



PACIFIC
ENVIRONMENTAL
GROUP, INC.

90 MAR 15 AM 11:30

Date March 13, 1990

Project No. 330-06.04

To: Mr. Edgar B. Howell III
ALAMEDA COUNTY HEALTH CARE SERVICES
Department of Environmental Health
470 27th Street Third Floor
Oakland, CA 94612

We have enclosed

Copies	Description
<u>1</u>	<u>Work plan addendum responding to Alameda County's</u> <u>comments of 2/22/90 for the proposed groundwater</u> <u>investigation at Arco Service Station No. 608, 17601</u> <u>Hesperian Boulevard, San Lorenzo, California.</u>

For your Use
 Approval
 Information

Comments Please call if you have any comments regarding
this addendum.

Spoke w/ Tina Berry by telephone on 3/19/90. Told her that this addendum satisfied requirements as set out in letter of 2/22/90 and that work could proceed. PE

Thank You,

Tina Berry



PACIFIC
ENVIRONMENTAL
GROUP, INC.
DOUG UMLAND
JOHN CALANAUGH

1601 Civic Center Dr., Suite 202
Santa Clara, California 95050
(408) 984-6536
FAX: (408) 243-3911

SS#608

165 Tms

RODGER THOMAS TRUCKING
7200 Wells Ave.
Loomis, CA. 95650
(916) 652-0145

CERTIFICATE OF DISPOSAL
UNDERGROUND FUEL TANK(S)

DATE: June 16, 1988

This is to certify the receipt and acceptance of the tank(s) as specified below.
All materials specified have been completely destroyed for scrap purposes only,
and fully complies with all regulatory and permit requirements.

CONTRACTOR: Golden West Builders

JOB SITE ADDRESS: Arco AM-PM
17601 Hesperian, San Lorenzo

TANKS RECEIVED:	STEEL	FIBERGLASS
<u>(4) 6000 gallon</u>	<u>X</u>	<u>_____</u>
<u>(1) 550 gallon</u>	<u>X</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>
<u>_____</u>	<u>_____</u>	<u>_____</u>
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<u>_____</u>	<u>_____</u>	<u>_____</u>

CG Thomas
Authorized Representative



PACIFIC
ENVIRONMENTAL
GROUP INC.

Project No. 330-06.04
March 13, 1990

Mr. Edgar B. Howell III
Alameda County Health Care Services
Department of Environmental Health
470 27th Street, Third Floor
Oakland, California 94612

RE: ARCO Service Station No. 608
17601 Hesperian Boulevard
San Lorenzo, California

Dear Mr. Howell:

This letter responds to your attached letter dated February 22, 1990 regarding the October 4, 1989 work plan prepared by Pacific Environmental Group, Inc. (PACIFIC) for the ARCO station referenced above. Please note the following specifications and include them as an addendum to the October 1989 work plan:

- 1.) Enclosed please find a draft copy of a site safety plan prepared by PACIFIC for the subject site. The plan will be used by PACIFIC employees, and their subcontractors, when working at this location.
- 2.) Enclosed is a copy of the certificate of disposal for the underground storage tanks which were removed from the site on June 14, 1988 by Golden West Builders.
- 3.) In regards to purged water disposal plans, water obtained during well development, and prior to well sampling, will be stored on-site in 55-gallon drums until analytical results from a California state-certified laboratory are received, evaluated, and appropriate disposal activities implemented. The water will be disposed of by a licensed hauler at a site permitted to accept such material.

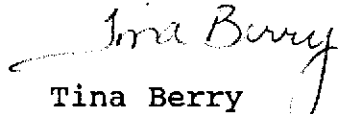
A starting date for drilling work will be scheduled upon approval of this work plan by your office. It is anticipated that drilling will commence one to two weeks, thereafter, and will be completed in approximately five working days.

Project No. 330-06.04
March 13, 1990
Page 2

If you have any questions regarding this letter, please call.

Sincerely,

PACIFIC ENVIRONMENTAL GROUP, INC.



Tina Berry
Staff Geologist



Debra J. Moser
Senior Geologist
CEG 1293

cc: Kyle Christie, ARCO Petroleum Products Company
Chris Winsor, ARCO Petroleum Products Company
Gil Jensen, Alameda County District Attorney's Office
Hosein Kazimi, RWQCB

SITE HEALTH & SAFETY PLAN

ARCO
Service Station No. 0608

March 13, 1990

Project No. 330-06.06

DRAFT

1.0 INTRODUCTION

A. Overview

This Project Safety Plan delineates the basic safety requirements for the soils and groundwater investigation at the gasoline station located at 17601 Hesperian Blvd. in San Lorenzo, California (see Figure 1).

The above referenced site is an operating service station. The underground storage tank complex consists of five gasoline tanks: three 6,000-gallon tanks in one excavation (east); one 6,000-gallon tank in another excavation (west); and one 550-gallon waste oil tank located in an excavation southwest of the station building.

Six on-site/off-site groundwater monitoring wells will be installed (see Figure 2 for proposed groundwater monitoring well locations).

Golden West Builders performed a tank removal and waste disposal in June 1988. Pacific Environmental Group, Inc. performed soil and groundwater sampling during that tank removal. Results from sampling indicate hydrocarbon contamination in soil and groundwater.

A previous site investigation conducted by Applied Geosystems and EMCON Associates in March 1988 indicated hydrocarbon contamination in soil and groundwater (see Figure 2 for monitoring well locations).

Quarterly sampling performed by Pacific Environmental Group, Inc., in December 1989, indicate continued hydrocarbon contamination in groundwater.

The provisions set forth in this plan will apply as minimum guidelines to be followed by the employees of Pacific Environmental Group, Inc. and their subcontractors working on this phase of the project. The subcontractors may elect to modify these provisions, but only to upgrade or increase the safety requirements, and only with the concurrence of Pacific Environmental Group, Inc. as designated and accepted in writing.

2.0 PROJECT SAFETY AUTHORITY

A. ON-SITE PROJECT SAFETY

Personnel responsible for the project safety are:

Kyle Christie ARCO Petroleum Products Engineer

Douglas K. Umland Staff Geologist
Project Safety Officer
(Pacific Environmental Group, Inc.)

Joe Neely Company Safety Officer
(Pacific Environmental Group, Inc.)

The Project Safety Officer has the authority to suspend work anytime he or she determines that the provisions of the plan are inadequate to ensure worker safety. The Company Safety Officer shall also inform the ARCO Engineer of individuals whose conduct is not consistent with the requirements of the plan. In addition, the Project Safety Officer shall be responsible for the following:

- o Safety Supplies & Equipment Inventory for the Project Site.
- o Medical Surveillance Program/Physical Examinations Compliance.
- o Training Programs/Hazard Communication Compliance.
- o Accident/Incident Reporting.
- o Decontamination/Contamination Reduction Procedures.

B. PACIFIC ENVIRONMENTAL GROUP, INC. SAFETY OFFICER

The Company Safety Officer reports to the Pacific Environmental Group, Inc. Senior Management and is responsible for on-site safety and loss prevention functions.

Responsibilities include:

- o Health surveillance of all Pacific Environmental Group, Inc. employees.

- o Assuring that safety procedures in effect are in compliance with all appropriate federal, state, and company regulations (following the most stringent of the standards).
- o Maintenance of personnel exposure monitoring records.
- o Assuring appropriate personal protective equipment is adequate for actual hazards of on-site conditions.
- o Assuring appropriate hazard areas are identified and marked.
- o Assuring all personnel entering hazard area are in appropriate levels of protection.

3.0 JOB HAZARD ANALYSIS

The possible major contaminants to be encountered on the project are Petroleum Hydrocarbons and Volatile Organic Compounds (VOCs).

Currently, there is no known air concentration data available for VOCs emissions in the direct breathing zone of personnel working around the piezometers or exposed soils. However, separate phase hydrocarbons have been encountered at the site prior to the June 1988 tank removal.

Inhalation and dermal (absorption) hazards are the major area of concern, regarding the exposure to VOCs. Results of toxicological studies on animal exposure to pure concentrations of the VOCs that have been detected at the site are detailed in "Handbook of Toxic and Hazardous Chemicals", by M. Sittig (1981), and "Dangerous Properties of Industrial Materials", by N. Irving Sax (1984). An additional reference source used for the development of this Site Safety Plan is the "Documentation of the Threshold Limit Values", published by the ACGIH (American Conference of Governmental Industrial Hygienists, Inc.

In addition, there will be some risk of hazards based upon the Lower Explosive Limit (LEL) of the specific compounds encountered on the project site. As the majority of the petroleum fuel hydrocarbon materials have low flash points, it is important to measure the presence of the concentrations or amounts of vapor present. This will be accomplished using direct reading instruments and/or indicator tubes.

Possible hazardous material that may be encountered include gasoline and its primary constituents benzene, toluene, xylene, and ethyl benzene. Descriptions of these materials are presented below.

Gasoline

Gasoline has an appearance of a clear, aromatic, volatile liquid, and is a mixture of aliphatic hydrocarbons. The flash point is listed at -50 degrees Fahrenheit, and has an LEL (Lower Explosive Limit) of approximately 1.3%. The TLV for gasoline is listed as 300 ppm in air.

Benzene

Benzene is a common constituent of gasoline and other petroleum product materials. It is a clear, colorless liquid, with a flash point listed at 12 degrees Fahrenheit.

The currently established TLV for Benzene is 10 ppm in air. However, the American Conference of Governmental Hygienists (ACGIH) has recommended a TLV of 1 ppm be adopted.

Toluene

This material is a flammable, colorless liquid, with a benzol-like odor. The flash point is listed at 40 degrees Fahrenheit. The currently established TLV is 100 ppm in air.

Xylene

This material is a clear liquid with a flash point of 100 degrees Fahrenheit. The TLV is currently established at 100 ppm in air; xylene is currently under study as a possible carcinogen.

Ethyl Benzene

Ethyl benzene is a flammable, colorless liquid with an aromatic odor. The flash point is 59° F, and the currently established TLV is 100 ppm in air.

It is currently not anticipated that the potential levels of exposure will reach personal exposure limit (PEL) or threshold limit value (TLV) limits, based on prior field work at this site. It is

planned that inhalation and dermal contact will be the potential exposure pathways of concern. Protective clothing, including coveralls, boots, and gloves will be mandatory for all field operations personnel. In addition, respiratory protective devices shall be required to be within easy reach of those persons working in the Exclusion Zone or the Contamination Reduction Zone, should respiratory irritation occur.

Should respiratory irritation occur, appropriate air-purifying respiratory protective devices will be worn, with organic vapor cartridges and dust pre-filters, or with high efficiency organic vapor/HEPA stack type cartridge. Typically, the cartridge will require replacement daily.

One potentially hazardous situation that may occur during this investigation is the delivery of fuel to the station. All operations related to this investigation shall be modified or temporarily suspended if they will impede the safe off-loading of fuel. The Project Safety Officer will make this determination in cooperation with the delivery truck operator. Whenever possible, the Project Safety Officer will ascertain the date and time of delivery, and the potential for conflicts with site operations before work begins.

Fuel is delivered on a daily basis. Deliveries are scheduled based upon consumption and vary. Generally, deliveries are made in the evenings after 5:00 p.m. and in the morning between 9:00 a.m. and 12:00 p.m.. Therefore, the Project Safety Officer will coordinate the on-site drilling schedule with Arco Station Manager's fuel deliveries.

4.0 RISK ASSESSMENT SUMMARY

It is not anticipated that there will be any significant or major potential source of exposures due to the scope of work to be followed on this project. The potential of any increased risk of exposure on other workers or the surrounding community is minimal. The basic potential exposure would probably originate from airborne dusts, during the drilling of the monitoring wells, and those dusts containing low level concentrations of VOCs materials in the soils.

Due to this potential, the Contractor will have equipment on-site to provide for dust control during the drilling activities, if it appears that dust control is warranted. Also, perimeter air monitoring, to detect potentially migrating contaminants, may be conducted to ensure no hazardous materials are migrating to the surrounding community.

5.0 EXPOSURE MONITORING PLAN

a. General

An air quality monitoring program shall be implemented to provide baseline and on-going air quality data for site operations. The program shall include:

1. A preliminary survey of existing air quality conditions, prior to any surface disturbances and, if possible, under anticipated "worst case" weather conditions, to be used to establish baseline levels for input into the respiratory protection selection process;
2. An on-going evaluation of on-site atmospheric contaminant concentrations during site remediation activities that involve significant surface disturbances;
3. Perimeter monitoring of downwind air quality conditions during significant surface disturbances.

6.0 PERSONAL PROTECTIVE EQUIPMENT

A. Introduction

It is important that personal protective equipment and safety requirements be appropriate to protect against the potential hazards at the site. Protective equipment will be selected based on the contaminant type(s), concentration(s), and routes of entry. In situations where the type of materials and possibilities of contact are unknown or the hazards are not clearly identifiable, a more subjective determination must be made of the personal protective equipment.

Field personnel and visitors are required to wear the following clothing and equipment, as a minimum, while at the work site:

- o Hard Hat
- o Safety Glasses
- o Long Sleeved Shirts
- o Steel-toed boots

B. Levels of Protection - General

Level A: Should be worn when the highest level of respiratory, skin, and eye protection is needed.

Level B: Should be worn when the highest level of respiratory protection is needed, but a lesser level of skin protection is required.

Level C: Should be worn when the types of airborne substances are known, the concentration is measured, and the criteria for using air-purifying respirators are met.

Level D: Should not be worn on any site with respiratory or skin hazards. It is primarily a work uniform providing minimal protection.

C. Required Protection

Level D safety protection is required. Level D protective clothing and equipment is equivalent to the minimum protection required while on an ARCO company site, and includes a hard hat, steel-toed boots, safety glasses, and long-sleeved button-down shirts. It is required that all field personnel bring Level C safety protection equipment in case it is needed.

In cases where measurable thicknesses of floating product are known to occur, or are encountered at a job site, all personal working within the exclusion zone (described below) will wear clothing that protects against splash.

Pacific Environmental Group, Inc. will provide its employees with appropriate personal protective equipment as required. If respirators are deemed necessary, only NIOSH/MSHA certified respiratory protective equipment will be utilized. Pacific Environmental Group, Inc. sub-contractor(s) are responsible to supply the appropriate safety equipment for their own employees.

A. General

A site must be controlled to reduce the possibility of exposure to any contaminants present and their transport by personnel or equipment from the site.

The possibility of exposure or translocation of contaminants can be reduced or eliminated in a number of ways, including:

- o Setting up security or physical barriers to exclude unnecessary personnel from the general area,
- o Minimizing the number of personnel and equipment on-site consistent with effective operations,
- o Establishing work zones within the site,
- o Establishing control points to regulate access to work zones,
- o Conducting operations in a manner to reduce the exposure of personnel and equipment,
- o Minimizing the airborne dispersion of contaminants,
- o Implementing the appropriate personnel and equipment decontamination procedures.

b. Field Operations Work Area

Work areas (zones) will be established based on anticipated contamination. Within these zones prescribed operations will occur utilizing appropriate personal protective equipment. Movement between areas will be controlled at checkpoints. The planned zones are:

1. Exclusion Area (contaminated)

The exclusion area will be defined as the area in which the actual drilling and sample collection is taking place. This is the area where contact with soil and groundwater is most likely to occur. It will include the drill rig, the driller's work area and the geologist's work area, and shall be

identified with a physical marking. The exclusion area will be located inside the contamination reduction area.

2. Contamination Reduction Area

The contamination reduction area will be defined as the area in which decontamination of equipment and personnel takes place. This area shall surround the exclusion area, and include facilities for disposal of contaminated clothing, containment of drill cuttings, and steam cleaning of drilling equipment.

The contamination reduction area will be located inside the support area, and will surround the drilling location exclusion zone. The area will be marked with a physical barrier to prevent any unauthorized personnel from entering, and to ensure public safety.

3. Support Area (non-contaminated)

The support area will consist of all areas of the project site in which materials are stored and non-contaminated equipment is used. The support area shall have no physical barriers to access, except in the case of physical hazards (i.e. heavy equipment operation, unloading of supplies, etc.).

A control system is required to assure that personnel and equipment working on the hazardous waste site are subjected to appropriate health and safety surveillance.

8.0 DECONTAMINATION PROCEDURES

A. Introduction

As part of the system to prevent or reduce the physical transfer of contaminants by people and/or equipment from on-site, procedures will be instituted for decontaminating anything leaving the Exclusion Area and Contamination Reduction Area. These procedures include the decontamination of personnel, protective equipment, monitoring equipment, clean-up equipment, etc. Unless otherwise demonstrated, everything leaving the Exclusion Area should be

considered contaminated and appropriate methods established for decontamination shall be followed. In general, decontamination at the site consists of rinsing equipment, personnel, etc., with copious amounts of water and washing with detergent water solutions.

B. Procedure

1. Personnel equipment worn into the Exclusion Area will be decontaminated upon leaving the Contamination Reduction Area. All equipment decontaminated will be air dried.
2. The decontamination of equipment, material, and personnel used or working in the Contamination Reduction Area may be somewhat less complex than that used in the Exclusion Area.
3. The spent solution, brushes, sponges, containers, stands, etc., used in the decontamination process must be properly disposed.

9.0 GENERAL SAFE WORK PRACTICES

The project operations shall be conducted with the following minimum safety requirements employed:

- A. Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand to mouth transfer and ingestion of materials is prohibited in any area where the possibility of contamination exists.
- B. Hands must be thoroughly washed upon leaving a contaminated or suspected contaminated area before eating, drinking, or any other activities transpire.
- C. Thorough washing of the entire body should be accomplished whenever decontamination procedures for outer garments are in effect. The washing should occur as soon as possible after the final wearing of protective garments.
- D. Legible and understandable precautionary labels shall be prominently affixed to containers of raw materials, intermediates, products, mixtures, scrap, waste, debris, and contaminated clothing.
- E. Contaminated protective equipment shall not be removed from the regulated area until it has been cleaned or properly packaged and labeled.

F. Removal of materials from protective clothing or equipment by blowing, shaking, or any other means which may disperse materials into the air is prohibited.

G. Personnel on-site must use the "buddy" system when wearing any respiratory protective devices. Communications between members must be maintained at all times. Emergency communications shall be prearranged in case of encountering unexpected situations. Visual contact must be maintained between "pairs" on-site, and each team should remain in closed proximity to assist each other if necessary.

H. Personnel should be cautioned to inform each other of subjective symptoms of chemical exposure such as headache, dizziness, nausea, and irritation of the respiratory tract.

I. No excessive facial hair which interferes with a satisfactory fit of the facepiece-to-face seal, will be allowed on personnel required to wear respiratory protective equipment.

J. All respiratory protection selection, use, and maintenance shall meet the requirements of established Pacific Environmental Group, Inc. procedures, recognized consensus standards (AIHA, ANSI, NIOSH), and shall comply with the requirements set forth in 29 CFR 1910.134.

K. Appropriate work areas for support, contamination reduction, and exclusion will be established.

L. Pacific Environmental Group, Inc. personnel on-site are to be thoroughly briefed on the anticipated hazards, equipment requirements, safety practices, emergency procedures, and communications methods, initially and in daily briefings.

M. Contact with surface and groundwater shall be minimized.

N. Steel toed and neoprene boots will be worn on-site at all times.

In addition, the following precautions shall be implemented for all personnel working on the project:

- o Gross decontamination and removal of all personal protective equipment shall be performed prior to exiting the facility. Contaminated clothing will be removed and collected in a drum for disposal.
- o The Project Safety Officer will be responsible to take necessary steps to ensure that employees are protected from physical hazards, which could include: falling objects such as tools or equipment, falls from elevations, tripping over hoses, pipes, tools, or equipment, slipping on wet or oily surfaces, insufficient or faulty protective equipment, insufficient or faulty operations, equipment, or tools.
- o All personnel shall be required to wash hands and face before eating, drinking, or smoking.
- o Field operations personnel shall be cautioned to inform each other of non-visual effects of the presence of toxics, such as:

Headaches

Dizziness

Nausea

Blurred Vision

Cramps

Irritation of eyes, skin, or respiratory tract

Changes in complexion or skin discoloration

Changes in apparent motor coordination

Changes in personality or demeanor

Excessive salivation or changes in pupillary response

Changes in speech ability or pattern

Respiratory Protection Program Guidelines

Respirators will be provided by the Company when such equipment is deemed necessary to protect the health of the employee. The Company shall provide respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of this respiratory protection program. The Company Safety Officer will approve the selection, purchase, and inspection of the models and types of respiratory protective devices.

A medical evaluation is required prior to wearing any respirator, except where emergency escape respirators are provided. The contract physician shall determine annually if any health or physical conditions exist which would prohibit a worker from being assigned to an area requiring respiratory protection. A record will be retained in the employee's medical file, which will be retained at the medical clinic or doctor's office.

Respirators shall not be worn when conditions prevent a facepiece-to-face seal. Such conditions as facial hair, scars, wrinkles, facial diseases, dentures removal, or other disorders could prevent a proper facepiece-to-face seal. In these cases, corrective action will be taken to ensure a proper seal. Contact lenses shall not be worn when using any respirator.

For the safe use of any respirator, it is essential that the user be properly instructed in its operation and maintenance. Both supervisors and employees shall be so instructed. Employees shall be instructed and trained in the proper selection and use of respirators and their limitations. The employee shall use the provided respirator in accordance with instructions and training received. All training shall be documented with records retained in the employee's training files.

The Pacific Environmental Group, Inc. Respirator Program will meet the 11 points as specified in Title 29 CFR 1910.134*, and CAC Title 8.

11.0 EMERGENCY PROCEDURES

A. Site Emergency Warning System

Several warning systems may be utilized depending on the work site conditions or emergency involved:

1. Verbal Communications
2. Vehicle Horns
3. Portable hand-held compressed gas horns

Verbal instructions with or without assistance are used to deal with specific incidents.

Horn signals are used to signify emergency warning.

One long blast is used on-site to signify emergency evacuation of the immediate work area to a predetermined location upwind, where a head count will be taken and further instructions given.

Repeated short blasts are used on-site or from off-site to signify evacuation of all personnel from the site to the hot line where further instructions will be given after a head count is taken.

B. Emergency Equipment

The following equipment comprises the basic emergency list, of which all or some shall be available at the work site:

1. Fire extinguishers - dry chemical
2. First aid kits (including chemical burn kit)
3. Combustible gas and oxygen detector analyzers
4. Inorganic vapor detector tubes and air supply pumps - Draeger and/or MSA, or equivalent
5. Hand-held compressed gas horns
6. Appropriate spill clean-up supplies and equipment

C. General Emergency Procedures

In case of an emergency or hazardous situation, the team member that observes this condition shall immediately sound the alarm.

1. Upon hearing an alarm, all non-emergency communications will cease and the member giving the alarm will proceed to give the Project Safety Officer all pertinent information.
2. Actions to be taken will be dictated by the emergency condition.
3. Power equipment will be shut down and operators will stand by for instruction.
4. Injured personnel will be transported to the Contamination Reduction Line.
5. Pacific Environmental Group, Inc. Offices will be notified immediately.
6. In case of a fire, explosion, or hazard alarm, personnel will immediately proceed to assigned pre-arranged safe locations.
7. Upon arrival at the safe locations, a complete head count will be given to the Project Safety Officer and personnel will stay at the safe locations until the area is secured.

D. Personal Injury

If an injury occurs due to an accident or exposure to a hazardous substance, the Pacific Environmental Group, Inc. Offices will be notified. The Company Safety Officer will be given all appropriate information concerning the nature and cause of the injury so that treatment preparations can be initiated. The injured person will be transported to the Contamination Reduction line where appropriate first aid and treatment can begin. The Project Manager will be informed and will investigate the cause of the injury and make any necessary changes in work procedures.

E. Ambient Monitoring Contingencies

When ambient monitoring on the downwind edge of the site indicates significantly higher than

background levels of any contaminants, the Project Safety Officer will immediately determine the cause, make changes to work practices or procedures, and if necessary, make changes in site layout (i.e., change the location of the Command Center, decon area, or Exclusion Area), and warn unprotected personnel to evacuate or don protective equipment.

In the event of an accident resulting in physical injury, first aid will be administered, and the injured worker will be transported to Fairmont Hospital for emergency treatment.

Hospital (Emergency).....(415) 667-7878

Directions to Hospital: (refer to Figure 4)

From the project site, proceed north on Hesperian Blvd., approximately 4-miles, to Fairmont Dr. and turn right. Proceed northeast on Fairmont Dr. approximately 1-1/2 miles, beneath the I-580 overpass to Foothill Blvd. and turn right. Proceed southeast on Foothill Blvd. approximately 1/4-mile to Fairmont Hospital. Address: 15400 Foothill Blvd., San Leandro, Calif..

EMERGENCY CONTACT LISTING

Emergency Telephone Numbers:

<u>Emergency Number</u>	<u>Alternate Number</u>
Fire/Ambulance..... 911	(415) 581-3636
Police..... 911	(415) 667-7755
Hospital (Emergency).....	(415) 667-7878
Poison Control Center. 911	(800) 523-2222
Chemical Spills.....	(800) 424-8802
O.E.S. (Office of Emergency Services).....	(415) 667-7740

Additional Contingency Telephone Numbers:

Pacific Environmental Group, Inc. 408-984-6536

12.0 TRAINING REQUIREMENTS

All personnel assigned to this project will be required to demonstrate that they have completed the Initial Training Requirements (40 hrs.), according to Federal OSHA Standards under 29 CFR 1910.120.

Field personnel from Pacific Environmental Group, Inc. and their sub-contractors will attend a project-specific training program for safety issues and project work task review before beginning work.

- A. All Pacific Environmental Group, Inc. site personnel shall have completed training relative to the project operations plans, and the materials to be encountered during the project. This training shall be conducted by the Pacific Environmental Group, Inc. Safety Officer, and shall include classroom and practical application exercises regarding the hazards to be expected and the protective equipment to be utilized.

This formal training is supplemented as required by daily safety briefings and site specific training. All subcontractor personnel will be required to complete the same basic training, and to attend all safety briefings.

13.0 MEDICAL SURVEILLANCE

Pacific Environmental Group, Inc. personnel and sub-contractors engaged in project operations shall be participants in the Medical Surveillance program, and must be cleared by the examining physician(s) to wear respiratory protection devices and protective clothing for working with hazardous materials. The applicable requirements under Federal OSHA, 29 CFR 1910 will be observed.

Examination Requirements

All Pacific Environmental Group, Inc. personnel on-site shall have successfully completed a pre-placement or periodic medical examination in accordance with established Pacific Environmental Group, Inc. policies and procedures, and consistent with the provisions of the OSHA carcinogen standards. This examination shall include a complete medical and occupational history, physical examination, and selected biological sampling. Laboratory studies include a complete blood count (CBC), urinalysis, chemistry panel (SMAC), pulmonary function (FEV and FVC), chest X-ray, audiometry, and vision screening.

14.0 RECORDKEEPING

A. General

Recordkeeping shall be consistent with OSHA regulations in all respects. The following permanent records will be maintained in the Pacific Environmental Group, Inc. offices and at the site:

1. Safety Inspection Reports
2. Personnel Exposure Monitoring Records (spiral or bound permanent log books will be used)
3. OSHA 200 - Current to within 5 days
4. Accident reports consistent with the established Pacific Environmental Group, Inc. procedures

B. Medical Records

Permanent medical records shall be maintained in confidential files by the contract physician/medical clinic. The physician will supply Pacific Environmental Group, Inc. with a medical status document, certifying that the personnel assigned to the project are physically capable of performing their individual work tasks.

15.0 SIGNATURES

Site Health & Safety Plan Approved By:

Signature: _____ Date: _____

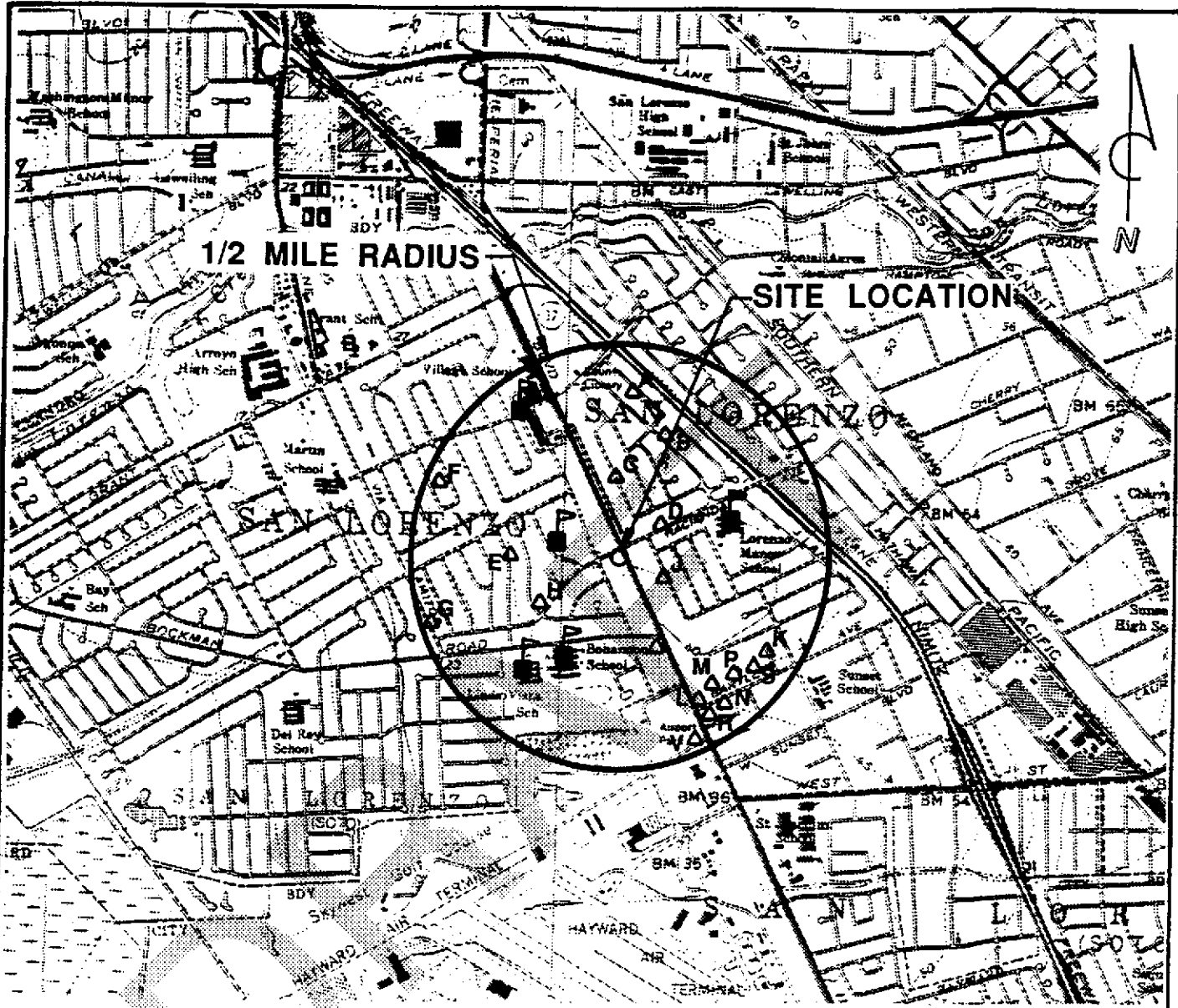
Name:

Title: Project Manager,
Pacific Environmental Group, Inc.

Contractor and Sub-Contractor Agreements:

1. Contractor certifies that the following personnel to be employed on the subject project have met the following requirements of the OSHA Hazardous Waste Operator Standard (29 CFR 1910.120) and other applicable OSHA standards.
2. Contractor certifies that in addition to meeting OSHA requirements, it has received a copy of this Site Health & Safety Plan and will ensure that its employees are informed and will comply with both OSHA requirements and the guidelines in this Site Health & Safety Plan.
3. Contractor further certifies that it has read and understands and will comply with all provisions of this Health & Safety Plan and will not hold Pacific Environmental Group, Inc. responsible or liable for any injury or health problems that may arise.

Contractor Personnel Name	Signature	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
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1/2 MILE RADIUS

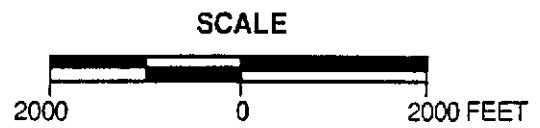
SITE LOCATION



LEGEND:

- SCHOOL
- WATER SUPPLY WELL DESIGNATION AND APPROXIMATE LOCATION

REFERENCE:
 USGS 7.5 MIN. TOPOGRAPHIC MAP
 TITLED: HAYWARD, CALIFORNIA
 DATED: 1959 REVISED: 1980
 TITLED: SAN LEANDRO, CALIFORNIA
 DATED: 1959 REVISED: 1980

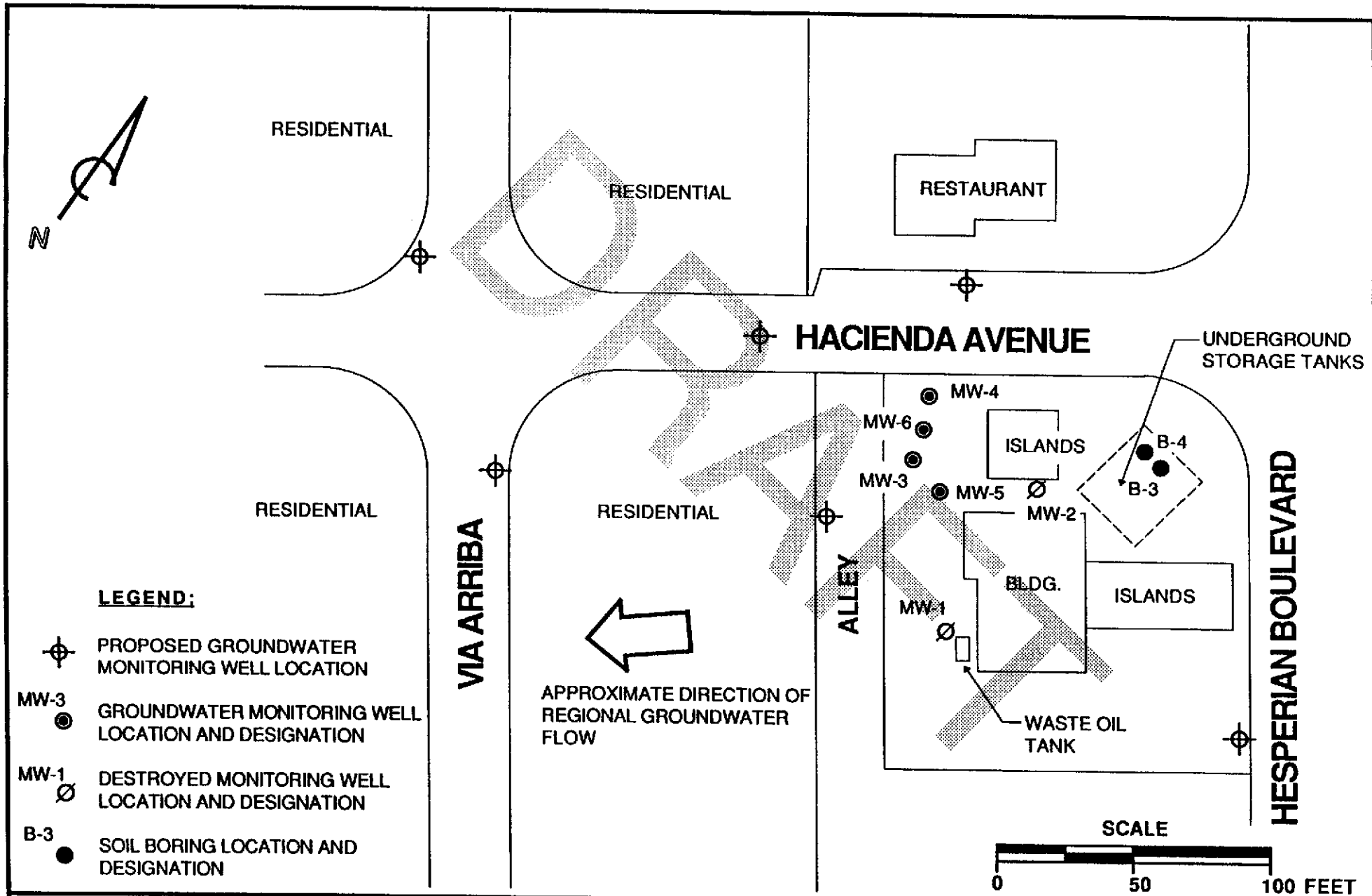


PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO STATION #0608
 17601 Hesperian Boulevard
 San Lorenzo, California

SITE LOCATION MAP

FIGURE:
 1
 PROJECT:
 330-06.06



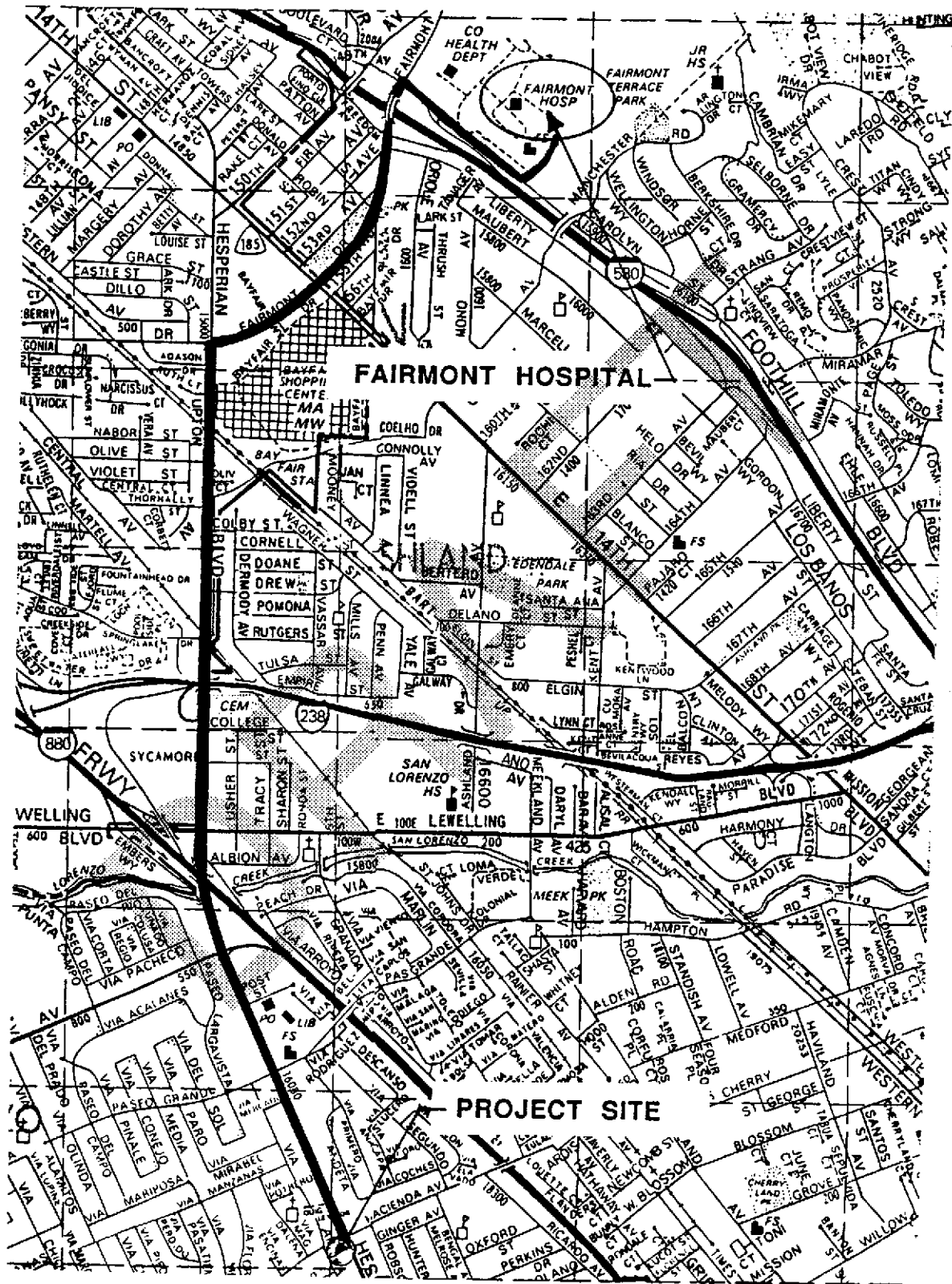
PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO STATION #608
17601 Hesperian Boulevard
San Lorenzo, California

PROPOSED MONITORING WELL LOCATIONS

FIGURE:
2

PROJECT:
330-06.06



PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO STATION #0608
17601 Hesperian Boulevard
San Lorenzo, California

HOSPITAL ROUTE MAP

FIGURE:
3
PROJECT:
330-06.06