letter, page vii, and throughout the document: "Department of Toxics Substance Control," Change to "Department of Toxic Substances Control"
2. Page number ii: Remove John Muegge as the project manager, replace with Ed Benelli.
3. Page number vii: "poly-chlorinated biphenyls," change to "polychlorinated biphenyls"
4. List all the acronyms in the list of abbreviations and acronyms.
5. Page number 2 Section 1.2: Change to "DTSC is the lead regulatory agency overseeing this air sampling program. DTSC regulates hazardous waste, and oversees cleanup of hazardous wastes on contaminated properties in California, ..."
6. Page number 2: Verify Point of Contact for EMSL as the technical lead person, and not the sales representative.
7. Page number 3: Global comment: Replace "we" with "Geocon" (or specific assignment doing the work such as site safety officer) so that overall the document is written in the third person.
8. Page numbers 3-5: Please make reference to Figures when referring to locations of the facilities (i.e. 3 miles southeast of Bakersfield). There should be vicinity maps and site layout maps. Also please provide graphics or maps that show the predominate wind direction for each facility, such as a wind rose.
9. Page number 4: "The average wind speed in Redwood City ..." Change to "The average wind speed in Bakersfield..."
10. Page number 6: Following each section number within the text, please identify the name of the section.
11. Page number 6: Please verify that Chester LabNet (CLN) Laboratory is certified for the analytical methods and include the date of expiration. DTSC's review shows that the ELAP Certification is for a different asbestos method than what is being proposed,

and that the expiration date listed on the ELAP document for Asbestos is September 30, 2016.

12. Page number 6: Please specify that all size fractions will have metals analysis conducted- TSP, PM10, and PM2.5.
13. Page number 7: Verify that collocated samples means two *identically configured* samplers located in the same location (same make/model and sampling the same pollutant). Typically, a collocated sample is a QC parameter to the primary sample at one location.
14. Page number 7: "The samples will be representative of 24-hour duration and will be performed over consecutive days at each Site." Change to "The samples will be representative of 24-hour duration and will be performed over three (3) consecutive days at each Site." Further, the plan should contain some criteria regarding acceptable meteorological conditions for the three consecutive days of monitoring (e.g., no rain, light winds). The plan should state that if those conditions do not occur (e.g., day 1 is normal, but day 2 has gusty winds, a rain episode, or other unanticipated conditions), then the monitoring will be postponed until favorable conditions return.
15. Page number 7: Please add additional detail on how the collocated samples will be collected at a ratio of 1:10 over the 3 sampling days per facility.
16. Page number 7: Please add additional detail on how the number of blanks will be collected over the 3 sampling days. It might be clearer to describe the specific number of blanks per facility or per site, such as 1 blank per 20 filters, or one filter blank and one field blank per facility over study period.
17. Page number 7: Verify that all parameters identified in Section 3.2 Additional Spatial Considerations have been adequately addressed, and that the sampling criteria specified by US EPA for 'collocated' samplers has been met by the expected placement called for in this sampling and analysis plan. Please verify that the criteria specified is appropriate for each analyte, and does not differ depending on compound.
18. Page number 7: Revise the wording for "field blank" since the introduction of contaminants can occur before and after sample collection.
19. Page number 7: "RPD between MSDs less than or equal to 40%" contradicts the RPDs listed in TABLE 2. Either update bullet point in this Section of the SAP (3.3.1),

or update the RPD value listed in TABLE 2. Geocon should describe that if these criteria are exceeded, the laboratory will investigate why, and will include a discussion of the impact on data usability in the case narrative. Verify that if the cause of the exceedance is determined to be laboratory error, the laboratory will reanalyze the sample, as appropriate. Geocon should specify the QC limits associated with each parameter and which corrective action to take on a per method basis. Also, a list of qualifiers (and their meanings) used for data validation/verification should be defined in the SAP.

20. Page number 8: "Performance evaluation (PE) check samples are not proposed for this air monitoring program. The selected laboratory routinely participates in independent national and California laboratory PE certification and accreditation programs." Provide reasoning and explanation of the decision to not include performance evaluation (PE) check samples such as field spikes in this plan.
21. Page number 14: Verify that Part 50 App L and the EPA QA Handbook are being referenced, as 50 App J does not cover criteria for low-vol PM10 instruments.
22. Page number 14: Asbestos- Please provide an explanation of the choice of the NIOSH method over ARB's ACTM method, which requires the use of a modified AHERA method.
23. Page number 14: PCBs- Please provide an explanation of the choice the NIOSH method over TO-4A, which would provide greater sensitivity and is the method more typically used in ambient air monitoring.
24. Page number 14: Formaldehyde- Please provide an explanation of the choice of the NIOSH method over TO-11, which may be a more sensitive measurement, and is the method more typically used in ambient air measurements.
25. Page number 16: Section 6.0: Field methods and procedures. Include in the final report a summary table for Field Equipment/Instrument Calibration, Maintenance, Testing, and Inspection.
26. Page number 16: Verify that the filter media specified in this plan is appropriate for the anticipated sampling design and analytical suite. Reference: 40 CFR, Part 50, App. B, Section 7.1.3, which suggests "Material: Glass fiber or other relatively inert, non-hygroscopic material." Geocon should determine and document in the plan why quartz filters will be used in lieu of the 'standard' glass fiber filters, and how results using quartz filters will meet client data needs. Note that the ARB utilizes glass fiber filters for their Total Suspended Particulates (TSP) program.

27. Page number 17: Verify that the Precision related to sample collection in the field will be monitored as the difference between field duplicates. The RPD between field duplicates for samples with analyte concentrations greater than the MDL should be less than or equal to 40 percent. The absolute concentration difference between duplicate samples with concentrations less than five times the MDL will be less than or equal to the corresponding MDL. Geocon should clarify the last sentence in reference to the MDL, and specify the actual RPD for field duplicates; TABLE 2 has an RPD of 30%. Either update this section, or update the RPD value in TABLE 2.
28. Page number 19: Please verify that hold times listed for TSP mass, e.g., for Pb, are not different than EPA guidance for pre-analysis. If there is a discrepancy between this and the cited references, this document should justify the longer hold times.
29. Page number 21: Flow Calibration- please include the instrument type/brand.
30. Page number 25: Correct the symbol used for degrees Centigrade.
31. Page number 25: Consider changing to "sample" rather than "sampler" run data sheet and "sampler" log book.
32. Page number 25: Consider moving sample documentation information listed under number 11 to the section 9.
33. Page number 26: Please specify the frequency for activities such as flow/leak checks, calibrations, independent audits, etc. US EPA method 2.12 and other EPA references describe frequencies assuming ongoing continuous operation over multiple years. This plan should address the needed differences, such as how frequently leak/flow checks will be done, since each study period is 3 days.
34. Page number 33: How often will the meteorological data be collected?
35. Section 2- need references to figures, such as the state-wide figure 1, page 44.
36. Page number 36: Please include in this section with all pertinent information on sample labeling, shipping, and chain-of-custody, additional information on field observations in dedicated field notes for each site, such as a recording of wind direction to verify information from sampling equipment or other monitoring devices and a photo log showing the photographs that were used to document the sampling events. Provide details on how the samples will be packaged and shipped to the lab and include an example of chain of custody as a figure or appendix.

37. Page number 38: "The sample locations proposed for the collection of field duplicates will be selected randomly during each sampling event." Verify that the "randomly selected locations" would be at one of the four previously-established sampling locations. Please discuss the need to have the duplicate collected at a randomly selected location, rather than having the duplicate collected at the known or anticipated downwind location, where the concentration would be expected to be highest.
38. Page number 38: Field QC Samples- Please clarify the frequency of QC sample collection, given that there are 3 sampling days (at 4 sites) per facility for this sampling project.
39. Page number 39: "Verbal approval of significant SAP modifications will be obtained from the DTSC prior to implementing changes." Change to "Written approval of significant SAP modifications will be obtained from the DTSC prior to implementing changes."
40. Page number 42: Schedule- Please update the schedule recognizing that all data must be submitted by November 31, 2016.
41. Figure number 7: Figure 7- Site Plan – SA Recycling Terminal Island- SARTI2- Location of SARTI2 should be moved to the center of the ship loading area, i.e., to the northeast, equidistant from obstructions on either side.
42. Page number 61: correct spelling errors starting with "collecitng samples from the perimeter of the facilities. To assess is activities..." change to "collecting" and "if", respectively.
43. Page number 61: throughout this section, change the word "analysed" to "analyzed"
44. TABLE 2: For clarification purposes, specify which RPD refers to which QC parameter for the LSC/LCSD and MS/MSD pair (currently listed as "Lab: 20% RPD; 30% RPD). For example, list as Lab: 20% RPD (LSC/LCSD); 30% RPD (MS/MSD), using the proper RPD that applies to each pair. Please note that the RPD values given in this Table are inconsistent with those listed throughout the document. Either update the sections of the SAP with the correct RPD values, or update Table 2.