



ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
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February 9, 2015 (*Revised*)

Mr. Anthony Batarse, Jr.
10550 International Boulevard
Oakland, CA 94603
(Sent via email to anthonya@batarse.com)

Subject: Modified Excavation Work Plan Approval and Request for Work Plan; Site Cleanup Program Case No. RO0003115 and Geotracker Global ID T0000006347, 10550 International Boulevard, Oakland, CA 94603

Dear Mr. Batarse:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Secondary Source Removal Work Plan*, dated February 2, 2015. The remedial excavation work plan was prepared and submitted on your behalf by WellTest, Inc. (WellTest). The work plan was submitted in response to a telephone conversation held on January 12, 2015 after ACEH review of the *Proposed Voluntary Clean-up - Letter of Understanding*, dated December 5, 2014, submitted on your behalf by Phase-1 Environmental Services. Thank you for submitting the documents.

ACEH has also received and reviewed the following documents:

- *Batarse Project Site, Phase I Environmental Site Assessment Report*, ENSR Consulting and Engineering, October 2000
- *Preliminary Environmental Assessment Work Plan*, Levine Fricke Recon, May 25, 2001
- *Preliminary Environmental Assessment Report, Batarse Report*, Levine Fricke Recon, October 3, 2001
- *Responses to Comments on Draft Remedial Action Work Plan*, Batarse Site, Levine Fricke Recon, October 18, 2002

The February 2015 work plan proposed the remedial excavation of five areas (identified as Areas A to E) within Areas of Concern (AOC) 1 and 5 as defined by Levine-Fricke Recon (LFR) in their *Preliminary Environmental Assessment Report, Batarse Site*, dated October 3, 2001 (LFR AOCs 2 and 3 are within the subject parcels but do not appear to require remediation, and AOCs 6 to 9 are not located on the site currently under discussion, but were part of a larger redevelopment then under consideration that did not proceed).

In general, the size and depth of the proposed remedial excavations contained in the work plan remained consistent with those proposed by LFR in their *Response to Comments on Draft Remedial Action Workplan (RAW)* dated October 18, 2002; however, the depth of the excavations appears to have been partly modified and limited to a depth of 10 feet below surface grade (bgs) based on the State Water Resource Control Board's (SWRCB) August 2012 Low Threat Underground Storage Tank Case Closure Policy (LTCP). The RAW appears to have evaluated alternative remedial technologies, but selected excavation as most appropriate at the subject site. Thus it is the judgment of ACEH that re-evaluation of alternative remedial options is not required again.

Additionally, while the LTCP was specifically designed to be applied to underground storage tanks (USTs), the LTCP document specifically states that it is not intended to be limited to UST sites only, and can be applied at sites with similar attributes. ACEH is in general agreement that the petroleum portion of contamination at the subject site can be managed under a LTCP closure scenario; however, the documented metals contamination cannot. For metals, the referenced excavation work plan proposes to use remedial goals consistent with the Environmental Screening Levels (ESLs) promulgated by the San

Francisco Bay Regional Water Quality Control Board (RWQCB). The most recent version is dated December 2013. Please note that while the likelihood of groundwater use in this area of Oakland in the near future is limited, the July 2013 *San Francisco Bay Basin (Region 2) Water Quality Control Plan* (Basin Plan) considers groundwater in the area to be of potential future beneficial use, and thus the appropriate remedial ESL goals for the site are for potential drinking water ("Groundwater is Current or Potential Source of Drinking Water.") Please reference these concentrations in reports.

ACEH notes that the remedial excavation work plan also did not recommend the excavation of a moderately elevated concentration of 160 milligrams per kilogram (mg/kg) of chromium in AOC 4 previously proposed by LFR. The rationale is that while the concentration is higher than all other chromium concentrations at the site, the concentration does not exceed the total chromium ESL of 750 mg/kg for residential or commercial land use. At present this appears reasonable; however, please see the request for addition work contained in the technical comments below.

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

- 1. Quality of Imported Recycled Concrete Baserock** – The primary goal at the site is to achieve a cleanup of the site that is protective of human health and the environment. Due to potential contamination issues with recycled concrete (e.g. absorbed hydrocarbons, PCBs, PNAs, solvents, and etc.), ACEH requests the submittal of a document that certifies that the recycled concrete is appropriate for this site, including laboratory analysis of the specific material to be imported, by the date identified below.

Please see Attachment A for the Department of Toxic Substances Control (DTSC) clean import guidance document (*Information Advisory Clean Imported Fill Material*), and the New Jersey Department of Environmental Protection (NJDEP) *Guidance for Characterization of Concrete and Clean Material Certification for Recycling*.

- 2. Future Site Land-Use** - The referenced work plan and letter of understanding state that the subject site, comprised of multiple assessor's parcels, has an interested purchaser that intends on keeping the existing commercial land use classification near the front of the parcels (10500 and 10550 International Boulevard), and converting areas behind the frontage to residential land use. It appears that this will require both parcel splitting and merging. Additionally, review of the case closure for the Lloyd Wise Honda Nissan site (RO0000966, Global ID No. T0600101676) located along the frontage of the parcels under discussion appears to suggest that the former waste oil UST and a nearby sump may be on a portion of the proposed project that would be rezoned as residential (and might potentially be located in the vicinity of excavation Area A). Because the Lloyd Wise Honda Nissan case was closed to commercial, with a land use restriction if the site is to be redeveloped (risk assessment or other), this would involve re-evaluating this portion of the parcel.

In order to determine the plans for the subject site as a whole, as well as to the individual parcels, including portions of the parcels, and with the intent of specifically identifying the remedial goals for each area of interest (commercial versus residential), ACEH requests copies of existing development plans be submitted electronically by the date referenced below.

This is requested to include future building foundation details because site grade level changes, including the development of subsurface structures (parking, elevator shafts, intended soil reuse, etc.) affect the selection of remedial goals, and remedial excavation depths. At present, it appears that each of the areas proposed for excavation (Areas A to E) would require residential remedial goals. If this is incorrect, please notify ACEH by the date listed below.

- 3. Remedial Excavation Work Plan Clarifications** – The referenced work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests several modifications to the approach. Please submit an excavation report by the date specified below.
 - a. Soil Sample Selection Protocols** – The work plan proposes to collect and retain soil samples for laboratory analysis from each excavation sidewall as well as the bottom of the excavation. In regards to the sidewall samples, please collect discrete soil samples at the depth of contamination documented by the soil bores that originally detected the contamination, and additionally at signs of contamination (photoionization detections, discoloration, odor, etc). Additionally, please bias the selected discrete soil samples to these indications of contamination in order to characterize worst-case concentrations. This is likely to require additional soil samples on each sidewall and the bottom.
 - b. Areas A and E** – Due to elevated lead concentrations in Areas A and E please additionally test all soil samples for lead in addition to those contaminants already proposed for each area. Due to moderately elevated zinc concentrations in Area E, please additionally include analysis for zinc in the Area. ACEH recognizes that while the zinc concentration is below residential ESLs, it is relatively elevated compared to other site and Area analytical results and occurs in association with elevated lead and arsenic. This suggests an association that warrants a quick evaluation including laboratory analysis.
- 4. Atypical Chromium Concentration in AOC 4** – As discussed above, atypical elevated concentrations of metals an order of magnitude higher than all other site concentrations can indicate the potential for associated additional atypical analytical results in the vicinity of the atypical chromium detection (in this case in soil bore BASB013). The referenced work plan proposed to exclude the area of this sample for excavation is reasonable; however, the concentration and the potential for additional atypical results require further evaluation. Therefore, by the date requested below, please submit a work plan to further evaluate the vicinity of soil bore BASB013.
- 5. Near Surface Soils Analytical Testing** – In general the shallowest soil sample collected by LFR was at an approximate depth of 2 feet bgs; however, the preponderance of samples were collected starting at an approximate depth of 3 or 4 feet bgs. Historic uses at the site indicate that contamination of shallower soil is probable and requires evaluation; however, can be managed in association with planned redevelopment (prior to demolition or grading, etc.). Due to the proposed rezoning from commercial to residential, this becomes of increased importance. Potential contaminants include petroleum hydrocarbons, metals including but not limited to lead, chromium, and zinc, as well as other chemicals known or likely to have been used by existing or historic businesses at the parcels. Therefore, please present a work plan to evaluate shallow soils at the site, by the date referenced below.
- 6. Status of Phase 1 Recommendations** – The ENSR Phase 1, dated October 2000, contained a series of recommendations by property address, and indicated the potential presence of one or more heating oil USTs and the presence of a water supply well. ACEH has not been able to determine if these concerns have been addressed by previous investigations. Therefore, please address the extent these issues have been addressed by existing data, or if not previously addressed, please include a scope of work in the requested work plan to address these concerns.
- 7. GeoTracker Compliance** – A review of the State Water Resources Control Board's (SWRCB) GeoTracker website indicates this recently created site has not been claimed and site documents have not been uploaded to Geotracker. Because this is a state requirement, ACEH requests that the site be claimed in GeoTracker by the date identified below.

Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the UST or LUST program, must be transmitted electronically to the SWRCB GeoTracker system via the internet. Also, beginning January 1, 2002, all permanent monitoring points utilized to collect groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude to sub-meter accuracy using NAD 83. A California

licensed surveyor may be required to perform this work. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs, including SCP programs. Additionally, pursuant to California Code of Regulations, Title 23, Division 3, Chapter 30, Articles 1 and 2, Sections 3893, 3894, and 3895, beginning July 1, 2005, the successful submittal of electronic information (i.e. report in PDF format) shall replace the requirement for the submittal of a paper copy. Please claim your site and upload all future submittals to GeoTracker and ACEH's ftp server by the date specified below. Electronic reporting is described below on the attachments.

Additional information regarding the SWRCB's GeoTracker website may be obtained online at http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/ and http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml) or by contacting the GeoTracker Help Desk at geotracker@waterboards.ca.gov or (866) 480-1028.

Additionally, please be aware that Environmental Deliverable Format (EDF) analytical data is required to be submitted to Geotracker. Please obtain these from the analytical laboratory.

8. **Draft Site Management Plan** – Because the site is intended for redevelopment and there appears to be a likelihood of encountering additional contamination as redevelopment proceeds due to past uses and the existing analytical data set, it is apparent that the site warrants a Site Management Plan (SMP). The SMP is intended to detail characterization methodology prior to and during redevelopment, sampling protocols, laboratory analysis and intervals, analytical methodology, soil and groundwater handling procedures for contaminated and uncontaminated media, and minimum health and safety protocols. Please submit a draft SMP by the date identified below.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **March 13, 2015** – Concrete Sampling Report and Certification
File to be named: RO3151_MISC_R_YYYY-mm-dd
- **March 13, 2015** – Claim Site on Geotracker and Upload Recent Documents
Please notify your case worker by email.
- **March 13, 2015** – Site Development Plans for Identification of Excavation Area Remedial Goal
File to be named: RO3151_MISC_R_YYYY-mm-dd
- **April 17, 2015** – Excavation Report
File to be named: RO3151_EX_R_YYYY-mm-dd
- **April 17, 2015** – Site Investigation Work Plan
File to be named: RO3151_WP_R_YYYY-mm-dd
- **April 17, 2015** – Draft Site Management Plan
File to be named: RO3151_WP_R_YYYY-mm-dd

Online case files are available for review at the following website: <http://www.acgov.org/aceh/index.htm>. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Mr. Anthony Batarse, Jr.
RO0003151
February 9, 2015, Page 5

If you have any questions, please call me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations and
Electronic Report Upload (ftp) Instructions

*Attachment A - Information Advisory Clean Imported Fill Material, DTSC and Guidance
for Characterization of Concrete and Clean Material Certification for
Recycling, NJDEP*

cc: Stuart Solomon, Phase-1 Environmental Services, 5216 Harwood Road, San Jose, CA 95124,
(Sent via email to stuart@phase-1environmental.com)

William Dugan, WellTest, Inc, PO Box 8548, San Jose, CA 95155
(Sent via email to dugan@welltest.biz)

Dilan Roe, ACEH, (Sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACEH, (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	REVISION DATE: May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	SUBJECT: Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.**
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

- 1) Obtain User Name and Password
 - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
 - i) Send an e-mail to deh.loptoxic@acgov.org
 - b) In the subject line of your request, be sure to include "**ftp PASSWORD REQUEST**" and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**
- 2) Upload Files to the ftp Site
 - a) Using Internet Explorer (IE4+), go to <ftp://alcoftp1.acgov.org>
 - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
 - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
 - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
 - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
 - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
 - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
 - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
 - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
 - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Information Advisory

Clean Imported Fill Material



October 2001

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

It is DTSC's mission to restore, protect and enhance the environment, to ensure public health, environmental quality and economic vitality, by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.

State of California



California
Environmental
Protection Agency



Executive Summary

This fact sheet has been prepared to ensure that inappropriate fill material is not introduced onto sensitive land use properties under the oversight of the DTSC or applicable regulatory authorities. Sensitive land use properties include those that contain facilities such as hospitals, homes, day care centers, and schools. This document only focuses on human health concerns and ecological issues are not addressed.

It identifies those types of land use activities that may be appropriate when determining whether a site may be used as a fill material source area. It also provides guidelines for the appropriate types of analyses that should be performed relative to the former land use, and for the number of samples that should be collected and analyzed based on the estimated volume of fill material that will need to be used. The information provided in this fact sheet is not regulatory in nature, rather is to be used as a guide, and in most situations the final decision as to the acceptability of fill material for a sensitive land use property is made on a case-by-case basis by the appropriate regulatory agency.

Introduction

The use of imported fill material has recently come under scrutiny because of the instances where contaminated soil has been brought onto an otherwise clean site. However, there are currently no established standards in the statutes or regulations that address environmental requirements for imported fill material. Therefore, the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) has prepared this fact sheet to identify procedures that can be used to minimize the possibility of introducing contaminated soil onto a site that requires imported fill material. Such sites include those that are undergoing site remediation, corrective action, and closure activities overseen by DTSC or the appropriate regulatory agency. These procedures may also apply to construction projects that will result in sensitive land uses. The intent of this fact sheet is to protect people who live on or otherwise use a sensitive land use property. By using this fact sheet as a guide, the reader will minimize the chance of introducing fill material that may result in potential risk to human health or the environment at some future time.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.dtsc.ca.gov.

Overview

Both natural and manmade fill materials are used for a variety of purposes. Fill material properties are commonly controlled to meet the necessary site specific engineering specifications. Because most sites requiring fill material are located in or near urban areas, the fill materials are often obtained from construction projects that generate an excess of soil, and from demolition debris (asphalt, broken concrete, etc.). However, materials from those types of sites may or may not be appropriate, depending on the proposed use of the fill, and the quality of the assessment and/or mitigation measures, if necessary. Therefore, unless material from construction projects can be demonstrated to be free of contami-

nation and/or appropriate for the proposed use, the use of that material as fill should be avoided.

Selecting Fill Material

In general, the fill source area should be located in nonindustrial areas, and not from sites undergoing an environmental cleanup. Nonindustrial sites include those that were previously undeveloped, or used solely for residential or agricultural purposes. If the source is from an agricultural area, care should be taken to insure that the fill does not include former agricultural waste process byproducts such as manure or other decomposed organic material. Undesirable sources of fill material include industrial and/or commercial sites where hazardous ma-

Potential Contaminants Based on the Fill Source Area

Fill Source:	Target Compounds
Land near to an existing freeway	Lead (EPA methods 6010B or 7471A), PAHs (EPA method 8310)
Land near a mining area or rock quarry	Heavy Metals (EPA methods 6010B and 7471A), asbestos (polarized light microscopy), pH
Agricultural land	Pesticides (Organochlorine Pesticides: EPA method 8081A or 8080A; Organophosphorus Pesticides: EPA method 8141A; Chlorinated Herbicides: EPA method 8151A), heavy metals (EPA methods 6010B and 7471A)
Residential/acceptable commercial land	VOCs (EPA method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035), semi-VOCs (EPA method 8270C), TPH (modified EPA method 8015), PCBs (EPA method 8082 or 8080A), heavy metals including lead (EPA methods 6010B and 7471A), asbestos (OSHA Method ID-191)

**The recommended analyses should be performed in accordance with USEPA SW-846 methods (1996). Other possible analyses include Hexavalent Chromium: EPA method 7199*

Recommended Fill Material Sampling Schedule

Area of Individual Borrow Area

Sampling Requirements

2 acres or less

Minimum of 4 samples

2 to 4 acres

Minimum of 1 sample every 1/2 acre

4 to 10 acres

Minimum of 8 samples

Greater than 10 acres

Minimum of 8 locations with 4 subsamples per location

Volume of Borrow Area Stockpile

Samples per Volume

Up to 1,000 cubic yards

1 sample per 250 cubic yards

1,000 to 5,000 cubic yards

4 samples for first 1000 cubic yards + 1 sample per each additional 500 cubic yards

Greater than 5,000 cubic yards

12 samples for first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

materials were used, handled or stored as part of the business operations, or unpaved parking areas where petroleum hydrocarbons could have been spilled or leaked into the soil. Undesirable commercial sites include former gasoline service stations, retail strip malls that contained dry cleaners or photographic processing facilities, paint stores, auto repair and/or painting facilities. Undesirable industrial facilities include metal processing shops, manufacturing facilities, aerospace facilities, oil refineries, waste treatment plants, etc. Alternatives to using fill from construction sites include the use of fill material obtained from a commercial supplier of fill material or from soil pits in rural or suburban areas. However, care should be taken to ensure that those materials are also uncontaminated.

Documentation and Analysis

In order to minimize the potential of introducing contaminated fill material onto a site, it is necessary

to verify through documentation that the fill source is appropriate and/or to have the fill material analyzed for potential contaminants based on the location and history of the source area. Fill documentation should include detailed information on the previous use of the land from where the fill is taken, whether an environmental site assessment was performed and its findings, and the results of any testing performed. It is recommended that any such documentation should be signed by an appropriately licensed (CA-registered) individual. If such documentation is not available or is inadequate, samples of the fill material should be chemically analyzed. Analysis of the fill material should be based on the source of the fill and knowledge of the prior land use.

Detectable amounts of compounds of concern within the fill material should be evaluated for risk in accordance with the DTSC Preliminary Endangerment Assessment (PEA) Guidance Manual. If

metal analyses are performed, only those metals (CAM 17 / Title 22) to which risk levels have been assigned need to be evaluated. At present, the DTSC is working to establish California Screening Levels (CSL) to determine whether some compounds of concern pose a risk. Until such time as these CSL values are established, DTSC recommends that the DTSC PEA Guidance Manual or an equivalent process be referenced. This guidance may include the Regional Water Quality Control Board's (RWQCB) guidelines for reuse of non-hazardous petroleum hydrocarbon contaminated soil as applied to Total Petroleum Hydrocarbons (TPH) only. The RWQCB guidelines should not be used for volatile organic compounds (VOCs) or semi-volatile organic compounds (SVOCS). In addition, a standard laboratory data package, including a summary of the QA/QC (Quality Assurance/Quality Control) sample results should also accompany all analytical reports.

When possible, representative samples should be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. In addition to performing the appropriate analyses of the fill material, an appropriate number of samples should also be determined based on the approximate volume or area of soil to be used as fill material. The table above can be used as a guide to determine the number of samples needed to adequately characterize the fill material when sampled at the borrow site.

Alternative Sampling

A Phase I or PEA may be conducted prior to sampling to determine whether the borrow area may have been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with DTSC or appropriate regulatory agency. However, if it is not possible to analyze the fill material at the borrow area or determine that it is appropriate for use via a Phase I or PEA, it is recommended that one (1) sample per truckload be collected and analyzed for all com-

pounds of concern to ensure that the imported soil is uncontaminated and acceptable. (See chart on Potential Contaminants Based on the Fill Source Area for appropriate analyses). This sampling frequency may be modified upon consultation with the DTSC or appropriate regulatory agency if all of the fill material is derived from a common borrow area. However, fill material that is not characterized at the borrow area will need to be stockpiled either on or off-site until the analyses have been completed. In addition, should contaminants exceeding acceptance criteria be identified in the stockpiled fill material, that material will be deemed unacceptable and new fill material will need to be obtained, sampled and analyzed. Therefore, the DTSC recommends that all sampling and analyses should be completed prior to delivery to the site to ensure the soil is free of contamination, and to eliminate unnecessary transportation charges for unacceptable fill material.

Composite sampling for fill material characterization may or may not be appropriate, depending on quality and homogeneity of source/borrow area, and compounds of concern. Compositing samples for volatile and semivolatile constituents is not acceptable. Composite sampling for heavy metals, pesticides, herbicides or PAH's from unanalyzed stockpiled soil is also unacceptable, unless it is stockpiled at the borrow area and originates from the same source area. In addition, if samples are composited, they should be from the same soil layer, and not from different soil layers.

When very large volumes of fill material are anticipated, or when larger areas are being considered as borrow areas, the DTSC recommends that a Phase I or PEA be conducted on the area to ensure that the borrow area has not been impacted by previous activities on the property. After the property has been evaluated, any sampling that may be required can be determined during a meeting with the DTSC.

For further information, call Richard Coffman, Ph.D., R.G., at (818) 551-2175.

**The New Jersey Department of Environmental Protection
Solid and Hazardous Waste Management Program**

**Guidance for Characterization of Concrete and
Clean Material Certification for Recycling**

(Updated January 12, 2010)

I. Overview:

The New Jersey Department of Environmental Protection (Department or NJDEP) is requiring the characterization, preferably by in situ predemolition sampling, or post-demolition sampling, through the laboratory analysis of concrete, post-demolition concrete-processing fines and brick and block (referred to herein as concrete) at all New Jersey demolition and construction sites that have the Department's Site Remediation Program's and Licensed Site Remediation Professional Program's, (SRP) oversight when the concrete is designated for: 1) recycling pursuant to N.J.A.C. 7:26A *et seq.*; or, 2) beneficial use pursuant to N.J.A.C. 7:26-1.7(g), rather than disposal as solid waste. This characterization requirement applies to demolished buildings, concrete roadways and related structures such as, but not limited to, sidewalks and curbing. The Department is taking this step to ensure that the concrete entering the State's concrete recycling system is clean and will not contaminate otherwise clean sites. The Department is also outlining in the, "Guidance for Characterization of Concrete and Clean Material Certification for Recycling" (Guidance), how site owners can self-certify building materials as clean prior to demolition without sampling and analysis. See Section VI for information on clean building certification compliance procedures.

The Sampling and Analysis Protocol outlined below is for certain contaminants that the Department recognizes may be found in concrete from contaminated sites. Only uncontaminated concrete will normally qualify for unrestricted recycling, while some minimally contaminated concrete or concrete fines may qualify for beneficial uses but only with Department approval.

For example, asphalt-contaminated concrete or concrete mixed with soils may meet beneficial use requirements for certain conditional uses at roadways. No sampling of the concrete from a site is required under this guidance if the property owner chooses to dispose of all of the material as solid waste. Note that Department approval pursuant to N.J.A.C. 7:26-1.7(g)8 is required for the beneficial use of materials out of state, which may require sampling and analysis of the material to meet the receiving State's requirements.

II. Concrete Materials Characterization:

Through either in situ, which is the preferred approach, or post demolition sampling the site owner is responsible for characterizing the concrete in the structures the owner is demolishing. In situ sampling and analysis is sampling prior to demolition at targeted areas of the structure, which are known and suspected areas of contamination, in order to determine contamination levels. More detailed information concerning in situ sampling requirements is described in Section V below.

Alternatively, the owner may elect to conduct post-demolition sampling and analysis of the concrete from a structure or consolidation of concrete from roadway and related structures. The concrete material must be stockpiled on the property where it is generated if it is to be considered for either recycling or beneficial use. The material should be staged in Sampling Areas of segregated material based on any knowledge of contamination and sampled according to the Sampling and Analysis Protocol below in Section V. Otherwise the concrete must be managed as solid waste per the solid waste regulatory requirements at N.J.A.C. 7:26 *et seq.* All sampling must take place where the material is generated in accordance with the Department's Technical Requirements for Site Remediation at N.J.A.C. 7:26E, including the Field Sampling Procedures Manual.

III. Criteria for Materials Disposition:

The disposition of all concrete material from contaminated sites with the Department's **SRP's** oversight at contaminated sites shall be determined by characterization of the material using the results of sampling and analysis conducted according to this Guidance. The analytical results shall be compared to the Department's most recent Soil Remediation Standards (SRS) at N.J.A.C. 7:26D, which are publicly available at the following website: <http://www.nj.gov/dep/srp/regs/rs/> .

Note that the Impact to Groundwater Soil Remediation Standards are not applicable to the materials addressed in this guidance.

Data averaging is not permitted in order to achieve compliance with the standards.

For material that is intended to be used on the site of generation sampling and management of material must be conducted in compliance with the requirements of the Department's case manager.

Concrete materials containing contamination entirely below the Department's Residential Direct Contact Soil Remediation Standards (RDSCRS) shall be considered eligible for transfer: 1) to a Class B Recycling Center holding a General or Limited Approval for recycling, 2) for recycling per the recycling site approval exemption requirements at N.J.A.C. 7:26A-1.4(a)2, 7, or 20, or 3) for direct unrestricted use on or off site in compliance with all other requirements. Compliance with any Federal, State, and local requirements is still required for all uses of concrete materials.

Materials containing any contaminant above the Department's RDSCRS are considered solid wastes and must be managed in accordance with all statutory and Department regulatory requirements including, but not limited to, the full requirements for solid waste pursuant to the Solid Waste Regulations at N.J.A.C. 7:26 *et seq.* including classification as hazardous waste as necessary, or at specific Class B recycling centers authorized to accept the material, or beneficial use in accordance with Department requirements. Department guidance for conducting Beneficial Use Projects and a project application form are available at <http://www.state.nj.us/dep/dshw/rtrp/bud.htm> . These contaminated materials do not qualify for the following: 1) recycling at the State's Class B, or other, Recycling Centers holding a General Approval or at Class B Limited Recycling Centers approved in

accordance with the requirements at N.J.A.C. 7:26A-3.7 unless the facilities are specifically authorized to accept the material; 2) recycling at sites operating per the recycling approval exemption requirements at N.J.A.C. 7:26A-1.4(a)2, 7, or 20; and, 3) for direct reuse or recycling on or off of the site of generation without Department approval.

IV. Separation of Distinct Demolition Areas and Materials:

The sampling and analysis protocol specified in this document in Section V is based on defining distinct areas of the structure for initial in situ sampling or demolition based on known and suspected areas of contamination within or on a structure, roadway or pad or any other “area of concern”. Demolition shall be planned to prevent the mixing of areas of demolition that are contaminated with uncontaminated areas in the form of a demolition workplan. The site owner is obligated to develop and implement a plan to segregate contaminated materials from uncontaminated materials. Demolition practices should separate out materials that may be contaminated prior to and/or concurrent with demolition, for proper manifesting and/or disposal as solid waste.

V. Sampling and Analysis:

1. What Demolition Materials to Sample: Source Separated Concrete, Block, Brick and Concrete Fines (processed concrete fines or concrete mixed with soil, sand, stone, etc.) at all New Jersey demolition and construction sites that have the Department’s Site Remediation Program’s oversight at a contaminated site.

2. How to Sample:

- a. **Biased Sampling:** All sampling, including in situ sampling, shall be biased toward visible staining or other indication of potential contamination: such as the source of the material, coloration or odor.
- b. **Sampling Methods:** the Department is specifying approved sampling methods as either chip or core samples. Core samples shall be no deeper than 1 inch unless staining or discoloration indicates that contamination is below that depth. Sampling logs shall record the depth of core samples. This would further support the Self Certification Process discussed below. Confirmatory sampling is required of material intended for recycling if suspected contaminated sections of material are removed.
- c. **Sampling Areas:** Sampling areas shall be determined based on each distinct area of demolition such as separate properties, separate structures on the same property, known or suspected areas of contamination within a structure or roadway, or designated Areas of Concern (AOC). The Department case manager may be consulted as an option for advice, or a determination, of which structures to sample.

Sampling Frequency: In situ sampling frequency is dependent on the number of areas of biased sampling and whether contamination is found at sampling locations. Material used for samples shall not exceed 1 (one) inch maximum in

depth. If additional material is needed for a sample additional sample(s) should be colocated at the sampling point. In situ samples shall always be discrete samples and not composited.

Each post-demolition Sampling Area, such as accumulated concrete material in individual staged stockpiles, shall be sampled at the following rate. Material used for individual samples shall not exceed 1 (one) inch maximum in size, and depth. If additional material is needed for a sample additional sample(s) should be colocated at the sampling point.

(Each composite sample must include 1 sample for each 20 yds³.)

<u>Quantity</u>	<u>Number of Composite Samples</u>
Less than 400 yds ³ -	1/100 total yds ³
400 yds ³ – 2000 yds ³ -	1/200 total yds ³ + 2
Over 2000 yds ³ -	1/500 total yds ³ + 8

(Ex. 1: 310 total yds³ project requires: (310/100) = 4 samples.)

(Ex. 2: 735 total yds³ project requires: (735/200) + 2 = 6 samples.)

(Ex. 3: 1,750 total yds³ project requires: (1750/200) + 2 = 11 samples.)

(Ex. 4: 5,000 total yds³ project requires: (5000/500) + 8 = 18 samples.)

(Note: for any amount over a volume increment round up to the next highest number of samples as in ex. 1 and 2.)

3. What Contaminants to Analyze: (Analysis Profile)

All sampling and sample analyses shall be conducted in accordance with the criteria and methods specified in the Technical Requirements for Site Remediation at N.J.A.C. 7:26E *et seq.* The Department sanctions composite sampling for the purposes of post-demolition materials characterized for management per this Guidance. In situ samples shall always be discrete samples and not composited.

For all sites:

a. PCBs & PAHs: :

Sample and analyze in all concrete and concrete fine materials. If the recycled concrete is going to be used as road base, the requirement to analyze for PAHs may be eliminated by the site case manager.

Based on site-specific factors, or as directed by the SRP Manager:

b. TCLP, TAL/TCL+30, TPH:

If known or suspected at industrial, mining or other sites, or as directed by the Department's Case Manager for the site, analyze for VOCs, SVOCs, TCLP Pesticides, Herbicides; TAL/TCL+30, TPH, and as required on a case-specific basis RCRA TCLP including TCLP metals.

c. Dioxins/Furans:

If known or suspected at industrial, mining or other sites, or as directed by the site Case Manager for the site, use USEPA Method 1613B, 1ppt detection limit, 17-congener profile, or the latest Department-approved method. Consult the Department for a case-specific determination for use of materials containing

elevated levels of dioxins/furans above a screening level of 50 parts per trillion (ppt) total 17-congener Toxicity Equivalents (TEQ) off site.

d. **Radionuclides as Naturally Occurring Radioactive Material (NORM):**

If known or suspected at industrial, mining or other sites, or as directed by the Department's Case Manager for the site, analyze by gamma spectroscopy for the natural series of radionuclides. The representative samples should be dried, sealed and counted after 21 days. The minimum detectable concentration requirement for Ra-226 and Th-232 daughter nuclides should be 0.5 picoCuries per gram (pCi/g) on dried material. Provide laboratory documentation of analysis and methodology. The laboratories must be certified by the Department's Office of Quality Assurance (OQA) for radionuclides in soil analysis DOE 4.5.2.3. Contact Mr. Vas Komanduri of OQA at (609)984-0855 for a current list of certified laboratories.

The following industries are recognized by the Department's Bureau of Environmental Radiation as having the potential to have technologically enhanced Naturally Occurring Radioactive Material (NORM) contamination potential: Paper and pulp facilities; Ceramics manufacturing; Paint and pigment manufacturing; Metal foundry facilities; Optical glass; Fertilizer plants; Aircraft manufacture; Munitions and armament manufacture; Scrap metal recycling; Zirconium manufacturing; Oil and gas production, refining, and storage; Electricity generation; Cement and concrete product manufacture; Radiopharmaceutical manufacturing; Geothermal energy production.

If material is from a radioactive materials licensee or a former licensee, or is a radioactively contaminated site, contact the Bureau of Environmental Radiation case manager for assistance.

VI. Clean Building Self Certification Compliance:

This section discusses the procedures for the owner of a structure self certifying that the structure is clean. The Department will allow the owner of a site that is a demolition and construction site with the **SRP's** oversight that is required to comply with this Guidance, to self certify the site, or a portion or portions of the site's structures, as clean either based on the results of in situ or post-demolition sampling and analysis prior to concrete material disposition per this guidance document or by reviewing the historical uses and construction features of the site. Note that each individual building or structure at the site from which concrete will be generated for recycling or use as outlined above must undergo either sampling and analysis per the guidance in sections I through V of the "Guidance for Characterization of Concrete and Clean Material Certification for Recycling," or one of the two self-certification procedures described in this section.

The person completing the certification must be a principal executive officer, general partner or proprietor of the company or a high level official of a government-owned site. The site owner has the option of providing a delegation of authority, which assigns responsibility for signing the Certification Statement from the officer or high ranking official to the local site manager, to the Department with the Certification Statement.

1. Self Certification with Sampling/Analysis:

The self Certification process with sampling specifies that all of the concrete and concrete materials contain contamination of PCBs and PAHs, and other contaminants based on site-specific factors or as directed by the SRP's Case Manager, below the Department's Soil Remediation Standards. The site owner shall base the self Certification on analytical data from the testing of the concrete in accordance with this Guidance and certify that the concrete was fully characterized and also managed according to the requirements of this Guidance. The owner of the site is responsible for compliance with this Guidance, maintaining all documentation related to the demolition and material characterization process including demolition and sampling plans, analytical testing documentation and material disposition after self Certification and filing self Certification documents with the Department.

The owner of the property where the concrete sampling was conducted shall complete the Certification in Addendum 2 of this Guidance, which the owner shall have notarized and retain with the characterization documentation on site for a minimum of five years. The owner of the property is responsible for submitting a copy of the executed Certification to the SRP Case Manager for the site.

2. Self Certification without Sampling/Analysis using the "Clean Building Checklist":

The self Certification process without sampling specifies that all of the concrete and concrete materials contain contamination of PCBs and PAHs, and other contaminants based on site specific factors or as directed by the SRP's Case Manager, below the Department's Soil Remediation Standards based on an assessment of the historical uses of the site and building construction materials. The site owner shall base the self Certification on the results of the "Clean Building Checklist" in accordance with this Guidance and certify that the concrete is clean based on the assessment of the building and also managed according to the requirements of this Guidance. The owner of the site is responsible for compliance with this Guidance, maintaining all documentation related to the demolition and assessment process including demolition and sampling plans, analytical testing documentation and material disposition after self certification and filing self Certification documents with the Department.

The owner of the property for which the, "Clean Building Checklist for Recycling" was used to assess the status of material contamination in the building shall complete the Certification in Addendum 2 of this Guidance, noting that the "Clean Building Checklist" was used to determine the building's concrete and related materials are clean. The owner shall have the Certification notarized and retain with the other related facility documentation. The owner of the property is responsible for submitting a copy of the executed Certification to the SRP Case Manager for the site.

ADDENDUM 1
The New Jersey Department of Environmental Protection
Solid and Hazardous Waste Management Program
CLEAN BUILDING CHECKLIST for RECYCLING

Activity	Yes	No	* If “Yes”, Include Detailed Comments
1. Was the building constructed or concrete poured in the year 2000 or later?			
2. Was the building constructed or the concrete poured between 1990 and 1999?			
<u>3. The following questions apply to the current and historic use of the building (including prior owners and operators):</u>			
a. Did the building contain liquid filled transformers?			
b. Did the building contain liquid filled PCB equipment?			
c. Did the building contain oil filled equipment?			
d. Did the building contain chemicals?			
e. Did the building contain heat transfer equipment?			
f. Was the building utilized for an industrial process where chemicals may have been manufactured or used?			
4. Does the building have doorways that are caulked?			
5. Does the building have windows that are caulked?			
6. Does the building have exterior panels with joints that are caulked?			
7. Does the building have floor concrete expansion joints that are caulked?			
8. Are there any sumps, floor drains or pits in a chemical room or process area <u>(include current and historic operations)</u> ?			
9. Did the building have chemical waste collection areas <u>(current and historic operations)</u> ?			
10. Did the building have storage areas for raw materials or finished products that contained liquids <u>(include current and historic operations)</u> ?			

(March 2007)

Sampling and Analysis Summary: (Detailed direction for sampling and analysis is described in the Guidance.)

- No sampling or analysis is required for any buildings or concrete poured 2000 or later
- Buildings constructed between 1990 and 1999; sampling is only required in areas with an affirmative response as required in the, “Clean Building Checklist for Recycling”
- Buildings containing caulking, expansion joints and constructed between 1990 and 1999, sampling for PCBs is required
- Nonbuilding structures (i.e., sidewalks, curbs, driveways, etc.) constructed between 1990 and 1999, analysis of PCBs & PAHs is required
- * Include or attach appropriate documentation to support claims.

ADDENDUM 1 (cont.)

CLEAN BUILDING CHECKLIST for RECYCLING - INSTRUCTIONS

Clean Building Checklist Determination:

To certify that a nonindustrial use building (i.e., cafeterias, offices hotels, etc.) or structure (i.e., sidewalks, etc.) are free of contamination (a.k.a., clean) because of the building's historical uses and operations, the owner of the facility should, at a minimum, conduct the following:

For nonindustrial use buildings or structures constructed in the year 1990 or later, complete the Department's "Clean Building Checklist", a series of questions related to the historical use(s) of such structures and buildings, the age, etc. If, after completing the checklist, the owner determines that no evidence of industrial use has occurred, the building or structure is considered clean and no sampling will be required. If the building or structure can not be documented as clean, then targeted sampling is required using the protocol below. Follow the Certification process in the Guidance.

Building Self Certification Process Summary:

For nonindustrial use buildings and structures constructed prior to 1990 or if the completion of the "Clean Building Checklist" revealed possible industrial uses, targeted sampling shall be performed of the caulking from windows, doorways, expansion joints in floors and external panels, spacers from other structures, transformers and electrical supply areas and other known or suspected contaminated building components;

Targeted sampling shall be completed as follows: the caulking from one outer doorway will be sampled for PCBs and PAHs. If it can be documented that all the doorways were installed at the same time and no physical alterations were made since installation, then the one sample shall be representative. Otherwise, samples will be taken from multiple outer doorways and composited into one sample. At a minimum, at least one 5-sample composite from different doorways shall be analyzed from each building's doorway caulking for PCBs. The same sampling protocol shall be followed for windows, expansion joints in floors and external panels, spacers from other structures, transformers and electrical supply areas or other known or suspected contaminated building components;

A copy of the results shall be retained for five years and shall be certified by the site operations manager or the ranking corporate officer at the site according to the procedure in the Department's "Guidance for Characterization of Concrete and Clean Material Certification for Recycling" available at:

<http://www.state.nj.us/dep/dshw/resource/techman.htm#concrete> .

Note: that this is the recommended Guidance at this time only for determining that concrete and related materials are suitable for recycling in the State's recycling system.

IMPORTANT

Pursuant to N.J.S.A. 47:1A-1 et seq. the information provided in this form and its attachments shall be available to the public for review unless a specific claim of confidentiality is submitted pursuant to the procedures set forth in N.J.A.C. 7:26-17 et seq. and is approved by the Department. For assistance regarding confidentiality claims, please contact the Solid and Hazardous Waste Management Program at (609) 984-6985.

SIGNATURES. IN WITNESS WHEREOF, Owner has executed this Certification of Concrete Sampling as of the date first written above.

[If Owner is an individual]

WITNESS:

[Signature]

[Print name below signature]

[If Owner is a corporation]

ATTEST:

[Name of corporation]

By _____

[Print name and title]

[Signature]

[If Owner is a general or limited partnership]

WITNESS:

[Name of partnership]

[Signature]

By _____, General
[Print name] Partner

[If Owner is an individual]

STATE OF [State where document is executed] SS.:
COUNTY OF [County where document is executed]

I certify that on _____, 20__, [Name of Owner] personally came before me, and this person acknowledged under oath, to my satisfaction, that this person [or if more than one person, each person]

(a) is named in and personally signed this document; and

(b) signed, sealed and delivered this document as his or her act and deed.

_____, Notary Public
[Print Name and Title]

[If Owner is a corporation]

STATE OF [State where document is executed] SS.:
COUNTY OF [County where document is executed]

I certify that on _____, 20__, [Name of person executing document on behalf of Owner] personally came before me, and this person acknowledged under oath, to my satisfaction, that:

(a) this person is the [secretary/assistant secretary] of [Owner], the corporation named in this document;

(b) this person is the attesting witness to the signing of this document by the proper corporate officer who is the [president/vice president] of the corporation;

(c) this document was signed and delivered by the corporation as its voluntary act and was duly authorized;

(d) this person knows the proper seal of the corporation which was affixed to this document; and

(e) this person signed this proof to attest to the truth of these facts.

[Signature]

[Print name and title of attesting witness]

Signed and sworn before me on _____, 20__

_____, Notary Public

[Print name and title]

[If Owner is a partnership]

STATE OF [State where document is executed] SS.:
COUNTY OF [County where document is executed]

I certify that on _____, 20__, [Name of person executing document on behalf of Owner] personally came before me, and this person acknowledged under oath, to my satisfaction, that this person:

(a) is a general partner of [Owner], the partnership named in this document;

(b) signed, sealed and delivered this document as his or her act and deed in his capacity as a general partner of [owner]; and

(c) this document was signed and delivered by such partnership as its voluntary act, duly authorized.

[Signature]

_____, General Partner

[Print Name]

_____, Notary Public

[Print name and title]