



Consulting • Engineering • Remediation

June 10, 1997

Project No. 8700-742

Housing Authority of the City of Alameda  
701 Atlantic Avenue  
Alameda, California 95401

Attention: Ms. Eileen Duffy

Subject: Report of Monitoring Well Destruction and  
Removal of Non-Hazardous Waste Material  
1916 Webster Street, Alameda, California

1420 Harbor Bay Parkway  
Suite 160  
Alameda, CA 94502  
(510) 748-6700  
FAX (510) 748-6799

Dear Ms. Duffy:

ENSR (formerly Fugro West Geo-Environmental, Inc.) has prepared this letter to document the destruction of six groundwater monitoring wells and removal of containerized, non-hazardous soil and groundwater at the Housing Authority of the City of Alameda (AHA) property, located at 1916 Webster Street in Alameda, California (Figure 1). The destruction of the groundwater monitoring wells was required by the Alameda County Department of Environmental Health (ACHD) and the Regional Water Quality Control Board, San Francisco Region (RWQCB) to obtain site closure. This letter presents a summary of the project history, a description of monitoring well destruction procedures and provides documentation for the disposal of non-hazardous groundwater and soil materials.

### **Project Background**

A leaking underground storage tank, determined to have impacted the subsurface with gasoline, was removed from the subject property in July 1986. Six monitoring wells were installed as part of soil and groundwater assessment and remediation activities conducted at the subject property since September 1986 (Figure 2). The assessment and remediation activities included soil and groundwater sampling, excavation of impacted soil and quarterly groundwater monitoring. Monitoring wells MW-1, MW-2 and MW-3 were installed by others in September 1986 and MW-4, MW-5 and MW-6 were installed by Fugro West, Inc. in October, 1994. Fugro West, Inc. conducted quarterly and annual groundwater monitoring and sampling at the subject property until September, 1996. Following the removal of impacted soil and completion of a Risked-Based Corrective Action evaluation, site closure was recommended by the ACHD and RWQCB in March 1997.

### **Monitoring Well Type and Construction**

When installed, the monitoring wells were completed in 10-inch diameter soil borings of 2-inch diameter (MW-1, MW-2 and MW-3) and 4-inch diameter (MW-4, MW-5 and MW-6) polyvinyl chloride (PVC) casing and screen to a depth of approximately 14.5 feet below ground surface (bgs).

Well screens extended from the bottom of the well borings to approximately 4 feet bgs. The sand filter packs extended from 1 foot above the top of the well screens to the bottom of the well boring. Annular well seals were approximately 4 feet thick and consisted of a 1 foot thick bentonite transition seal and cement grout. At the surface, each well was completed with a flush-mounted traffic-rated well box set in concrete.

Monitoring well MW-4 was installed within the area previously excavated to remove impacted soils. Initially, this monitoring well was also intended to serve as a groundwater extraction well. Monitoring MW-4 was to be placed within loose pea gravel backfill material, therefore, the uppermost 5.5 feet of the well was installed within a 10-inch diameter steel conductor casing. The remaining 8.5 feet of the well boring was drilled into native material, through the conductor casing.

### **Monitoring Well Destruction Procedures**

The monitoring well destruction was completed on May 12 and May 13, 1997 under permit No. 97288 issued by the Alameda County Flood Control and Water Conservation District Zone 7 (attached). ENSR contracted Exploration GeoServices, Inc. of San Jose, California (C-57 license number 484288) to complete the well destruction activities.

The PVC casing in monitoring wells MW-1 through MW-3, MW-5 and MW-6 were removed by advancing a hollow stem auger the depth of the monitoring well boring and extracting the casing and screen from the center of the auger. Following the removal of the casing and screen, the well boring was drilled out to total depth, to remove residual seal material and filter sand. Cement grout was then tremied from the bottom of the well boring to approximately 2 feet bgs. Concrete was placed above the grout to surface grade.

ENSR recommended that the steel conductor casing at monitoring well MW-4 remain in place. If the conductor casing was removed, loose pea gravel would likely have collapsed and backfilled the portion of the well boring below 5.5 feet bgs. If this occurred, it would have been difficult to drill out the backfilled pea gravel and grouting the well boring to depth may not have been possible. Based on this rationale, MW-4 was destroyed by removing the PVC casing and placing cement grout, using a tremie pipe from the bottom of the well boring to approximately 2 feet bgs. Concrete was placed above the grout to surface grade.

### **Disposal of Non-Hazardous Soil and Groundwater**

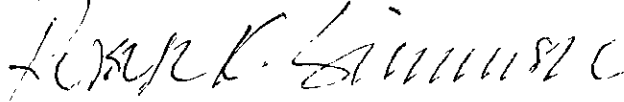
Non-hazardous waste material removed during the well destruction activities and non-hazardous purged groundwater from past quarterly groundwater monitoring events were contained in 55-gallon drums and stored at the subject property. Eight drums of water, two of soil, and one of trash were removed by Integrated Waste Management, Inc. (IWM) of Milpitas, California on May 28, 1997. The eight drums of purge water, or 360 gallons, was accepted by the McKittrick WTS/IWM, Inc disposal facility in McKittrick, California, on May 28, 1997. A copy of the signed transport form (transport form number MK052897) is attached to this letter.

Generally, IWM will accumulate transportable quantities of soil material for disposal before delivery to the McKittrick facility. Therefore, receipt of a signed transport form will require approximately 3 additional weeks. However, a copy of the non-hazardous waste transport form, not yet been signed by the McKittrick, is attached. We will forward the signed copy as soon as it is received.

It has been a pleasure assisting you and the AHA throughout the course of this project. If there is any way we can assist you in the future, please contact us.

Sincerely,

ENSR Consulting and Engineering



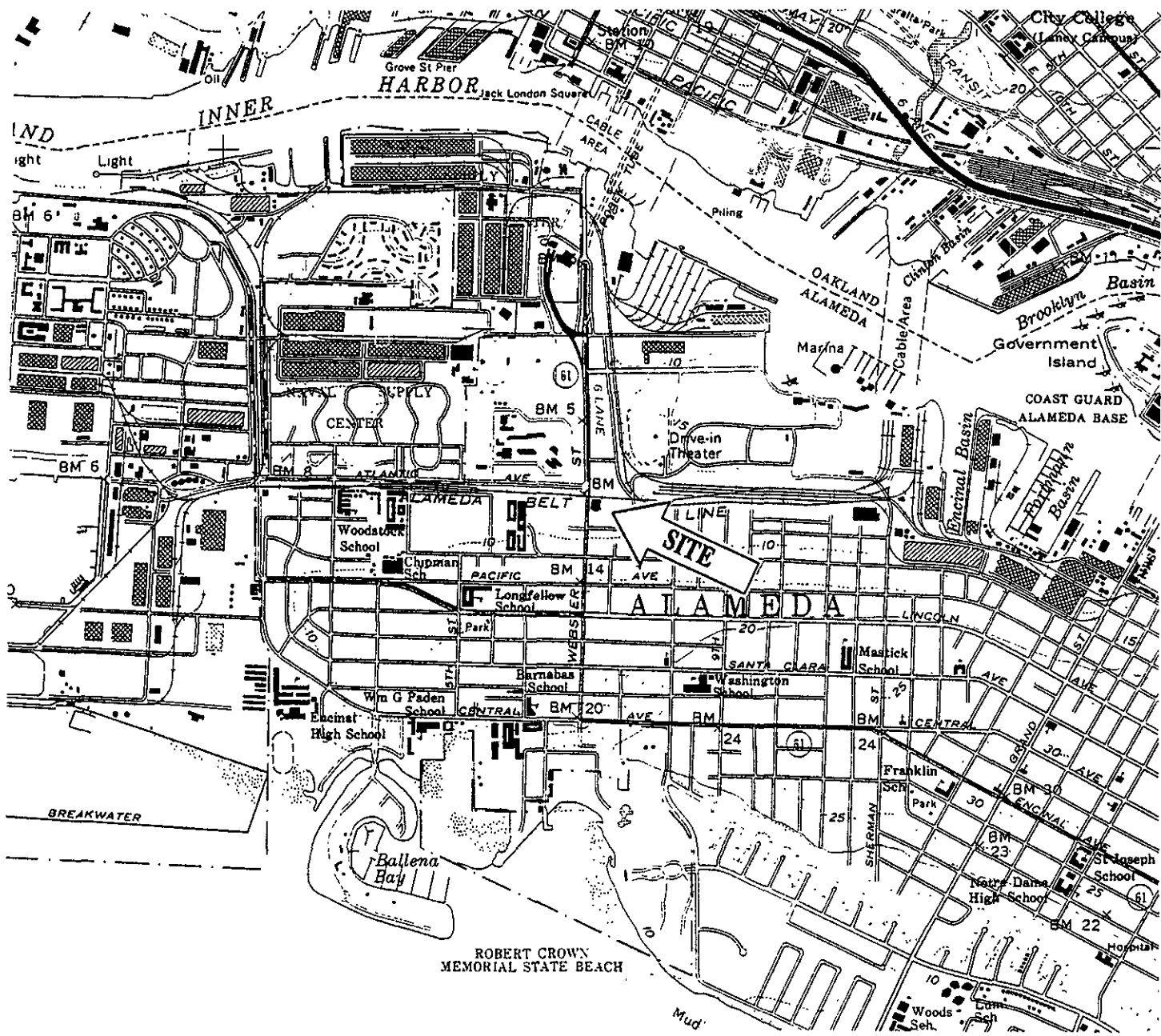
Robyn K. Simonsen, E.I.T.  
Staff Engineer



Peter B. Hudson  
Project Manager

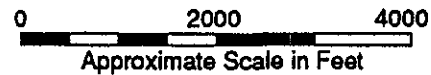
cc: Wyman Hong, Alameda County Flood Control and Water Conservation District, Zone 7  
Eva Chu, Alameda Health Care Services

Attachments: Site Location Map, Figure 1  
Site and Project Area Map, Figure 2  
Drilling Permit # 97288 for Destruction of Monitoring Wells 2S/4W 11C80 to  
11C85 at 1916 Webster Street in Alameda, California  
Non Hazardous Waste Transport Form # MK052897  
McKittrick Waste Treatment Site Generator's Waste Profile  
Non-Hazardous Waste Transport Form - (unsigned)



**GENERAL NOTES:**

BASE MAP FROM USGS  
7.5 MINUTE TOPOGRAPHIC  
OAKLAND WEST, CA



DRAWN BY: J. Paradis  
DATE: September 19, 1996  
REVISED BY:  
DATE:

**SITE LOCATION MAP**  
  
City of Alameda Housing Authority Property  
1916 Webster Street  
Alameda, CA

**FIGURE**  
**1**  
  
PROJECT NUMBER:  
**95-37-1311**

WEBSTER STREET

ATLANTIC AVENUE

City Of Alameda Housing Authority  
1916 Webster Street

Building

Canopy

MW-6

MW-3

MW-1

MW-4

Former  
Excavation  
Limits

MW-5

MW-2

LEGEND



Monitoring Well

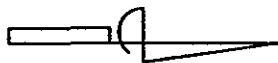
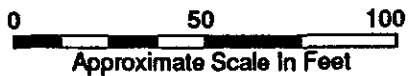


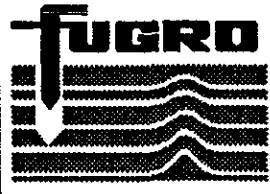
Fence

NOTES

Site Sketch After Map  
By Ron Archer, Civil Engineer, Inc.

All Locations Are Approximate



	DRAWN BY: D. Hada	<b>SITE AND PROJECT AREA MAP</b>	<b>FIGURE 2</b>
	DATE: April 17, 1998		
	REVISED BY: J. Paradis	City of Alameda Housing Authority Property 1916 Webster Street Alameda, CA	PROJECT NUMBER: 95-37-1311

DRAWN BY:  
D. Hada

DATE:  
April 17, 1998

REVISED BY:  
J. Paradis

DATE:  
September 19, 1998

SITE AND PROJECT AREA MAP

City of Alameda Housing Authority Property  
1916 Webster Street  
Alameda, CA

FIGURE  
2

PROJECT NUMBER:  
95-37-1311



# ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE, PLEASANTON, CALIFORNIA 94588-5127 PHONE (510) 484-2600 X236  
FAX (510) 462-3914

## DRILLING PERMIT APPLICATION

### FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 1916 WEBSTER STREET  
ALAMEDA CALIFORNIA, SOUTHEAST  
CORNER ATLANTIC & WEBSTER STREETS

California Coordinates Source \* ft. Accuracy  $\pm$  \_\_\_\_\_ ft.  
CCN \_\_\_\_\_ ft. CCE \_\_\_\_\_ ft.  
APN \_\_\_\_\_

\* SEE ATTACHED FIG. 1

CLIENT  
Name HOUSING AUTHORITY OF THE CITY OF ALAMEDA  
Address 701 ATLANTIC AVENUE Phone 510 522 8422  
City ALAMEDA, CA. Zip 94501

APPLICANT  
Name ENSR (CONSULTANT TO HOUSING AUTHORITY)  
510 PETER HUDSON Fax 510 748 6799  
Address 1420 HARBOUR BAY PKWY #160 Phone 510 748 6700  
City ALAMEDA CA 94501 Zip 94502

#### TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

#### PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

#### DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S LICENSE NO. \* 484 288

#### WELL PROJECTS - WELL DESTRUCTION - 6 WELLS.

Drill Hole Diameter	<u>8-10</u> in.	Maximum	
Casing Diameter	<u>2 1/4</u> in.	Depth	<u>15</u> ft.
Surface Seal Depth	<u>5</u> ft.	Number	<u>6</u>

#### GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE MAY 12, 1997

ESTIMATED COMPLETION DATE MAY 13, 1997

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] Date 5/5/97

### FOR OFFICE USE

PERMIT NUMBER 97288  
WELL NUMBER 2S/4W 11C80 to 11C85  
APN 073 0426-014-01

#### PERMIT CONDITIONS

Circled Permit Requirements Apply

- (A) GENERAL
  1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
  2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
  3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS
  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
  2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
- (F) WELL DESTRUCTION. See attached.
- G. SPECIAL CONDITIONS

Approved [Signature] Date 7 May 97  
Wyman Hong

7 May 1997

ZONE 7  
WATER RESOURCES ENGINEERING  
DRILLING ORDINANCE

CITY OF ALAMEDA  
1916 WEBSTER STREET  
ALAMEDA  
WELLS 2S/4W 11C80 TO 11C85  
PERMIT 97288

Destruction Requirements:

1. Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.
2. Sound the well as deeply as practicable and record for your report.
3. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.
4. After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Peter Hudson of ENSR meet or exceed the Zone 7 minimum requirements.

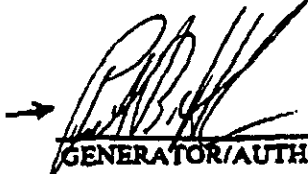
# NON-HAZARDOUS WATER TRANSPORT FORM

## GENERATOR INFORMATION

NAME: Alameda Housing Authority  
 ADDRESS: 701 Atlantic Ave.  
 CITY, STATE, ZIP: Alameda, CA 94501 PHONE #: 510-522-8422

DESCRIPTION OF WATER: MONITORING WELL PURGE / DECON WATER

I CERTIFY THAT THIS MATERIAL IS A LIQUID, EXEMPT FROM RCRA PER 40 CFR 361.6 (b)(10) AND DOES NOT MEET THE CRITERIA OF HAZARDOUS WASTE AS DESCRIBED IN 22 CCR ARTICLE 11 OR ANY OTHER APPLICABLE STATE LAW, HAS BEEN PROPERLY DESCRIBED, CLASSIFIED AND PACKAGED AND IS IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS.

 AS AGENT FOR ALAMEDA HOUSING AUTHORITY  
 GENERATOR/AUTHORIZED AGENT

PETER B. HUDSON MAY 23, 1997  
 SIGNATURE & DATE

## SITE INFORMATION

Site Operator	Address	Gals
<u>Alameda Housing Authority</u>	<u>1916 Webster St. Alameda, CA</u>	<u>360</u>
TOTAL GALLONS:		<u>360</u>

## TRANSPORTER INFORMATION

NAME: IWM, Inc.  
 ADDRESS: 950 Ames Avenue  
 CITY, STATE, ZIP: Milpitas, CA 95035 PHONE #: (408) 942-8955

TRUCK ID #: \_\_\_\_\_ Lee Heckman 05/28/97  
 (Typed or printed full name & signature) (Date)

## RECEIVING FACILITY

NAME: McKittrick WTS/ IWM, Inc.  
 ADDRESS: 56533 Hwy 58W  
 CITY, STATE, ZIP: McKittrick, CA 93251 PHONE #: (805) 762-7366

APPROVAL #: \_\_\_\_\_  5/28/97  
 (Typed or printed full name & signature) (Date)



Approval No.: \_\_\_\_\_

# McKittrick Waste Treatment Site

## Generator's Waste Profile

**IMPORTANT:** This form must be completed by a Representative of the Waste Generator. The information on this form must be typed or legibly printed in ink and signed by an Authorized Agent of the Generator. Completed form bearing original signature must be provided to MWTS PRIOR TO DISPOSAL.

### 1.0 Generator Information

- 1.1 Generator Name: ALAMEDA HOUSING AUTHORITY
- 1.2 Generating Facility Name: ALAMEDA HOUSING AUTHORITY
- 1.3 Facility Address: 1916 WEBSTER ST.  
City: ALAMEDA State: CA Zip: \_\_\_\_\_
- 1.4 Company Representative: EILEEN DUFFY  
Title: PROJECT ADMINISTRATOR
- 1.5 Emergency Contact: PETER HUDSON  
Title: ENVIRONMENTAL CONSULTANT
- 1.6 Local Registration No.: \_\_\_\_\_
- 1.7 Generator's EPA ID No.: \_\_\_\_\_
- 1.8 Facility Phone: (\_\_\_\_) \_\_\_\_\_
- 1.9 After Hours Phone: (\_\_\_\_) \_\_\_\_\_
- 1.10 Emergency Phone: (510) 748-6700
- General Site Activity: PARKING VEHICLE STORAGE (FORMER UST SITE)

### 2.0 Waste Description

- 2.1 General Waste Description: SOIL CUTTINGS
- 2.2 Process Generating Waste: MW DESTRUCTION
- 2.3 Is this Waste "Hazardous Waste" as defined by Federal, State or Local Regulations: \_\_\_ Yes  No
- 2.4 Has this waste ever been "Handled, or "Disposed" of as a hazardous material waste disposed of via a "uniform hazardous waste manifest". NO  
If yes, explain \_\_\_\_\_
- 2.6 Waste Generation Rate: \_\_\_\_\_ Tons 1.0 Cubic Yards \_\_\_\_\_ Other: \_\_\_\_\_  
Per: \_\_\_\_\_ Day \_\_\_\_\_ Week \_\_\_\_\_ Year  Other
- 2.7 Waste will be transported in: \_\_\_\_\_ Roll Off Boxes \_\_\_\_\_ Drums (Type/Size): \_\_\_\_\_  
 Dump Trucks \_\_\_\_\_ Other: \_\_\_\_\_

### 3.0 Waste Properties at Room Temperature

- 3.1 Physical State  
 Solid \_\_\_\_\_ Semi-Solid  
\_\_\_\_\_ Powder \_\_\_\_\_ Liquid  
\_\_\_\_\_ Combination: \_\_\_\_\_
- 3.2 Odor:  None \_\_\_\_\_ Mild \_\_\_\_\_ Strong
- 3.3 pH Range: 6 to: 8
- 3.4 Color(s): BROWN
- 3.5 Percent Solid: 99-100 %
- 3.6 Flash Point F°: >140

### 4.0 Transportation

4.1 Proper U.S. DOT Shipping Name: n/a Transporter Name: IWM, Inc.  
 Address: 950 Ames Ave.  
Milpitas, CA 95035  
 4.2 U.S. DOT Hazard Class: n/a Technical Contact: Lyja Bautista/ Jay De Leon  
 4.3 CERCLA Reportable Quantity: n/a Phone: 408-942-8955  
 This Waste is NOT a DOT Hazardous Material State Hazardous Waste Hauler License: n/a

### 5.0 Attached Information

5.1 ANALYTICAL (Check all that apply) \*\*  
 TPH Gas/Diesel  BTEX  TRPH Oil  CA Title 22 Metals  
 Semivolatile Organics  Volatile Organics  Herbicides/Pesticides

5.2  MSDS  Generator Certification  Other: \_\_\_\_\_  
 \*\*  Analytical data supplied from California State Certified Labs.

### 6.0 Billing Information

6.1 Bill To: IWM, Inc. Attention: Jay De Leon  
950 Ames Ave. Phone No.: 408-942-8955  
Milpitas, CA 95035 P.O. #: n/a  
 Job #: n/a

6.2 Does customer have a current account with MWTS?  Yes  No

I hereby certify that all information supplied is truly representative of the above mentioned waste. I agree to notify MWTS if there is a change in the waste stream information submitted for acceptance. I also authorize MWTS to periodically reanalyze the waste, at my expense. I also certify that all samples were collected according to EPA Method SW-846 and that samples were analyzed by a California State Certified Lab and that the appropriate chain of custody was attached. I further certify that the wastes submitted for disposal are non-hazardous in accordance with the California State Health and Safety Code, and the Code of Federal Regulations and any applicable local laws or regulations.

Printed Name PETER HUDSON Company or Business ENSR CONSULTING/ENGINEER  
 Generator Signature [Signature] AS AGENT FOR ALAMEDA HOUSING AUTHORITY Date MAY 23, 1997

INTERNAL USE ONLY - DO NOT WRITE BELOW THIS LINE	
<b>FACILITY DECISION</b> <input type="checkbox"/> Accept <input type="checkbox"/> Reject By: _____ Comments: _____ _____ _____	<b>BILLING INFORMATION</b> <input type="checkbox"/> Accept <input type="checkbox"/> Reject By: _____ Comments: _____ _____ MWTS Account No.: _____

**McKittrick Waste Treatment Site  
Non Hazardous Waste Water Characterization Form**

Responsible Party		Site Address (if different)	
Name:	<u>ALAMEDA HOUSING AUTHORITY</u>	Name:	<u>ALAMEDA HOUSING AUTHORITY</u>
Authorized Representative:	<u>EILEEN DUFFY</u>	Contact:	<u>PETER HUDSON / ROBYN SIMONSEN</u>
Street:	<u>701 ATLANTIC AVE.</u>	Street:	<u>1420 HARBOR BAY PKWY #160</u>
City/State/Zip:	<u>ALAMEDA, CA 94501</u>	City/State/Zip:	<u>ALAMEDA, CA</u>
Phone:	<u>510-522-8422</u>	Phone:	<u>510-748-6700</u>
Fax:	<u>510-522-7848</u>	Fax:	<u>510-748-6799</u>

**Activity Producing Wastewater (check all that apply):**

<input checked="" type="checkbox"/>	Monitoring well sampling	<input type="checkbox"/>	Excavation de-watering
<input type="checkbox"/>	Monitoring well development/augur rinsate	<input type="checkbox"/>	Pump test
<input type="checkbox"/>	Other (describe): _____		

**Suspected Source of Contaminants:**

Does (or did) the site contain one or more underground storage tanks (UST's) for fuel? Yes  No

Is a UST the suspected source of contamination? Yes  No

Are you aware of any other possible sources or causes of wastewater contamination at the site? Yes  No

If "Yes", please describe: \_\_\_\_\_

**Wastewater Characterization:**

Is the pH less than 2 or greater than 12.5? Yes  No

Is the flashpoint less than 100°F (38°C)? Yes  No

Is there any reason to suspect the presence of reactive cyanides or sulfides? Yes  No

Is there reason to suspect that the wastewater would prove toxic in a fish bio-assay test? Yes  No

Is there separate-phase liquid present in the wastewater? Yes  No

Can one detect any hydrocarbon odor from the wastewater? Yes  No

Was the wastewater tested for hydrocarbons? Yes  No

If "Yes", please attach copies of the test results.

Was the wastewater tested for anything other than hydrocarbons? Yes  No

If "Yes", please attach copies of the test results. Also, please describe the tests: \_\_\_\_\_

Is there any other analytical test information (eg., soil samples) for this site? Yes  No

Is there any soil vapor monitoring data for this site? Yes  No

The information and representations presented above are true and correct to the best of my knowledge.

→ Peter B. Hudson PETER B. HUDSON  
 Authorized Representative of Responsible Party (sign and print name)  
 AS AGENT  
 FOR ALAMEDA  
 HOUSING AUTHORITY

Date: May 23, 1997

TF NUMBER: \_\_\_\_\_

### NON-HAZARDOUS WASTE TRANSPORT FORM

#### GENERATOR INFORMATION

NAME: Alameda Housing Authority

ADDRESS: 701 Atlantic Ave.

CITY, STATE, ZIP: Alameda, CA 94501 PHONE #: 510-522-8422

DESCRIPTION OF SOIL: SOIL GENERATED DURING A DRILLING, EXCAVATION OR SITE INVESTIGATION (BORING EVENT)

THE GENERATOR CERTIFIES THAT THIS SOIL  
AS DESCRIBED IS NON-HAZARDOUS

→ PETER B. HUDSON AS AGENT FOR ALAMEDA HOUSING AUTHORITY  
 Print Name Signature Date 5/23/97

#### SITE INFORMATION

	Responsible Party	IWM JOB#	ADDRESS	Cu Yards
1	Alameda Housing		1916 Webster St. Alameda, CA	
2				
3				
4				
5				
6				
7				
8				
9				
10				

TOTAL CU. YARDS:

#### TRANSPORTER INFORMATION

Bill to IWM, Inc. Acct #: \_\_\_\_\_

NAME: IWM, Inc.

ADDRESS: 950 Ames Avenue

CITY, STATE, ZIP: Milpitas, CA 95035 PHONE #: 408-942-8955

TRUCK ID #: \_\_\_\_\_

Print Name Signature Date

#### TSD FACILITY INFORMATION

NAME: McKittrick Waste Treatment Site

ADDRESS: 56533 Highway 58W

CITY, STATE, ZIP: McKittrick, CA 93251 PHONE #: 805-762-7366

RELEASE #: \_\_\_\_\_

Print Name Signature Date