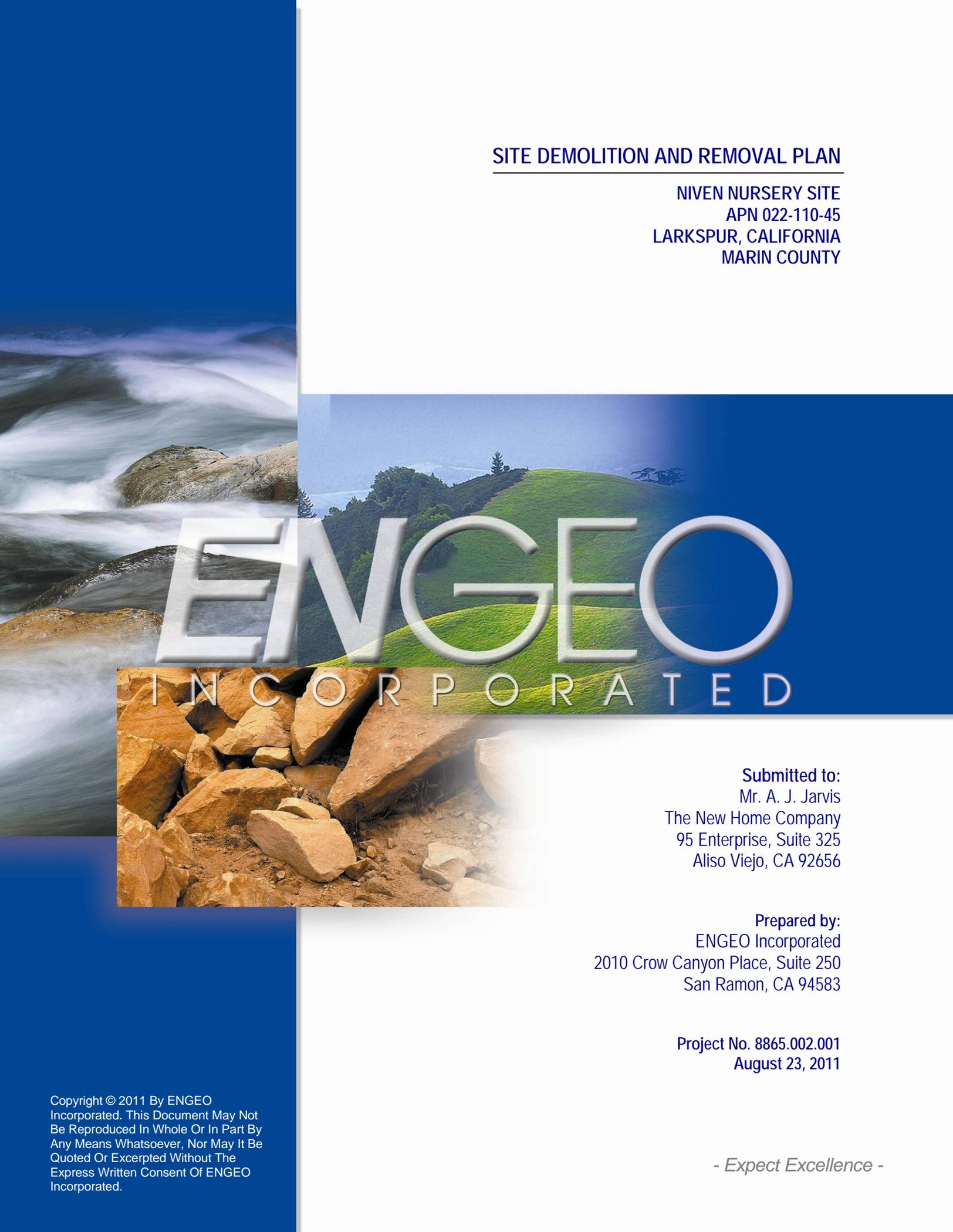


## SITE DEMOLITION AND REMOVAL PLAN

NIVEN NURSERY SITE  
APN 022-110-45  
LARKSPUR, CALIFORNIA  
MARIN COUNTY



# ENGEO

INCORPORATED

**Submitted to:**  
Mr. A. J. Jarvis  
The New Home Company  
95 Enterprise, Suite 325  
Aliso Viejo, CA 92656

**Prepared by:**  
ENGEO Incorporated  
2010 Crow Canyon Place, Suite 250  
San Ramon, CA 94583

**Project No. 8865.002.001**  
August 23, 2011

Copyright © 2011 By ENGEO  
Incorporated. This Document May Not  
Be Reproduced In Whole Or In Part By  
Any Means Whatsoever, Nor May It Be  
Quoted Or Excerpted Without The  
Express Written Consent Of ENGEO  
Incorporated.

- *Expect Excellence* -

## TABLE OF CONTENTS

<b>1.0</b>	<b>PROJECT AND SITE DESCRIPTION .....</b>	<b>1</b>
<b>2.0</b>	<b>GENERAL WORK ACTIVITY OVERVIEW .....</b>	<b>1</b>
<b>2.1</b>	<b>WORK HOURS AND SCHEDULE.....</b>	<b>2</b>
<b>2.2</b>	<b>EQUIPMENT /MATERIAL STAGING AND PARKING.....</b>	<b>2</b>
<b>2.3</b>	<b>DEBRIS/STOCKPILE STAGING .....</b>	<b>2</b>
<b>2.4</b>	<b>HAUL ROUTE / ESTIMATED VEHICULAR TRAFFIC .....</b>	<b>2</b>
<b>3.0</b>	<b>HEALTH AND SAFETY.....</b>	<b>2</b>
<b>4.0</b>	<b>DEMOLITION ACTIVITIES .....</b>	<b>3</b>
<b>4.1</b>	<b>PRE-DEMOLITION SURVEY AND HAZARDOUS MATERIAL         ABATEMENT .....</b>	<b>3</b>
<b>4.2</b>	<b>GENERAL DEMOLITION ACTIVITIES .....</b>	<b>3</b>
<b>5.0</b>	<b>PRE-STRUCTURAL DEMOLITION ACTIVITIES .....</b>	<b>4</b>
<b>6.0</b>	<b>MATERIAL RECYCLING AND DEMOLITION DEBRIS DISPOSAL.....</b>	<b>4</b>
<b>7.0</b>	<b>DUST CONTROL MEASURES .....</b>	<b>4</b>
<b>8.0</b>	<b>STORMWATER POLLUTION PREVENTION (SWPPP) AND EROSION         CONTROL PLANS (ECP).....</b>	<b>4</b>

**APPENDIX A:** Pre-Demolition Asbestos and Lead-Based Paint Survey Reports

**APPENDIX B:** Waste Management Plan

**APPENDIX C:** Dust Control Plan

## **1.0 PROJECT AND SITE DESCRIPTION**

ENGEO has prepared this Demolition and Removal Plan, hereafter referred to as the "Workplan", for the purpose of providing a detailed description of demolition and removal procedures, which the demolition contractor (Contractor) will be implementing during the onsite activities at the Niven Nursery site (Project), located in Larkspur, California. Please note that a separate management plan was prepared by ENVIRON in 2009 for the planned soil remediation work.

The project is situated south of Doherty Drive between a shopping center and Tamiscal High School on the site of the old Niven Nursery encompassing about 17 acres. Larkspur Creek is located on the south and east property boundaries. The drainage channel is approximately 10 feet in depth and has side slopes/banks ranging to as steep as 1:1 (horizontal to vertical), but appears to average 2:1.

A commercial nursery was operated at the Property for nearly 80 years. Several greenhouse structures, residential structures, and ancillary facilities have been present at the Property. The greenhouses were primarily grouped into three "areas": the western greenhouse area, the northern greenhouse area, and the southern greenhouse area.

## **2.0 GENERAL WORK ACTIVITY OVERVIEW**

The work covered under this Workplan will be conducted in a sequential manner, with some activities being conducted concurrently with others. Demolition work will be performed in accordance with Cal OSHA, BAAQMD 11-2-401.3, and the requirements of the City of Larkspur. Depending upon site and other unknown conditions, Contractor's general sequence of demolition activities may require alteration at any given time. A summary of the general sequence for the work activities is outlined as follows:

- Pre-demolition survey of each building
- Pre-construction activities and site mobilization
- Verification of utility disconnects and isolations by others
- Removal of remaining chemicals and hazardous materials
- Removal of asbestos containing materials (ACM) and lead-based paint (LBP) mitigation, as necessary
- Demolition of existing buildings.
- Removal of demolition debris and material to appropriate offsite disposal/recycling facilities.

## **2.1 WORK HOURS AND SCHEDULE**

Demolition activity shall be conducted between 7:00 a.m. and 6:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on weekends and holidays. Demolition work is expected to take approximately three months.

## **2.2 EQUIPMENT /MATERIAL STAGING AND PARKING**

Vehicle and equipment parking will initially be located in the eastern property area; however, staging and parking may occur in other areas of the site during the course of demolition activities.

## **2.3 DEBRIS/STOCKPILE STAGING**

Soil and debris stockpiles will initially be staged in the eastern area of the site; however, staging may be rotated to the western site area during the course of demolition activities.

## **2.4 HAUL ROUTE / ESTIMATED VEHICULAR TRAFFIC**

In accordance with the Traffic Control Plan, vehicular traffic will be confined to one exit and one entry point along Doherty Drive. It is anticipated that vehicular traffic will be routed in a counter-clockwise (west to east) route through the site. The specific number of daily truck trips will vary based on phasing and project schedule; however, it is estimated that transport truck traffic will be less than 25 trucks per day.

## **3.0 HEALTH AND SAFETY**

The Contractor shall consider safety and the prevention of accidents an integral part of its operation. Under Federal, State and local laws, Contractor is responsible to provide a safe working environment, and to protect life, health and safety of its employees and subcontractor's personnel. Although providing safe working conditions is primarily a management responsibility, safety and accident prevention can be accomplished only through coordinated efforts of all employees and subcontractor personnel. If the task or service being undertaken cannot be done safely, the Contractor shall discontinue work until proper controls can be established.

Contractor will hold daily tailgate meetings for its employees prior to work commencement. Additionally, Contractor will require that subcontractors be required to hold similar daily tailgate meetings covering their respective portion of the work. These meetings are designed to discuss the projected work schedule and prepare each worker for any potential hazards associated with the work activities. A copy of the daily or weekly safety meeting logs will be maintained onsite at all times. All personnel attending the safety meeting will be required to sign the safety-meeting log upon completion of the tailgate safety meeting. During the tailgate meetings,

personnel will be reminded of site conditions and are encouraged to participate with health and safety concerns.

At the conclusion of the project, copies of all daily activities will be presented in a final report to the Property owner for distribution to relevant parties.

## **4.0 DEMOLITION ACTIVITIES**

### **4.1 PRE-DEMOLITION SURVEY AND HAZARDOUS MATERIAL ABATEMENT**

Prior to commencement of building demolition, a thorough walkthrough and evaluation of the building will be conducted to confirm that all appropriate measures have been completed to ensure that the area is ready for commencement of demolition activities. Pre-Demolition Survey Reports have been completed by Kellco Services for the Property, which are provided in Appendix A. A copy of the Pre-Demolition survey will be provided to Contractor for as-needed distribution to the construction team. Contractor or subcontractor shall prepare an asbestos and lead-based paint abatement plan, addressing all items identified in the Pre-Demolition Survey Reports:

### **4.2 GENERAL DEMOLITION ACTIVITIES**

In general, the tasks will include a variety of procedures. The most important aspect in the development of these procedures will be the safe conduct of the work. Contractor's procedures will limit the use of labor to the most controlled and safe conditions and rely upon mechanized means of removal wherever possible. Excavators equipped with concrete breakers, concrete munchers, grapples, and other modern hydraulic demolition tools and attachments will be utilized. Wherever possible, large structures will be removed to ground level using mechanized means. Subsequent sizing of scrap materials such as steel and rebar and other material processing activities will take place at grade level, hauled offsite and recycled accordingly.

General building/structure demolition will be conducted in a manner that does not interfere with or encroach upon the existing surrounding pedestrian and vehicular traffic during normal activities. Contractor will provide fencing around the project site and will work within the confines of the site fencing whenever possible. However, depending upon site and structure conditions, alternative methods of demolition and alternative types of equipment may be used to ensure the safest and most efficient means of operation. This may involve modification of the site fencing from time to time in order to complete the demolition activities. This will always be coordinated with the Property owner in advance.

Requests for Information (RFIs) will be issued as needed if questions or scope issues arise during the course of the demolition activities. Field activities related to any RFIs will not occur until an appropriate answer has been provided.

## **5.0 PRE-STRUCTURAL DEMOLITION ACTIVITIES**

Contractor will perform salvage operations in accessible areas where the power has been isolated while the soft demolition and remaining clean-up activities are going on. Contractor will use Bobcat-type skid steer loaders and/or hand labor to remove all soft debris that is not easily separated from the concrete material. This includes removal debris piles, roofing, ceilings, HVAC ducts, insulation, plaster partition walls, lights and all other building components that will not be recycled. After much of the soft debris is removed, Contractor or subcontractor will commence the ACM and LBP abatement activities. Upon completion of hazardous building material abatement, the Contractor shall then resume with additional salvage and interior demolition until the building is cleaned out of all soft demolition debris.

## **6.0 MATERIAL RECYCLING AND DEMOLITION DEBRIS DISPOSAL**

In accordance with the *Waste Management Plan*, all demolition debris that will not be recycled by Contractor will be loaded into semi-end dumps and hauled to a disposal facility for further recycling or landfill. The *Waste Management Plan* provides detailed information on percentages of material to be recycled or disposed and the designated recycling and/or disposal facilities. The *Waste Management Plan* is provide as Appendix B.

## **7.0 DUST CONTROL MEASURES**

Dust control will be considered an important part of the overall project. Contractor will utilize a water truck and/or fire hose attached to a local hydrant during demolition operations. Contractor will direct a localized fine water spray to the source of demolition activities, as required, thereby reducing airborne dust particles. To minimize the run-off of water, the water supply will be used only when necessary. A proper backflow devise will be installed at the hydrant locations, if utilized. A detailed *Dust Control Plan* is provided as Appendix C.

## **8.0 STORMWATER POLLUTION PREVENTION (SWPPP) AND EROSION CONTROL PLANS (ECP)**

Contractor will follow requirements for stormwater management and erosion control as specified in the *SWWPP* and *ECP* prepared by ENGEO.

## **APPENDIX A**

### **KELCO SERVICES Pre-Demolition Asbestos and Lead Based Paint Survey Reports Rose Garden Residential Development**

**(see attached CD-ROM)**

## **APPENDIX B**

### **Waste Management Plan and Supporting Calculations for**

**NIVEN NURSERY SITE  
2 Ward Street  
Larkspur, California**

---

**Waste Management Plan**  
and Supporting Calculations for  
**NIVEN NURSERY SITE**

located at:

**2 WARD STREET**  
**LARKSPUR, CALIFORNIA**

August 23, 2011  
November 14, 2011, Revision 1

---

## **Table of Contents**

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
<b>2.0 PURPOSE.....</b>	<b>1</b>
<b>3.0 BACKGROUND .....</b>	<b>2</b>
<b>4.0 DIVERSION GOAL FOR NIVEN NURSERY SITE .....</b>	<b>3</b>
<b>5.0 REPORTING .....</b>	<b>4</b>
<b>6.0 RESPONSIBLE PROFESSIONAL .....</b>	<b>4</b>

### **Attachments**

**Tab 1 – General site and facility maps**

**Tab 2 – Site Structures, Status of materials and Estimated Quantities**

## **1.0 INTRODUCTION**

The Niven Nursery site will be cleared of all structures and remediated in preparation for future development.

According to the Phase 1 ESA prepared by ENGEO:

The Property encompasses approximately 17.9 acres and is identified by Assessor's Parcel Number (APN) 022-110-45 (Figure 2 from ENGEO Phase 1, attached).

The Property currently consists of greenhouse buildings in the northern, southern and western areas of the Property, along with several small, residential-type structures, storage/maintenance buildings, offices, and associated roadways (Figure 5 from ENGEO Phase 1). The greenhouses are currently not in use and are in a general state of disrepair. The eastern area remains undeveloped with several large fill material piles and miscellaneous debris. The northeast corner of the Property was formerly used by a tenant as a retail nursery outlet (Sloat Nursery – 279 Doherty Drive).

## **2.0 PURPOSE**

The purpose of this Waste Management Plan is to document the types and estimated weights of materials that will be generated during demolition activities at the site, and to evaluate the amount of these materials that may be recycled or reused. In Larkspur, the applicable regulation is: California Green Building Standards Code Appendix A4, Sec. A4.408.1 Tier 1.

In accordance with City of Larkspur Condition of Approval, B.3. Demolition Waste, prior to issuance of a Demolition Permit, the applicants shall complete and submit a Waste Management Plan ("WMP") for approval by the Planning Director. The completed WMP shall indicate all of the following:

- (1) the estimated volume or weight of debris, by materials type, to be generated;
- (2) the estimated volume or weight of such materials that can feasibly be diverted via reuse;
- (3) the estimated volume or weight of such materials that can feasibly be diverted via recycling;
- (4) the vendor and/or facility that the Applicant proposes to use to collect or receive said materials; and
- (5) the estimated volume or weight of materials that will be landfilled."

The City of Larkspur has not established a WMP application form; therefore the information is being provided on the Marin County model form.

### 3.0 BACKGROUND

According to the Phase 1 ESA prepared by ENGEEO:

The Property is listed under the CAL-EPA Department of Toxic Substances Control (DTSC) Voluntary Cleanup Program. A VCA application was prepared by a previous party (Larkspur Housing Partners) in May 2000. The VCA is not currently active. As part of the VCA, a Removal Action Workplan (RAW) was approved for the Property by CAL-EPA DTSC in March 2010. The RAW details the excavation and disposal of approximately 900 cubic yards of metal- and pesticide-impacted soil that exceeds residential risk criteria. The RAW includes a contingency for the segregation and encapsulation of excavated soil with *midden* (mounds or deposits that indicate human settlement). The RAW also indicates that land use restrictions and soil management plans will be necessary if any soil with culturally significant resources is retained on-site.

Extensive soil impacts related to the past nursery operations have been identified at the Property. The primary constituents of concern are dieldrin, DDT/DDD/DDE, and lead. The current RAW was approved for the Property by CAL-EPA DTSC in March 2010. The RAW details the excavation and disposal of approximately 900 cubic yards of metal- and pesticide-impacted soil, which exceeds residential risk criteria. The approved RAW was developed based on the cumulative data and investigative information compiled for the Property by Geopacific, Harza, ENSR, and ENVIRON. While we believe the fundamental approach of the RAW is generally sufficient, the current soil data does not support the estimated remedial volume. Many of the soil samples used to determine the extent of soil required for removal were “composite” samples, which may have resulted in misinterpretation of the data and remedial volumes. We conservatively estimate the total volume of impacted soil at the Property could be in excess of 4,600 cubic yards.

#### **Asbestos and Lead-Based Paint**

Extensive asbestos-containing building materials have been identified within the Property structures including, thermal systems insulation (TSI), transite panels, mastic, and window caulking. Limited sampling has been conducted to verify the actual quantities required for abatement. Personal communication with Mr. Tim Cannard, Vice President of Kellco, indicated that it was likely most of the painted surfaces of the Property structures would contain lead-based paint.

A demolition-level asbestos and lead paint survey was conducted by Kellco, and was used to estimate the percentage of materials that would require removal as hazardous waste.

## Summary

Size of site: 17.9 acres

Number and type of structures: 29 identified structures.

Many of the structures contain ACM (usually to a small degree on a limited number of materials) and lead-based paint. The use of lead-based paint was wide-spread at the site; almost all structures are affected, usually inside and out.

In addition, many of the structures are decades old and had not been maintained, especially the greenhouses. The wood structures, after lead-based paint abatement, are unlikely to yield useable timber.

## **4.0 DIVERSION GOAL FOR NIVEN NURSERY SITE**

In accordance with the California Green Building Standards Code Appendix A4, Sec. A4.408.1 Tier 1, the diversion rate is 65%. Meaning that 65% of the total construction and demolition debris generated by a project must be reused or recycled.

Due to the distribution of the weight of materials (large amounts of contaminated soil, lead-based paint contaminated wood, and a large quantity of wood that is too weathered for resale), it is unlikely that the 65% Diversion Requirement can be attained.

None (0%) of the diverted material is planned to be reused on the site.

ACM is widespread throughout the greenhouses; therefore, all of the greenhouse structures will be disposed as ACM waste. Once hazardous materials are removed there will be a 100% diversion rate for the remaining materials.

All of the Green Waste/Concrete/Asphalt/Brick will be recycled located at:

Redwood Landfill  
8950 Redwood Highway  
Novato, CA 94945  
(415) 892-2851

The Metals will be recycled at one or more of the following facilities:

Schnitzer Steel - Oakland  
1101 Embarcadero West  
Oakland, CA 94607 US  
(510) 444-3919

Alco Metal & Iron Company  
1091 Doolittle Drive  
San Leandro, CA 94577-1022  
(510) 562-1107

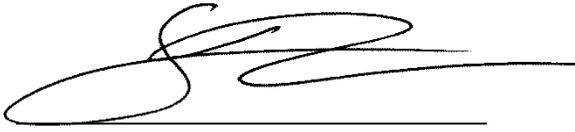
Sims Recycling  
23270 Eichler St  
Hayward, CA 94545  
(510) 259-0340

## **5.0 REPORTING**

At the completion of demolition, removal, and remediation activities at the site the contractor will submit the completed diversion form indicating the actual quantities of materials generated and diverted from landfill.

## **6.0 RESPONSIBLE PROFESSIONAL**

This WMP is approved by:

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

August 23, 2011

November 14, 2011, Revision 1

## **REFERENCES**

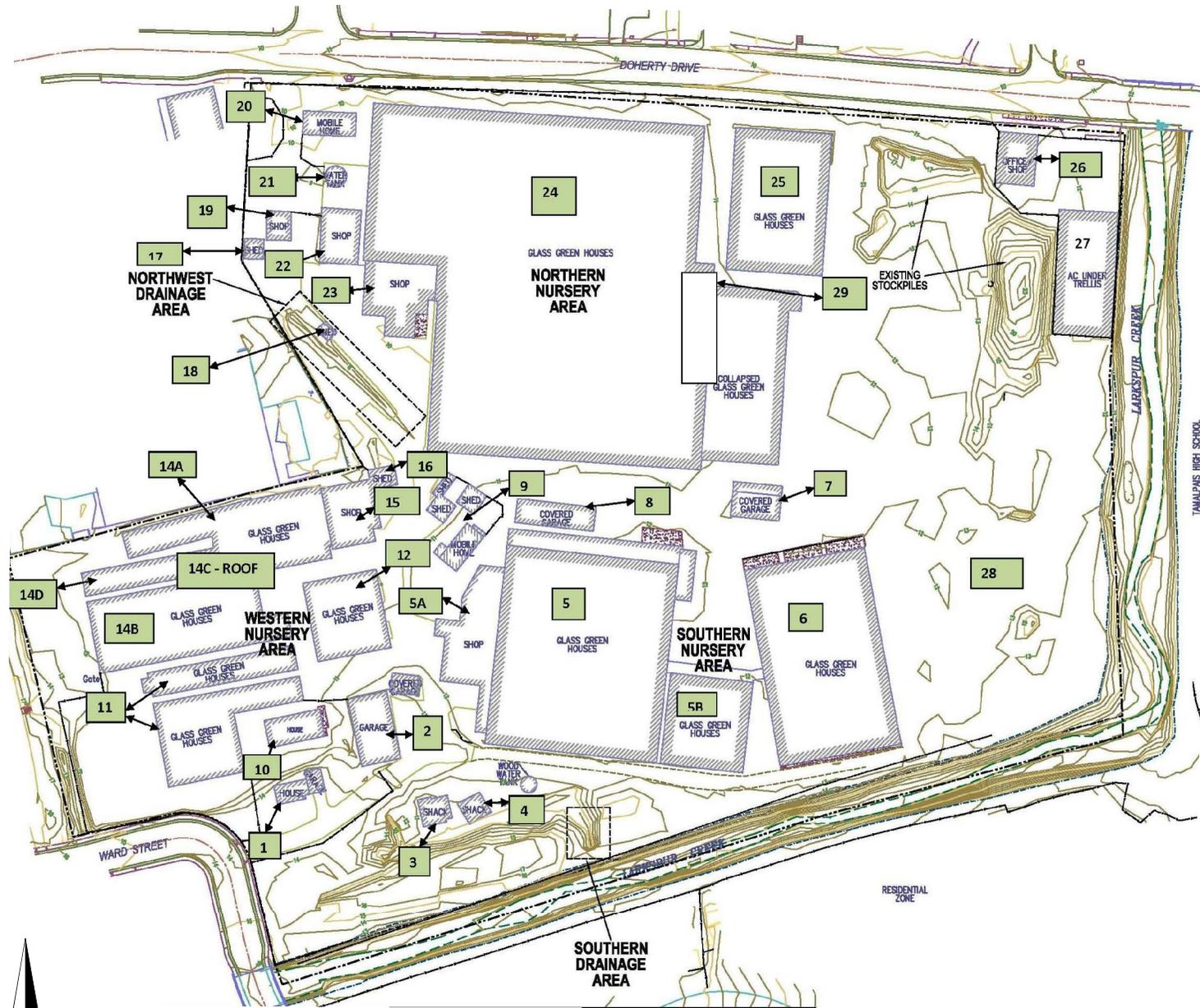
ENGEO Phase I Environmental Site Assessment Niven Nursery Site  
2 Ward Street, Larkspur, California 5/13/2011

KELLCO Job #1106-xx Pre-Demolition Asbestos and Lead Inspection Reports

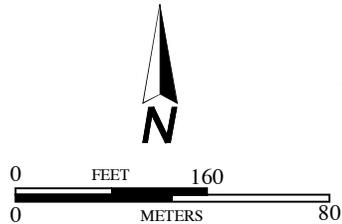
ENVIRON International Corporation, Removal Action Implementation  
Plan, Niven Nursery, 2 Ward Street, Larkspur, California October 14, 2009

**TAB 1**  
**FIGURES**

D:\Drafting\Drafting2\DWG\8865\002\886520000-1-StepPlan-0811.dwg Plot Date: 8-23-11 spotters



BASE MAP SOURCE: ENVIRON, 2008



SITE PLAN  
NIVEN NURSERY  
LARKSPUR, CALIFORNIA

PROJECT NO: 8865.002.000	
SCALE: AS SHOWN	
DRAWN BY: SRP	CHECKED BY:

FIGURE NO.  
**1**

**TAB 2**

**Site Structures, Status of Materials and Estimated Quantities**

Building ID #	Description	ACM/Pb	Area (ft2)	Estimated Demolition Waste			By material In tons						Glass and Miscellaneous
				lbs/ft2	Total (lbs)	Total (tons)	Wood	Concrete	Brick	Metals	Asphalt	Roofing	
1	The inspection was conducted on the interior and exterior of a single story family housing structure and detached shed.	y/y	1,232	100	123,206	62	25.9	14.8	0.6	3.1	1.2	0.6	15.4
2	The inspection was conducted on the interior and exterior of two covered garages. Building #2 - The interior is a wood frame with sheet metal on the walls and skylights on the ceiling. The exterior is sheet metal on the walls with pitched roof. This building was constructed on a concrete foundation. Building #2A - This is a wood frame structure with metal piping running along the outside area. The roofing is wood and has paint.	y/y	3,762	100	376,166	188	79.0	45.1	1.9	9.4	3.8	1.9	47.0
3	The inspection was conducted on the interior and exterior of a single story family housing structure located in Larkspur, California. The interior has wood paneling on the walls and ceiling. The flooring is multiple types of vinyl floor tile and mastic. The exterior has wood siding on the walls with a pitched gravel roof. This house is constructed on a concrete Foundation.	y/y	869	100	86,899	43	18.2	10.4	0.4	2.2	0.9	0.4	10.9
4	The inspection was conducted on the interior and exterior of a single story family housing structure located in Larkspur, California. The interior has wood paneling on the walls and ceiling. The flooring is multiple types of vinyl floor tile and mastic. The exterior has wood siding on the walls with a pitched gravel roof. This house is constructed on a concrete Foundation.	y/y	679	115	78,031	39	16.4	9.4	0.4	2.0	0.8	0.4	9.8
5	The inspection was conducted on a single story greenhouse, single story family housing structure and a two story commercial office building with attached barn/garage located in Larkspur, California. Building #5 - Single story barn/garage - The interior has wood panels and bricks on the walls with wood panels on the ceiling. The flooring is concrete. The exterior is wood panels on the walls. Building #5A - Single story family housing unit - The interior has wood paneling and sheetrock on the walls with drop in tiles and wood paneling on the ceiling. The flooring is a combination of carpet and vinyl sheet flooring and mastic. The exterior is wood siding on the walls with a pitched rolled roofing system. Building #5B - Single story Greenhouse - The interior and exterior has glass panels in a metal frame on the walls and ceiling. The flooring is concrete.	y/y	53,881	115	6,196,369	3,098	1,301.2	743.6	31.0	154.9	62.0	31.0	774.5
6	The inspection was conducted on the interior and exterior of a single story greenhouse building located in Larkspur, California. The interior and exterior is metal framing with glass windows and panels all around. Most of the glass has fallen to the ground at the time of the inspection. The interior has metal piping systems, black netting material and wooden platforms on the ground. There is a concrete walkway running alongside this structure. Additionally, most of the glass and window put This greenhouse has TSI feeding from building #5 and 3ft transite walls	y/y	26,248	115	3,018,557	1,509	633.9	362.2	15.1	75.5	30.2	15.1	377.3
7	The inspection was conducted on a dilapidated covered garage located in Larkspur, California. The interior has wood panels on the walls and ceiling. The flooring is dirt.	y/y	1,786	115	205,344	103	43.1	24.6	1.0	5.1	2.1	1.0	25.7
8	The inspection was conducted on the interior and exterior of a single story greenhouse located in Larkspur, California. The interior and exterior is a wood frame structure with plastic and glass drop in panels on the walls and ceiling. The flooring is concrete and dirt. Please Note: Most of the glass and plastic drop in panels have fallen to the ground at the time of the inspection.	y/y	1,956	115	224,966	112	47.2	27.0	1.1	5.6	2.2	1.1	28.1
9	The inspection was conducted on a single story family housing unit and detached garage/shed. Building #9 House - The interior has wood paneling and drywall on the walls and ceiling. The flooring is a combination of vinyl floor sheeting, carpet and ceramic tiles. The exterior has wood siding on the walls with a pitched asphalt shingles over felt roofing system. This house is constructed on a concrete foundation. Building #9 Sheds/garages - The interior has plywood and drywall on the walls with wood beams and drywall on the ceiling. The flooring is concrete. The exterior is wood paneling on the walls with a pitched asphalt shingle roofing system. This shed was building on a concrete foundation.		2,401	115	276,074	138	58.0	33.1	1.4	6.9	2.8	1.4	34.5

Building ID #	Description	ACM/Pb	Area (ft2)	Estimated Demolition Waste			By material In tons						Glass and Miscellaneous
				lbs/ft2	Total (lbs)	Total (tons)	Wood	Concrete	Brick	Metals	Asphalt	Roofing	
10	The inspection was conducted on the interior and exterior of a two story family house structure located in Larkspur, California. The interior has drywall, tape and texture on the walls and ceiling. The flooring is a combination of vinyl floor sheeting and carpet padding over a wooden subfloor. The exterior has wood siding on the walls and brick around the chimney. The roofing is pitched asphalt shingle over felt.	Y-limited/y	1,750	115	201,237	101	42.3	24.1	1.0	5.0	2.0	1.0	25.2
11	The inspection was conducted on the interior and exterior of a single story greenhouse located in Larkspur, California. The interior and exterior is wood framing and siding with glass panels on the walls and roof. The flooring is concrete. Also, some of the glass panels and window putty have fallen down.	Y-limited/y	12,717	115	1,462,506	731	307.1	175.5	7.3	36.6	14.6	7.3	182.8
12	The inspection was conducted on the interior and exterior of a warehouse shop and a connected greenhouse. The Warehouse Shop was composed of wooden panels and a limited amount of drywall and wallboard. The floor consisted of a combination of wood and concrete. Furthermore, a large stack of transit panels were found in the warehouse. The attached greenhouse is a wooden structure with glass panels. The interior of the greenhouse was not accessible at the time of the inspection as it was overgrown.	y/y	6,321	115	726,918	363	152.7	87.2	3.6	18.2	7.3	3.6	90.9
13	ID not used	--	--	---			0.0						
14	The inspection was conducted on the interior and exterior of a single story warehouse with multiple shops and a boiler. The interior has wood paneling and sheetrock on the walls and ceiling. The flooring is concrete. The roofing is pitched hot mop over felt.	y/y	27,078	115	3,113,928	1,557	653.9	373.7	15.6	77.8	31.1	15.6	389.2
15	The inspection was conducted on the interior and exterior of a warehouse shop and a connected shed located in Larkspur, California. Building #15 Warehouse Shop – The interior has wood panels and drywall on the walls with wood panels on the ceiling. The flooring is vinyl sheeting and concrete. The exterior has wood panels on the walls. Building #15A Shed – The interior and exterior has wood paneling on the walls and ceiling. The roofing is pitched. The flooring is wood.	Y-limited/y	4,053	115	466,131	233	97.9	55.9	2.3	11.7	4.7	2.3	58.3
16	The inspection was conducted on the interior and exterior of a fallen down wood shed located in Larkspur, California. This is a wood frame structure with debris scattered throughout. The sampling was conducted on the debris that were found. This structure has no paint to submit for lead analysis. TSI Debris in Dirt	Y-limited/n	595	115	68,448	34	14.4	8.2	0.3	1.7	0.7	0.3	8.6
17	The inspection was conducted on the interior and exterior of a single story shop located in Larkspur, California. The interior has drywall and wood on the walls with drywall and wood beams on the ceiling. The flooring is a combination of carpet and vinyl sheeting over concrete. The exterior is wood and stucco on the walls with a flat rolled asphalt shingle roofing system. This shop is constructed on a concrete foundation.	Y-limited/y	476	115	54,758	27	11.5	6.6	0.3	1.4	0.5	0.3	6.8
18	The inspection was conducted on the interior and exterior of a storage area located in Larkspur, California. The interior has wood boards on the walls and ceiling. This storage area is constructed on a concrete foundation.	N/y	214	115	24,641	12	5.2	3.0	0.1	0.6	0.2	0.1	3.1
19	The inspection was conducted on the interior and exterior of a single story shop/garage located in Larkspur, California. The interior has wood panels on the walls with wood panels and metal sheeting on the ceiling. The flooring is concrete. The exterior has wood panels on the walls with a metal sheet roof. This building is constructed on a concrete foundation.	N/y	792	115	91,036	46	19.1	10.9	0.5	2.3	0.9	0.5	11.4
20	The inspection was conducted on the interior and exterior of a single story mobile home located in Larkspur, California. The interior has wood paneling and wall paper on the walls with particle board on the ceiling. The flooring is a combination of vinyl floor sheeting and carpet. This house is constructed on a raised wood foundation. The exterior is wood paneling on the walls with a pitched asphalt shingle over felt roofing system.	Y-limited (floor, roof patch)/N	1,393	115	160,168	80	33.6	19.2	0.8	4.0	1.6	0.8	20.0
21	The inspection was conducted on the interior and exterior of a metal water tank located at Larkspur, California. This is a circular metal tank with beige paint. (Can recycle steel after paint removal)	Y-limited (sealant)/Y paint	399		0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Building ID #	Description	ACM/Pb	Area (ft2)	Estimated Demolition Waste			By material In tons							Glass and Miscellaneous
				lbs/ft2	Total (lbs)	Total (tons)	Wood	Concrete	Brick	Metals	Asphalt	Roofing		
22	The inspection was conducted on the interior of a single story shop located in Larkspur, California. The interior has wood paneling on the walls and ceiling. The flooring is concrete. The exterior has wood paneling on the walls with a hot mop over felt roofing system.	Y/Y	2,301	115	264,666	132	55.6	31.8	1.3	6.6	2.6	1.3	33.1	
23	The inspection was conducted on the interior of a single story shop and greenhouse located in Larkspur, California. Shop - The interior has wood paneling on the walls and ceiling. The flooring is concrete. The exterior has wood paneling on the walls with a hot mop over felt roofing system. Greenhouse - The interior/exterior is a metal frame single story structure with drop in glass panels on the walls and roof. Most of the glass panels have fallen to the ground at the time of the inspection.	Y/Y	4,476	115	514,729	257	108.1	61.8	2.6	12.9	5.1	2.6	64.3	
24	The inspection was conducted on the interior and exterior of a single story greenhouse located in Larkspur, California. This is a metal frame structure with glass panels on the walls and ceiling. A lot of the glass panels have fallen to the ground at the time of the inspection.	Y/Y	123,050	115	14,150,711	7,075	2,971.6	1,698.1	70.8	353.8	141.5	70.8	1,768.8	
25	The inspection was conducted on a single story metal frame greenhouse structure located in Larkspur, California. This is a metal frame building with fiberglass on the walls and ceiling and a dirt and wood floor. (metal and wood to recycle, fiberglass to waste)	N/N	14,650	115	1,684,733	842	353.8	202.2	8.4	42.1	16.8	8.4	210.6	
26	The inspection was conducted on the interior and exterior of a single story warehouse located in Larkspur, California. The interior has drywall on the walls and plywood on the ceiling. The flooring is a combination of vinyl sheeting and concrete. The exterior has wood on the walls with a pitched hot mop and felt roofing system. This building is constructed on a concrete foundation. An AC unit was noted on the ceiling of this Structure.	N/N	2,055	115	236,374	118	49.6	28.4	1.2	5.9	2.4	1.2	29.5	
27	The inspection was conducted on a single story wooden structure. This is a wood frame structure with some netting on the top. There are concrete slabs on the ground of this Structure, and a/c paving.	N/N	2,055	115	236,374	118	49.6	28.4	1.2	5.9	2.4	1.2	29.5	
28	Open debris area	?	--	--			0.0							
29	The inspection was conducted on the interior and exterior of a single story shop structure located in Larkspur, California. The interior wood on the walls and ceiling. The flooring is concrete and could not be accessed at the time of the inspection. There is major damage that was noted by the inspector at this location.	Y-limited	3,968	115	456,320	228	95.8	54.8	2.3	11.4	4.6	2.3	57.0	
	-Wooden Water Tower	?	264	115	30,345	15	6.4	3.6	0.2	0.8	0.3	0.2	3.8	
	-A/C Driveways		55,677	48.3	2,691,055	1,346					1,345.5			
	-Soil, contaminated (4,600 cubic yards)(75 lbs/ft3)		25,000		9,315,000	4,658								
			Area ft2		Total (lbs)	Total (tons)	Wood	Concrete	Brick	Metals	Asphalt	Roofing	Glass and Miscellaneous	
	GRAND TOTALS		382,098		46,535,690	23,268	7,251	4,144	173	863	1,691	173	4,316	
	Estimated Diversion based on environmental or physical condition (tons)					8,281	363	3,729	155	777	1,522	9	1,726	
	Estimated Diversion based on environmental or physical condition (% of total)					35.6%	5.0%	90.0%	90.0%	90.0%	90.0%	5.0%	40.0%	
	Estimated Disposed Tons					14,987	6,889	414	17	86	169	164	2,590	
	<b>By Diversion Category</b>													
	Estimated Reuse, Total						<b>0.00%</b>							
	Estimated Recycle, Total						<b>35.59%</b>							

Notes: Diversion Rate for Contaminated Soil is 0%, All Greenhouse wood will be managed as ACM (0 recycle/reuse)

## **APPENDIX C**

### **Dust Control Plan**

## **1.0 DUST CONTROL PLAN**

This section details potential dust control measures that the Contractor will implement to minimize dust emissions during demolition and grading activities. Dust emissions may result from activities during demolition and grading and from wind erosion. These sources are most effectively controlled using wet suppression. A high wind threshold will also be established to minimize wind erosion during extreme meteorological conditions. Stockpiles will be covered unless being loaded, and water will be sprayed on areas that have already been excavated and are subject to wind erosion.

## **2.0 DUST MITIGATION**

The main mechanism for the control of fugitive dust emissions from construction activities and wind erosion is by watering, which leads to the formation of a surface crust to reduce the available reservoir of dust. In addition to water, a wide variety of chemical dust suppressants are available to enhance the formation of a surface crust. The effectiveness of wet suppression is dependent on the type of activities occurring, the frequency of watering, and the meteorological conditions. The watering schedule will be determined by an evaluation of the air monitoring and meteorological data, site conditions, and site activities.

Dust control measures will include, but may not be limited to:

- Water all active construction areas at least twice daily and more often during windy periods.
- Active areas adjacent to residences should be kept damp at all times.
- Cover all hauling trucks or maintain at least 2 feet of freeboard. Pave, apply water at least twice daily, or apply (nontoxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas.
- Sweep adjacent streets daily (with water sweepers) if visible soil material is deposited onto the road surface.
- Hydroseed or apply (nontoxic) soil stabilizers to inactive construction areas (previously graded areas that are inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (nontoxic) soil binders to exposed stockpiles.
- Limit traffic speeds on any unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Designate an air quality coordinator for the project. Prominently post a phone number for this person on the job site, and distribute same to all nearby residents and businesses. The coordinator will respond to and remedy any complaints about dust, exhaust, or other air quality concerns. A log shall be kept of all complaints and how and when the problem was remedied.

### **3.0 STOCKPILE AND VEHICLE MANAGEMENT**

As necessary, based on meteorological and Site conditions, soil and/or debris piles will be covered with plastic tarps or equivalent. All vehicles onsite will be limited to a maximum speed of 5 mph. Prior to departure from the Site to the surface streets, all vehicles will be checked for material residue and cleaned if necessary. The public paved roadways surrounding the Site will be checked for any material possibly tracked out, despite mitigation efforts. The Contractor will take all reasonable measures to clean the roadways of this material within an hour of observation.

### **4.0 METEOROLOGICAL STATION**

A meteorological station will be deployed at the Site to monitor wind speed and direction. Measurements will be conducted every 15 minutes to verify conditions and adjust dust monitoring locations. If the wind speed rises to greater than 25 miles per hour (mph), operations will cease.

### **5.0 DUST MONITORING**

A MiniRAM dust meter or equivalent will be used to measure real-time dust levels at upwind and downwind locations. The action level for the project will be based on a 50 ug/m<sup>3</sup> differential between upwind and downwind measurement stations. If the action level is exceeded for a period greater than 15 minutes, work operations will cease until adequate dust mitigation measures can be implemented.

### **6.0 RECORD KEEPING**

The removal action contractor will be responsible for maintaining a field logbook, which will serve to document meteorological conditions, dust monitor readings and dust mitigation measures implemented.