54C3789B

To! Susan Hugo

SBCC
CONSTRUCTION
Lic. B336974

TO: County of Alameda
Health Department
1131 Harbor Bay Parkway 2nd Floor
Alameda, Ca 94502

DATE: July 17, 2000 JOB NO. 5571
ATTENTION: Susan Hugo
RE: HOLLIS BUSINESS CENTER

We are sending you: [X] Enclosed [ ] Under separate cover **Via: Cal-Overnight** the following items:

COPIES	DATE	NUMBER	DESCRIPTION
1	1/17/00	Nor Cal Steel	Final Project Specific Health and Safety Plan

THESE ARE TRANSMITTED as checked below:

[ ] For approval
[X] For your use
[ ] As requested
[X] For your review
[ ] Approved as submitted
[ ] Approved as noted
[ ] Returned after use
[ ] For bid due

ENVIRONMENTAL PROTECTION
JUL 20 PM12:25

REMARKS:

THANK YOU.

cc: FILE

SIGNED: Betty Ragni
Briana Stroud- Contract Admin.

If enclosures are not as noted, kindly notify us at once.

652 Petaluma Avenue, Suite D • Sebastopol, CA 95472 • Phone 707-829-9559 • Fax 707-829-9599 • email sbcc@sbci.com

FINAL

PROJECT SPECIFIC HEALTH & SAFETY PLAN

FOR:

HOLLIS STREET BUSINESS CENTER
EMERYVILLE, CALIFORNIA

JANUARY 17, 2000

NOR-CAL STEEL, INC.
34100 SEVENTH STREET
UNION CITY, CA 94587

EMERGENCY PHONE NUMBERS

Nor-Cal Steel, Inc. Headquarters	(510) 487-7770 OFFICE
Greg A. Slavit, Project Manager Primary Emergency Coordinator	(510) 487-7770 OFFICE (510) 376-8946 MOBILE
Project Manager Secondary Emergency Coordinator	(510) 487-7770 OFFICE (510)
Todd MacDonald Health and Safety Officer Tertiary Emergency Coordinator	(510) 487-7770 OFFICE
SBCC Bob Russi Tim LaForce	(510) 595-8122

LOCAL EMERGENCY CONTACTS

Ambulance	**911**
Police	**911**
Fire	**911**

FINAL

NOR-CAL STEEL, INC.
PROJECT SPECIFIC HEALTH & SAFETY PLAN

FOR

HOLLIS BUSINESS CENTER
1064 HOLLIS STREET
EMERYVILLE, CALIFORNIA

The Project Specific Health and Safety Plan contained herein has been reviewed by:

Todd MacDonald
Health and Safety Officer
Nor-Cal Steel, Inc..

Project Manager
Tim LaForce
SBCC Construction

George Caesar, Certified Industrial Hygienist
EnviroGroup, Inc.

The Site Health and Safety Plan contained herein
has been reviewed/accepted by:

Bob Russi
Project Supertendent
SBCC Construction

HAZARDOUS MATERIALS INFORMATION

EHA-INFO	(800) 342-4636
Toxline	(301) 496-1131
CAL OSHA	(510) 568-8602
CHEMTREC (24--hour, emergency only)	(800) 424-9300
ORNL. Toxicology Information Response Center	(615) 576-1743
National Response Center	(800) 424-8802
Poison Control Center	(800) 682-9211

UTILITIES

East Bay Mud Municipal Utility District	(510) 287-1009
Pacific Gas & Electric	(510) 889-6203
Telephone Company	(800) 303-3000

TABLE OF CONTENTS

1. INTRODUCTION

SBCC is planning to develop the property at 1064 Hollis Street, Emeryville, CA. This project addresses the excavation of contaminated or potentially contaminated fill soils from the area designated for excavation. Nor-Cal Steel, Inc, has been contracted by SBCC to perform various tasks that may impact contaminated soils and water at the site. This Project Specific Health and Safety Plan (HSP) has been prepared specifically to address the soils to be excavated within the project.

In general, the Nor-Cal Steel, Inc., Scope of work will consist of:

* Supply, deliver and install reinforcing steel at foundations, slab on grade and upper floors at Building B.

* Supply, deliver and install reinforcing steel at foundations, and slab on grade at Building A.

(HSP) was prepared to delineate the procedures to be employed to ensure that project personnel are protected against exposure to chemicals of concern during field activities. This HSP is not intended to supersede the Nor-Cal Steel, Inc.,. Injury Illness Prevention Manual and/or corporate Code of Safe Practices and Job Site Regulations. The HSP is to be used in conjunction with these documents.

Since site conditions are subject to change and unforeseen conditions may arise, amendments or additions may need to be made to this HSP during the course of work. Modifications to this plan can only be made by the Contractor with the assistance of a Certified Industrial Hygienist.

Subcontractors are required to comply with the requirements of this plan and their own accident prevention/health and safety programs, addressing subcontract operations and activities at the Site.

1.1 Site Background

The project site is located on the east side of the San Francisco Bay, at 1064 Hollis Street, Emeryville, CA. The site currently occupies about five acres. The site has served as a refining and other industrial site.

1.2 Site Geology and Hydrologeology

Situated approximately 10 feet above mean sea level (MSL), 11.8 feet above Port Datum and relatively flat.

The artificial fill, mainly sands, gravels, silts, and clays, consists of Terrestrial Fill and Mariene Fill. The Terrestrial Fill contains non-marine-derived soils which has been found to occur at ground surface. Sparse amounts of brick material, iron, and wood debris fragments have, been observed in the fill. The soil has been identified as containing total petroleum hydro carbon (TPH) and fuel residuals. The soil also contains lead contamination.

Some hydrogen sulfide has been found escaping from the soil.

2. MATERIAL TYPES TO BE EXCAVATED

Based on the previous field investigations performed by others at the site, the soils located at the site were screened by their depth and characteristics. The relocation of reuse of soil requires the removal of three distinct types of fill material, including ballast rock, riprap, and Stratum Type 1 material (TPH fill).

2.1 Contaminants of Concern

Report, presents the locations and corresponding concentrations of maximum Site Chemical of Potential Concern (COPC) in soil. Table 2 presents the locations and corresponding concentrations of maximum Site COPCs in groundwater. The report also states: "maximum soil concentrations within the Project Area for arsenic, lead, manganese, thallium, and TPH-m exceed soil Site-Specific Target Levels (SSTLs) for the construction worker scenario."

According to the primary contaminants of concern at the site for the purposes of identifying hot spots are TPH as diesel, motor oil and hydraulic fluid and the metals arsenic, lead, and zinc.

For the purposes of this HSP, the following chemicals will be considered: TPH as diesel, motor oil and hydraulic fluid and the metals arsenic and lead.

Areas where potential worker exposures may occur will be identified and posted in accordance with 8 California Code of Regulations (CCR) Section 1532.1. This HSP identifies the procedures to be employed to ensure that project personnel are protected against exposure to site contaminants during the field activities.

3. DESIGNATION OF RESPONSIBLE PERSON

3.1 Health and Safety Officer

Mr. Todd MacDonald, Health and Safety Officer (HSO), is designated as the Responsible Person for implementation of this HSP. Mr. Todd MacDonald responsibilities include:

1) Ensuring the training of personnel on the following topics:

   a) potential hazards associated with exposure to site contaminants;
   b) use of personal protective equipment;
   c) Work practices to minimize exposure and contamination of adjoining properties;
   d) hygienic procedures; and
   e) decontamination techniques

2) Overseeing implementation of the HSP, either by on-site supervision Or through direction of an on-site designee.

3) Coordinating air monitoring to assess potential worker exposure to site contaminants.

Mr. Todd MacDonald, Health and Safety Officer, is responsible for overall health and safety for the corporation. Mr. Todd MacDonald will periodically inspect the Site and review compliance with the HSP.

3.2 Project Superintendent

Mr. Russi is named as the Project Superintendent. He has the responsibility and authority to direct all operations involving hazardous waste and materials. He will also serve as the Secondary Emergency Coordinator.

Primary Project Contacts
Mr. Greg A. Slavit
Nor-Cal Steel, Inc..
Project Manager
Primary Emergency Coordinator

Mr. Dairl Stokes
Nor-Cal Steel, Inc.
Project Foreman
Secondary Emergency Coordinator

Mr. Todd MacDonald
Nor-Cal Steel, Inc.
Health and Safety Officer
Tertiary Emergency Coordinator

SBCC
Bob Russi, Project Supertendent
Tim La Force, Project Manager

4. HAZARD ASSESSMENT AND CONTROL MEASURES

The potential chemical and physical hazards posed by excavation and general soil disturbances are discussed below.

4.1 Chemical Hazard

Based on the Risk-Based Corrective Action (RBCA) analysis performed at the Site, developed the following conclusions and recommendations:

* Construction workers are the sole human receptors potentially exposed to soil and groundwater contamination within the terrestrial and hydraulic fill under the proposed plans for excavation and future use of the Site;

* A conservative screening analysis performed on constituents detected at The Site revealed the presence of 12 soil and 12 groundwater COPCs.

* Soil and groundwater COPCs are generally present at residual concentrations, with the exception of several "hot spots" within the Site:

* Site maximum COPC soil concentrations for several constituents occur within the Project Area, while Site maximum COPC groundwater concentrations are consistently detected outside of the Project Area;

* Hydrogen sulfide has been detected in air from the excavation of soil at this site. H2S is assumed to come from bay mud or buried industrial sources.

* Maximum COPC groundwater concentrations within the Project Area do not exceed groundwater SSTLCs for the construction worker scenario;

* Soil and groundwater SSTLs should be incorporated into health and safety plans, and soil management plans for the proposed construction worker at the UPIR Site, in order to identify appropriate health and safety measures Prior to initiation of construction.

As stated in Section 2.1 of this HSP, for the purposes of this HSP, the following chemicals will be considered as COPC: TPH as diesel, motor oil and hydraulic fluid.

Exposure to COPCs found at the site would be expected to occur almost exclusively through the ingestion, inhalation and direct contact pathways.. Safe work practices, personal protective equipment, and vigilant personal hygiene will be emphasized to control the ingestion pathway.

Table 3 presents a summary of potential chemical hazards which may result from overexposure to contaminants through skin contact, inhalation and/or ingestion.

Table 3
Exposure Effects and Symptoms
Permissible Exposure Levels for
Site COPCs

COPCs	Exposure Effects/Symptoms	Permissible Exposure Levels
TPH-diesel, motor oil, hydraulic fluid	Anesthesia, dizziness, headache, nausea, vomiting, sleepiness, fatigue, disorientation, depression, unconsciousness, respiratory tract irritation, sore throat, cough, dermatitis, mood shifts, CNS effects, fatigue.	IDHL: N/A PEL/TVL TWA: N/A
Arsenic	Inorganic compounds are confirmed human carcinogens producing tumors of the mouth, esophagus, larynx, bladder, and para nasal sinus. A recognized carcinogen of the skin, lungs, and liver. Poisoning from arsenic compounds may be acute or chronic. Acute poisoning usually results from swallowing arsenic compounds: chronic poisoning from either swallowing or inhaling. Acute arsenic poisoning (from ingestion) results in marked irritation of the stomach and intestines with nausea, vomiting, and diarrhea. Chronic arsenic poisoning, whether through ingestion or inhalation, may manifest itself in many different ways. There may be disturbances of digestive system such as loss of appetite, cramps, nausea, constipation, or diarrhea. Arsenic can cause a variety of skin abnormalities including itching, pigmentation, and even cancerous changes.	OSHA PEL: Inorganic: TWA 0.01 mg/m^3 Cancer Hazard Organic: TWA 0.5 mg/m^3 ACGIH TLV: TWA 0.2 mg/m^3 NIOSH REL: CL 2 ug/m^3
Lead	Short-term (Acute) Effects: Fatigue, constipation, and disturbance of sleep. Long-term (Chronic) Effects: Weakness, weight loss, fatigue, insomnia, abdominal pain, constipation, facial pallor, and anemia. Nervous system effects are often severe, including paralysis of the wrist or ankle muscles ("wrist drop" and "ankle drop"). Kidney damage may also occur. Additionally, lead is reproductive toxin, producing sperm abnormalities and, during pregnancy, damage to the developing fetus.	OSHA PEL: TWA 0.05 mg/m^3 ACGIH TLV: 0.15 mg/m^3 NIOSH REL: TWA (Inorganic Lead): 0.10 mg/m^3

Table 3
Exposure Effects and Symptoms
Permissible Exposure Levels for
Site COPCs

COPCs	Exposure Effects/Symptoms	Permissible Exposure Levels

Key to abbreviations:

PEL - Permissible Exposure Limits
TLV - Threshold Limit Value
ACGIH - American Conference of Governmental Industrial Hygienists
NIOSH - National Institute for Occupational Safety and Health
OSHA - Occupational Safety and Health Administration
TWA - Time Weighted Average
u - micron
ug - microgram
m^3 - cubic meter
fib - Fibrosis
N/A - Not Available

In the event of unforeseen circumstances which arise during excavation and handling of soil/groundwater and which involve potentially significant exposure, personnel are instructed to immediately inform their Supervisor and/or his designee. The Supervisor will interview involved personnel to determine the nature of the circumstances and whether or not significant exposure may have occurred. Medical evaluations may be required for all personnel involved, as determined by the Supervisor and Health and Safety Officer.

4.2 Physical Hazards

Physical hazards posed by project work are those typical of excavation requiring the use of heavy equipment. The safety procedures pertaining to this type of work are covering Nor-Cal Steel, Inc. Injury Illness Prevention Manual. Methods, equipment, and procedures to control physical hazards are also briefly described below.

4.2.1 Head Protection

Field personnel are required to wear hard hats while excavation or other heavy equipment activities are being performed. Hats must meet American National Standards Institute (ANSI) standards, be worn properly, and not altered in any way that would decrease the degree of protection provided.

4.2.2 Foot Protection

Sturdy boots or steel-toed safety shoes are required to be worn while performing site operations. Open-toe footwear such as sandals are prohibited. Rubber boots will be required during the handling of groundwater.

4.2.3 Eye Protection

If required, operations personnel will be required to wear eye protection (safety glasses with side shields). Eye protection use will be required to prevent injury from dusts or flying debris. Goggles will be required when a potential splash hazard exists. The main concern will be the pumping of contaminated water for filtration.

4.2.4 Noise Protection

Field personnel will be required to wear hearing protection (ear plugs or muffs) in high noise areas while disposal operations are being performed. If Required, a sound level meter will be used to measure noise levels in the work areas. Hearing protection will be required when noise levels in the work area exceed 90 decibels measured on the A-scale.

4.2.5 Heavy Equipment

Vehicle and heavy equipment operators will observe the posted speed limits when working at the Site. No riders will be allowed on heavy equipment unless seats and seat belts are available for their use. Spotters and other ground personnel will maintain sight contact with heavy equipment operators and wear high visibility vests. Backup alarms will be provided on equipment.

4.2.6 Thermal Stresses

Adverse climate conditions will be considered when planning and conducting site operations. Ambient temperatures at the Site are generally mild and heat stress is not expected to be a significant hazard. Extremes of ambient temperature can cause physical discomfort, loss of efficiency, personal injury, and increase the probability of accidents. One or more of the following recommendations will help reduce the risk of heat stress at the Site:

* Consume plenty of liquid body fluids. Water, electrolytic drinks, or both will be used.
* Establish a work schedule that provides appropriate rest periods.
* Provide adequate employee training on the causes of heat stress and preventative measures.

4.2.7 Walking and Working Surfaces

Outdoor surfaces at the Site may be uneven or unstable. Trip and fall hazards may be present at the working face or other areas of the Site. Operations personnel will be cautioned about the uneven surfaces, tripping obstacles, and fall hazards.

4.2.8 Excavations

Operations personnel are prohibited from entering into excavations deeper than 4 feet below ground surface unless a California OSHA excavation permit is obtained and California OSHA excavation regulations are observed. Unattended excavations will be protected from unauthorized or inadvertent entry using barricades or flagging tape.

5. MEDICAL MONITORING

Preliminary site investigations and planned work practices will render unlikely over-exposure to site contaminants. However, it may be necessary in some areas of the Site for personnel to wear respiratory protective equipment. Accordingly, these personnel will be required to have completed the medical surveillance requirements associated with the wearing of respiratory protective equipment, as detailed in Title 8, California Code of Regulations, Section 5144.

It is not anticipated that contractor/subcontractor personnel will work in areas where they may be over-exposed to airborne contaminants (ie., exposed above the applicable Cal/OSHA Permissible Exposure Limits or Action Levels). If, through project monitoring, potential over-exposure to site contaminants is confirmed or suspected, additional medical surveillance may be required. This will be determined by the Responsible Person and the Health and Safety Officer.

5.1 Baseline

All personnel who may be required to use respiratory protection will complete an entry physical. This baseline physical will include the following:

* Medical and occupational history
* Complete blood count, including differential
* Blood chemistry screen
* Urine analysis, including microscopic morphology
* Pulmonary function test Chest X-rays: 12-inch by 14-inch posterior-anterior and lateral (two views)
* Vision testing
* Audiogram: 6 frequency
* General physical examination

Other tests may be added to the physical at the discretion of the examining physician.

5.2 Exposure

An employee who becomes ill from unforeseen chemical exposure will be transported to the designated emergency medical facility for treatment. The examining physician will determine the content of the examination based on the type of exposure received. Medical attention will also be sought for employees that are injured while performing job duties.

6. SITE CONTROL

Traffic control will be provided by others. Due to the layout of the Site and anticipated exposure to hazardous chemicals, it is not practical or feasible to limit site access in all areas. In general, entry point to the Site will be posted in accordance with 8 California Code of Regulations (CCR) Section 1532.1. In the event that presently unidentified areas with concentrations of potentially hazardous levels of contaminants are identified, these areas will be designated as "limited access areas" and will be controlled through two points of entry and egress. These areas will be determined by the Project Superintendent in conjunction with other site respesentatives (i.e., Project Manager).

When required only specially-trained personnel will be allowed to enter limited access areas.

Contaminant Reduction zone (CRZ): Immediately interior to the point of access for personnel will be an areas designated as the Contaminant Reduction Zone. This area will be used for the decontamination of personnel and personal protective equipment. Equipment decontamination will be conducted in a separate area. Site access and decontamination stations shall be upwind of the prevailing wind direction. No Nor-Cal Steel, Inc. personnel will enter this zone without the permission of the CIH and Site Supertendent.

Exclusion Zone (EZ): Excavation areas will be identified as the Exclusion Zone. Movement of personnel, equipment and materials through the access point into the Exclusion Zone will be monitored by the Superintendent or his designee. Personnel will be required to wear required personal protective equipment prior to entering the Site. Egress of personnel and removal of equipment and materials will only be permitted after necessary decontamination in the designated CRZ. Eating, drinking and/or smoking will not be permitted after entry into any limited access areas.

No Nor-Cal Steel, Inc. personnel will enter this zone without the permission of the CIH and the Site Supertendent.

Support Zone (SZ): The Support Zone covers all areas outside of the EZ and CRZ. The support area provides for all administrative and support functions necessary to keep spill response activities running smoothly. Nor-Cal Steel, Inc. personnel will be allowed access to the area unless other wise excluded.

The perimeter of the limited access areas will be enclosed by fencing or other means of delineation and will be inspected on a periodic basis by SBCC personnel to insure no unauthorized entry. All visitors to the Site must first obtain clearance from the Site Supertendent.

7. PERSONAL PROTECTIVE EQUIPMENT

The use of personal protective equipment will vary according to the nature of the contaminants present and work being performed. Air monitoring will be conducted by a CIH to determine the adequate level of protection required.

Minimal personal protective equipment requirements are as follow:

* Safety glasses with side shields
* Substantial footwear
* Long pants and sleeved shirts
* Orange safety vests
* Leather work gloves as appropriate

In limited access areas where employees may be exposed to contaminated soil and/or groundwater, the following additional personal protective equipment may be required (as determined by the Health and Safety Officer and the CIH), or as on needed basis:

* Tyvek coveralls
* Steel-toed chemical resistant boots
* NIOSH/MSHA-approved half-mask air-purifying respirator with combination organic vapor/dust-fume-mist cartridges
* Chemical resistant gloves

If limited access zones are established, no Nor-Cal Steel, Inc. personnel will be permitted.

No change in personal protective equipment shall be made without the approval of the Health and Safety Officer.

8. DECONTAMINATION PROCEDURES

In limited access areas, decontamination is to occur in the designated decontamination area. Decontamination stations will be located upwind from the prevailing wind direction. Additionally, reusable personal protective equipment, such as gloves, boots and respirators will be decontaminated in the designated decontamination zone prior to removal from the area.

Decontamination requires removal of all visible contaminants. This will be accomplished by rinsing with water and cleaning with brushes or rags. Commercial detergent or Alkinox solution may be employed for objects which are difficult to clean with water. Contaminated brushes and rags are to be disposed of as hazardous waste. Additionally, materials which cannot be successfully cleaned of visible residue with water and detergent are to be disposed of as hazardous waste.

Water from decontamination procedures will be collected and disposed of at an appropriate disposal site by Nor-Cal Steel, Inc.

9. EMERGENCY PROCEDURES

Local ambulance and paramedic service is available. Call 911. Their response time is 4 minutes. Whenever possible, arrangements should be made for on-site standby. Clear instructions must be given to emergency services for location to the Site:

> **NOTE: If the injured person inside a restricted area and cannot be Safely moved without medical attention, make sure to ask for the Hazardous Materials Emergency Response Team. Regular paramedic personnel may not be willing to enter hazardous material areas.**

First-aid kits and equipment are available on-site at the following locations:

All Foreman's Vehicles

emergency showers, if determined to be necessary by the Safety Director, will be established at the point of egress from the limited access areas.

A sufficient number of appropriate size and type fire extinguishes shall be provided in all foreman's vehicles.

List of Emergency Numbers:

Fire Department	911
Paramedics	911
Ambulance	911
Police Department	911

In case of an emergency Nor-Cal Steel, Inc., or their designee will take control of the scene. All injuries must be reported immediately to Nor-Cal Steel, Inc. And Site Supertendent.

General Emergencies

1) Nor-Cal Steel , Inc. or their designee will be notified immediately of all emergencies. These individuals have the responsibility of responding to and correcting emergency situations. They will in turn inform Nor-Cal Steel, Inc. This may include taking appropriate measures to protect the safety of site personnel and the public. Possible action may involve evacuation of personnel from the area.

2) Upon hearing an alarm or being notified of an emergency, all operations will cease immediately. Power equipment will be shut down and operators will stand by for instructions.

3) Individuals not assigned specific contingency response duties will proceed immediately to the construction staging area (safe site).

4) Upon arrival at the safe site, a complete head count will be conducted by the Superintendent and/or his designee. Individuals will stay at the safe site until the emergency is secured or further instructions are given.

Fire/Explosion

1) Notify all personnel within the immediate area of the fire.
2) Evacuate the area in the event the fire cannot be extinguished safely.
3) Go directly to the closest telephone and summon the Fire Department by dialing 911.

Personal Injuries

1) All personal injuries must be reported to the supervisor immediately.
2) Supervisors must report all worker injuries to the safety department immediately.
3) First-aid trained personnel should administer first-aid to the injured party. If medical attention beyond first-aid treatment is required, arrange for transportation to the designated medical facility.
4) If the Victim's injuries would potentially be aggravated by movement of the victim or the victim is unconscious and unable to respond. Call 911 Paramedics. If the victim Is inside a restricted area, ask for the Hazardous Materials Emergency Response Team.

Potential Chemical Exposure

In the event of unforeseen circumstances which arise during excavation and handling of soil/groundwater and which involve potentially significant exposure, personnel are instructed to immediately inform their Superintendent and/or his designee. The Superintendent will interview involved personnel to determine the nature of the circumstances and whether or not significant exposure may have occurred. Medical evaluations may be required for all personnel involved, as determined by the Superintendent and Health and Safety Officer.

If H2S is the suspect exposure perimeter the emergency personnel must be specifically informed of this hazard.

Off-Site Spills of Contaminated Soil

Once the waste disposal truck leaves the Site, it is the waste transportation contractor's responsibility to manage any off-site spill activities.

Due to the number of variables that could impact any off-site spillage scenario, it is not appropriate to attempt to describe specific spill mitigation procedures in this HSP. Rather, use will be made of highly-trained emergency response

personnel of Nor-Cal Steel, Inc. and/or their subcontractors.

Each driver will carry an information sheet or Material Safety Data Sheet (MSDS) that describes the nature and concentrations of the materials. This information will be placed with the manifest so that it will be immediately accessible to Nor-Cal Steel, Inc. emergency response personnel as necessary. Emergency services such as fire, medical or law enforcement will be requested by the drive either over the truck radio or by contacting 911 through a public phone or mobile phone.

Immediately, but in no case longer than 24 hours from the onset of such an event, the Site Supertendent will notify Department of Toxic Substances Control (DTSC) agency representative, the City of Emeryville Fire Department, Alameda County Department of Environmental Health, and Alameda County Hazardous Material Response Unit.

11. GENERAL SAFE WORK PRACTICES

Field operations will be conducted following the minimum safety practices described below.

1. Eating, drinking, chewing gum or tobacco and smoking are prohibited except in designated areas.

2. Personnel will wash their hands and face thoroughly with soap and water prior to eating, drinking or smoking.

3. Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, etc. Avoid whenever possible, kneeling or sifting on the ground or sitting on equipment (other than in the cab).

4. Do not remove dust from clothing by using compressed air or by shaking the clothing.

5. All field workers should make use of their senses to alert them to potentially dangerous situations in which they should not become involved (e.g. the presence of strong, irritating odors).

6. Notify the immediate supervisor of any unusual circumstances (such as buried drums, containers or debris, or unusual soil coloration) immediately.

7. Field workers shall be familiar with the physical characteristics of the Site including:

    * Wind director in relation to contaminated area
    * Accessibility of equipment and vehicles
    * Areas of known or suspected contamination
    * Site access

8. Safety tailgate meetings will be held at least weekly prior to the work shift prior to any new phase of operation. Tailgate meetings will cover pertinent safety topics relating To the work to be performed. Elements of this HSP will also be reviewed.

9. Supervisor safety meetings will be held at least monthly. Meetings will cover pertinent safety topics relating to the work to be performed and assist the supervisor in ensuring a safe job site.

10. AIR MONITORING

Air quality surveys will be performed during site operations to measure airborne concentrations of constituents. Work site perimeter and personal air monitoring will be performed to verify that worker exposures to airborne COPCs is below the PEL.

Area air monitoring will be conducted to determine background airborne levels along the upwind and downwind perimeters of the work during excavation and soil handling. No Nor-Cal Steel, Inc. personnel will enter an area unless permitted by the CIH.

Hydrogen sulfide monitoring will be of particular concern. Level "C" protective factors will be in place as long as air concentrations of H2S are less than 5 ppm. If H2S levels exceed 5 ppm than Level "B" protection factors will be in place.

If personal air monitoring results indicate exposure levels for workers to be equal to or above CAL/OSHA permissible exposure limits, work practices will be reviewed with the workers to emphasize dust mitigation techniques. Furthermore, additional personal protective equipment may be required.

Portable monitoring instruments will be calibrated daily before use following the manufacturer's recommendations. Pumps used to collect samples for laboratory analyses will be calibrated before and after use. All calibration data and monitoring results will be recorded on data collection forms or field notebooks. Employee exposure data will be summarized and maintained at Nor-Cal Steel, Inc. project office.

10. During the entire excavation process the work area must be continuously misted with water to keeps surface areas moist and reduce airborne dust levels. During the process, there should be no visible clouds of dust.

11. Nor-Cal Steel, Inc. employees, subcontractors and visitors will be required To wear a florescent orange safety vest, shirt or jacket at all times while on site. In addition, flags, tapes, barricades and cones shall be used to designate all restricted areas.

12. Health and Safety Officer and/or Superintendent, shall review the safe practices and procedures used by their personnel and imitate corrective action necessary. Unsafe conditions will be corrected immediately. Where they cannot be corrected immediately, work which may expose workers to the unsafe conditions will cease and the situation will be immediately reported to the Superintendent and Project Supertindent.

13. If new material believed to be hazardous is encountered during excavation, work shall cease immediately, the area shall be secured and the Site Supertendent shall be immediately notified of the presence of potentially contaminated material.

14. All hazardous waste shall be disposed of in accordance with the remediation and disposal plan provided by the Project Supertendent.

15. In the event of a fire or emergency condition, notify the Supervisor and/or the Health and Safety Officer immediately.

16. Equipment operators will maintain a safe distance from other vehicles, be alert to people on the ground, and allow spotters sufficient time to complete duties. Other personnel will be alert to moving vehicles and back-up alarms.

17. Report equipment abnormalities or failures immediately.

18. Equipment will not be serviced until it has been de-energized and the power source locked out. Guards on machinery will not be removed.

12. TRAINING

Prior to the start operations at the Site, A trained supervisor will conduct a site safety briefing which will include all personnel involved in site operations, i.e., equipment operators, laborers, inspection personnel, etc. At this meeting the Supervisor will discuss:

* Contents of this plan.
* Specific operations which could result in exposure above the action level.
* Types of hazards at the Site and means of minimizing exposure.
* Personal protective equipment that may be used.
* Decontamination protocol, if required.
* Site control measures, including safe operating practices and communication.
* Location and use of emergency equipment.

Exception: Individuals not permanently assigned to the Site and who will be in limited access areas for short periods of time (less than 8 hours) may not be required to receive the above listed training. Exceptions to the training requirements are at the discretion of the Health and Safety Officer and Superintendent. All visitors to limited access areas must be accompanied by an individual trained as specified above.

Copies of training documentation will be kept by the Health and Safety Officer and Superintendent or his designee.

13. RECORD KEEPING

Copies of the following documents must be maintained at the job site.

* Nor-Cal Steel, Inc. Project Specific Health & Safety Plan, for 1064 Hollis Street, Emeryville, CA
* Nor-Cal Steel, Inc. Corporate Health and Safety Plan
* Nor-Cal Steel, Inc. Injury Illness Prevention Plan
* Site safety meetings
* Employee training records - site specific and visitors
* Daily Safety inspection logs
* Weekly safety reports
* Health and safety plan signature page
* OSHA 200 log
* Physician's statement for respirator use, if such use is contemplated
* Respirator fit-test certificate (for each model and size that may be required)
* First aid/cardiopulmonary resuscitation (CPR) training certification, if required based On site-specific needs
* Respirator training certificate for special devices, as required
* Employer's certification that the employee has completed training to a level required by the employee's job function and responsibilities

14. HEALTH AND SAFETY PLAN SIGNATURES

I have reviewed the Project Specific Health & Safety Plan for the 1064 Hollis Street Project, Emeryville, California. I understand its purpose and consent to adhere to its policies, procedures, and guidelines while an employee of Nor-Cal Steel, Inc. or its contractor (subcontractor).

Name (please print)	Date	Signature