Site Health and Safety Plan

Location:

Former Vacuum Oil Refinery
5, 15 Flint Street
Rochester, New York

Prepared for:

One Flint Street, LLC
120 East Avenue
Rochester, New York, 14604

Ravi Engineering Project #45-14-003-0L

October 3, 2014

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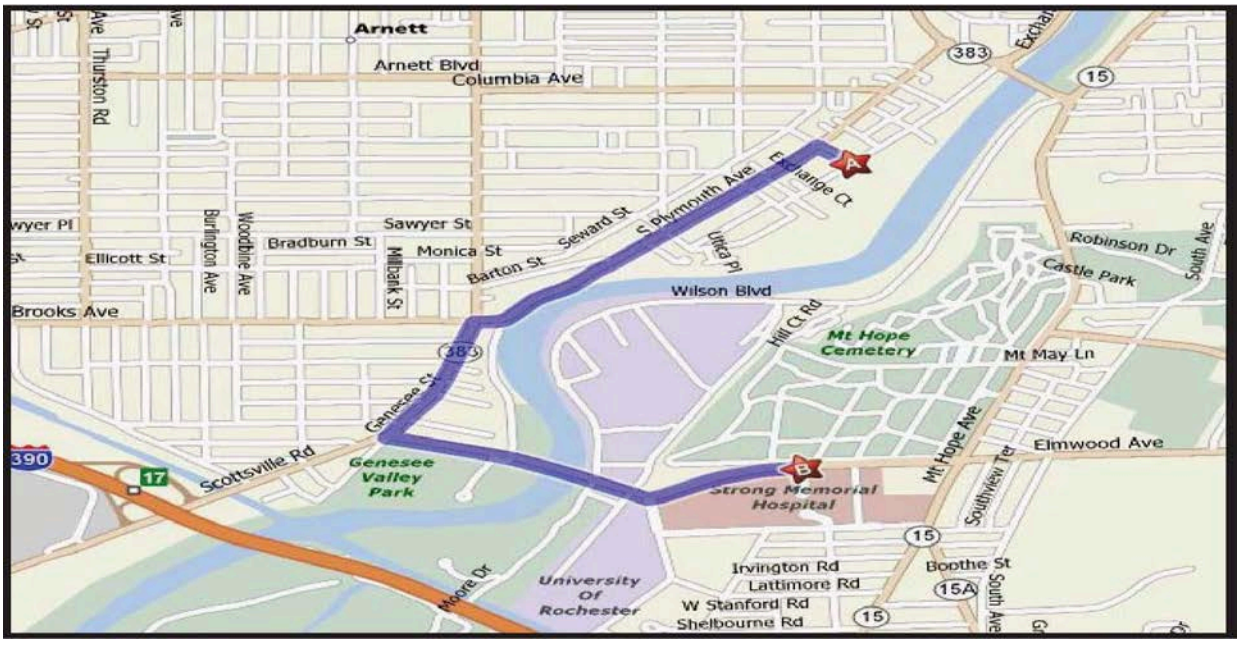
Project Title:	Former Vacuum Oil Refinery 5 & 15 Flint Street, Rochester, New York
Project Number:	45-14-003-0L
Project Location (Site):	
Project Manager:	Pete Morton, C.P.G.
Field Geologist:	Lynn Zicari
Field Geologist:	Dave DeYoung, Tony Hill
Site Safety Supervisor:	Geoff Bijak
Site Contact:	Adam Driscoll
Safety Director:	Geoff Bijak
Proposed Date(s) of Field Work	October 7, 2014 thru November 26, 2014

EMERGENCY CONTACTS

Name		Phone Number
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	Strong Memorial Hospital	
Poison Control Center:	Finger Lakes Poison Control	585-275-2100
Police (local, state):	City of Rochester Police Department	585-275-3232
Fire Department:	City of Rochester Fire Department	911
Agency Contact:	NYSDEC – Frank Sowers	585-226-5357
Project Manager:	Pete Morton, C.P.G.	585-697-2806
Site Safety Supervisor:	Geoff Bijak	585-690-6485
One Flint Street Contact:	Adam Driscoll	585-329-0232
Activities:	Remedial Investigation	
Site Environmental	Ravi Engineering and Land Surveying	

MAP AND DIRECTIONS TO THE MEDICAL FACILITY STRONG MEMORIAL HOSPITAL 601 ELMWOOD AVENUE, ROCHESTER, NEW YORK



Flint St, Rochester, NY 14608-2818

1. Start **"A "**outgoing NORTHWEST on FLINT ST toward S PLYMOUTH AVE/PLYMOUTH AVE S/NY-383. 0.1 mi
2. Turn LEFT onto PLYMOUTH AVE S/S PLYMOUTH AVE/NY-383. Continue to follow NY-383. 0.9 mi
3. Turn LEFT onto GENESEE ST/NY-383. 0.4 mi
4 Turn LEFT onto ELMWOOD AVE. 0.8 mi
5: End at **"B** " 601 Elmwood Ave Rochester, NY 14642-0001

Estimated Time: 6 minutes / Estimated Distance: 2.21 miles

1.0 INTRODUCTION

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during the subsurface investigation activities at a portion of the Former Vacuum Oil Refinery located at the 5 & 15 Flint Street property (see Figure 1).

This HASP may need to be modified to reflect the policies of the actual firm and personnel retained to implement the subsurface investigation if health and safety concerns are identified that are not included in this investigation. The requirements of this HASP are applicable to all approved personnel and their authorized visitors at the work site. In addition, the personnel that may occupy the buildings in the vicinity of the work area should also be aware of potential concerns relating to the remedial investigation. This document's project specifications and the Air Monitoring Plan are to be consulted for guidance for minimizing and abating a threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or and other regulatory body.

This HASP only applies to work activities at 5 & 15 Flint Street and not at other portions of the former Vacuum Oil Refinery property.

1.2 Site Location and Conditions

The site is located at 5 & 15 Flint Street in the City of Rochester, Monroe County, New York and, is approximately 11.2- acres is size it is improved with four buildings. Three of the buildings appear to be unoccupied and are located at the center and the entrance to the 15 Flint Street parcel, and in the northeast portion of the 5 Flint Street parcel. The other structure on the 15 Flint Street parcel appears to be vacant and is located adjacent to the Flint Street right-of-way at the entranceway to that parcel. The 15 Flint Street parcel was most recently used as a junkyard and junkyard related debris (e.g. tires, scrap metal, car parts. etc.) are observed through the site. Remnants of historical structures are visible in several portions of the site that typically consist of concrete foundations or walls located slightly above surface grade.

The site is generally steeply sloped downward from east to west and level at the eastern periphery. The site is overgrown with trees and underbrush.

2.0 RESPONSIBILITIES

This HASP presents guidelines to minimize the risk of injury, to project personnel, and to provide rapid response in the event of injury. The HASP is applicable only to activities of approved personnel and their authorized visitors. The Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of employees to follow the requirements of this HASP, and all applicable company safety procedures. Ravi Engineering & Land Management, P.C. (RE&LS) staff is required to review the HASP prior to conducting work at the project site. Listed below are RE&LS project personnel and their responsibilities with regard to the project:

Pete Morton, C.P.G. – Project Manager
Direct: 585-697-2806 Cell: 585-645-8295

Geoff Bijak, - RE&LS Health and Safety Supervisor
Direct: 585-697-2805 Cell: 585-690-6485

Lynn Zicari, Site Safety Supervisor
Direct: 585-697-2071 Cell: 585-506-6975

Mr. Morton is responsible for direct oversight and implementation of the project and HASP. Mr. Morton will be interacting directly with field personnel.

Mr. Bijak is responsible for implementation of the HASP. Any changes to this HASP must be approved of by Mr. Bijak.

Ms. Zicari is responsible for implementation of the HASP during the subsurface investigation activities. Ms. Zicari will notify the Project Manager regarding all HASP issues during the project.

3.0 ACTIVITIES COVERED

The activities covered under this HASP include the following:

1. Management of subsurface investigation activities
2. Environmental Monitoring
3. Collection of samples

4.0 WORK AREA ACCESS AND SITE CONTROL

RE&LS is working at the site on behalf of One Flint Street, LLC which is the owner of the Site. RE&LS is not responsible for individuals not employed by RE&LS accessing the site, but will make a reasonable effort to maintain a 20 foot (ft) buffer around the work area where the subsurface investigation activities are taking place. RE&LS will work with the caretaker of the property in an effort to prevent individuals not involved in the project from entering the subsurface investigation work area. A daily sign in/sign out sheet will be required to be completed for RE&LS employees and its contractors working at the Site. A copy of the sign in/sign out is included in Appendix 1. Also included in Appendix 1 is a compliance sheet that each RE&LS personnel is required to sign indicating they were informed of health and safety issues at the work site.

5.0 POTENTIAL HEALTH AND SAFETY HAZARDS

This section lists some potential health and safety hazards that project personnel may encounter at the project site and some actions to be implemented by approved personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change.

5.1 Chemical Hazards

Chemical hazards or potential chemicals of concern (COC) are associated with the historical use of the site. The potential COCs include, petroleum related compounds, solvents, metals, pesticides, and polychlorinated biphenyls (PCBs). In addition, there is a potential that sulfur dioxide gases may be released during the subsurface investigation activities.

These potential COCs relate to inhalation, ingestion, and dermal exposure to workers at the site. Although it is anticipated that exposure to unprotected works is low, monitoring equipment and handling procedures shall be used to during intrusive activities conducted at the site. It is understood that RE&LS will maintain equipment at the site to monitor for hydrogen sulfide, oxygen levels, and volatile organic compounds (VOCs) at the site during work activities. RE&LS will make an effort to communicate to notify workers at the site if monitoring equipment indicates exposures to chemical hazards.

5.2 Physical and Environmental Hazards

Physical hazards at the site are primarily associated with drilling and associated equipment, moving of vehicles, and site conditions. Site conditions vary throughout the site from highly sloping to generally flat surfaces, junkyard related waste debris, and weather hazards. These conditions present slip and fall

hazards, crushing hazards, cuts on debris, slippery and irregular unsafe surfaces, and getting struck by heavy machinery. Personnel should inspect working surfaces prior to moving equipment throughout the site. Unsafe surface shall be marked with highly visible material.

Weather related hazards include sunburns, heat and cold stress, lighting, rain, snow, ice, etc. Personnel should be aware of the weather forecast each day and maintain the appropriate apparel and protective equipment for the weather.

Environmental hazards include exposure to mosquitoes, fleas, ticks, poison ivy, poison oak etc. Personnel should be aware of these hazards.

5.3 Hazard Control

It is anticipated that Level D personnel protective equipment (PPE) will be worn and provide enough protection for each task during the project. Level D at the site shall include, at a minimum, of hard hat, safety glasses with side shield, steel toe boots, a bright colored highly visible shirt, and hearing protection. Additional PPE may be used anytime during this project.

6.0 PERSONNEL TRAINING AND PROTECTION

6.1 Personnel Training Requirements

RE&LS personnel performing subsurface investigation activities at the site must have completed the 40 hour requirements of 29 CFR 1910.120(c), and completed an 8-hour refresher course within one year of the work completed at the site.

RE&LS personnel are required to review this HASP prior to completing work at the site. The RE&LS Project Manager or another RE&LS personnel identified by the Project Manager shall review the HASP with each RE&LS employee working at the site.

6.2 Personnel Protection

Level D PPE will be used during field activities associated with completing the subsurface investigation at the site. Level D protection at the site includes the use of:

1. Hard hat
2. Safety glasses with side shields
3. Steel toe boots with metal shank
4. Hearing protection when noises hinder hearing above speaking level
5. Nitrile chemical resistant gloves are required for sampling, and resistant Kevlar gloves may be necessary if handling fill materials that contain sharp edges (e.g. glass).

PPE may be upgraded based on observations by RE&LS field personnel, Project Manager, or the RE&LS Health and Safety Supervisor. If respirators are used at the site, personnel are required to be properly trained, fit tested, medically approved, and use National Institute of Occupational Safety and Health (NIOSH) approved equipment.

If personnel are aware of a potential failure to PPE, personnel are required to stop and leave the work area immediately. If necessary the Project Manager or RE&LS Health and Safety Supervisor will be notified regarding the failure and make a decision whether the failure has affected the health and safety of workers where action should be taken. The Project Manager or RE&LS Health and Safety Supervisor will make the determination whether work shall continue when the PPE failure has been

identified and repaired.

6.3 Medical Surveillance

RE&LS implements a Medical Surveillance Program (MSP) in accordance with 29 CFR 1910.120. The purpose of the MSP is to:

Provide for the protection of RE&LS personnel, and Fulfill OSHA regulatory compliance requirements. OSHA mandates protection for employees with possibly hazardous exposures under the "general duty clause" and specific substance standards.

The content and services of the MSP are consistent with applicable federal and state regulations, OSHA regulations, and NIOSH recommendations.

7.0 AIR MONITORING

According to 29 CFR 1910.120(h), air monitoring shall be used to identify and quantify airborne levels of hazardous substances and health hazards in order to determine the appropriate level of employee protection required for personnel working onsite. Air monitoring will consist at a minimum of the procedure listed below. Air monitoring instruments will be calibrated and maintained in accordance with the manufacturer's specifications.

The air monitor will utilize a RAE Systems MultiRae Meter or equivalent that is capable to screen the ambient air in the work areas for total VOCs, oxygen concentration, and hydrogen sulfide.

7.1 Work Area Monitoring

Work area monitoring will consist of continuous monitoring of VOCs, oxygen concentration, and hydrogen sulfide with Rae Systems MultiRae. The air monitoring equipment may be programmed to identify personnel of action levels are exceeded. The following readings will be utilized for action levels at the site:

Total VOCs – Greater than 5.0 ppm for a five minute average

Hydrogen Sulfide – Greater than 5.0 ppm per instantaneous reading

Oxygen – Less than 19.5 % per instantaneous reading

If any of the above readings are exceeded in the breathing zone, personnel are to leave the work area until satisfactory readings are obtained. Approved personnel may re-enter the work areas wearing an appropriate type of NIOSH approved respirator. Personnel are required to notify the Project Manager for approval to re-enter the work area.

If oxygen and hydrogen sulfide action levels are exceeded, personnel are not allowed to re-enter the work area until readings have been sustained below the action level for at least 30 minutes. If the action level for VOCs is exceeded, personnel may re-enter the work area with a ½ face air purifying respirator with NIOSH approved organic vapor cartridges for a maximum 8-hour duration for readings between 5 to 50 ppm. Personnel are not allowed to re-enter the work area if readings are consistently above (5 minute average) 50 ppm. If readings are consistently above 50 ppm, work will be stopped immediately until safe levels of VOCs are encountered.

7.2 Site Perimeter Monitoring

Site perimeter monitoring will be conducted during all ground intrusive activities at the Site. Monitoring will be completed for particulates and VOCs. If hydrogen sulfide action levels are exceeded in the work area, then the hydrogen sulfide will also be monitored at the site perimeter. The

following sustained readings will be utilized for action levels at the site:

- Total Volatile Organics – measured with a MultiRae or PID: 5.0 part per million (ppm) per 15-minute running average.
- Dust – measured with a Dust Track: 0.1 mg/m^3 above background (upwind) conditions per 15-minute running average.

If site perimeter or downwind measurements above background reach or exceed the action level, work should be immediately stopped and measures taken to reduce the airborne concentrations of contaminants and/or dust (e.g., watering the work area). In addition, if the downwind readings above action levels persist consistently for a 15 minute period, persons downwind of the Site should be evacuated via routes perpendicular to the wind direction and emergency response crews should be contacted.

8.0 PERSONNEL DECONTAMINATION PROCEDURES

Upon leaving the work area, approved personnel shall decontaminate footwear as needed. Under normal work conditions, detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with contaminated substances. Minor splashes on clothing and footwear can be cleaned with soap and water. Heavily contaminated clothing should be removed if it cannot be cleaned with soap and water. Personnel assigned to this project should be prepared with a change of clothing whenever on site.

9.0 EMERGENCY ACTION PLAN

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible and wait at the assigned 'safe area' (to be determined).

Employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

A cell phone will be used to notify off-site personnel of emergencies. If personnel are to be transported to a hospital, a map and directions to Strong Memorial Hospital are included in the beginning of this HASP along with emergency contact phone numbers.

9.1 Responsibilities

The Site Safety Supervisor has primary responsibility for responding to and correcting emergency situations. This includes taking appropriate measure to ensure the safety of site personnel and the public. Possible actions may involve evacuation of personnel from the site area, and evacuation of adjacent residents. He/she is additionally responsible for ensuring that corrective measures have been implemented, appropriate authorities notified, and follow-up reports completed. The RE&LS Health and Safety officer may be called upon to act on the behalf of the Site Safety Supervisor, and will direct responses to any medical emergency. The individual contractor organizations are responsible for assisting the project manager in his/her mission within the parameters of their scope of work.

9.2 Evacuation Routes/Procedures

In the event of an emergency which necessitates an evacuation of the site, the following alarm procedures will be implemented:

Evacuation alarm notification should be made verbally, using hand signals, and/or by the Site Supervisor supplemented by sounding three long blasts from a vehicle horn. All personnel should

evacuate upwind of any activities. Rendezvous at the Flint Street entrance to the site in case of an emergency so that all personnel can be accounted for.

Personnel will be expected to proceed to the closest exit with your buddy, and mobilize to the safe distance area associated with the evacuation route. Personnel will remain at that area until the re-entry is authorized by the Project Manager.

9.3 Accidents and Injuries

Any accidents and injuries to a worker are to be immediately reported to the Site Safety Supervisor. He/she will assist those who have been injured by notifying the personnel trained to respond to accidents and injuries.

Any accident and injury shall be reported to the Project Manager.

9.4 Emergency Equipment

The following equipment, based on the potential site hazard will be maintained in the Site Safety Supervisor's vehicle:

- First aid kit

9.5 Site Communications Plan

Successful communications between field teams and contact with personnel in the work area is essential. The following communications systems will be used during activities at the Site.

Hand Signals - Signal Definition
Hands clutching throat - Out of air/cannot breath
Hands on top of head - Need assistance
Thumbs up OK - I am all right/I understand
Thumbs down - No/negative
Arms waving upright - Send backup support
Grip partners wrist - Exit area immediately

10.0 JOB SAFETY ANALYSIS

The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times, the Site Safety Officer has responsibility for site safety and his or her instructions must be followed. The following list is intended to identify hazards at the site. Additional hazards may be identified that are not included below, and should be added to the HASP.

<u>Hazards Due to Heavy Machinery</u>

Potential Hazard:
Heavy machinery including trucks, drill rigs, excavators, backhoes, etc will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

Protective Action:
Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. Operators should be made aware of where each contractor is working during that shift.

Cuts, Punctures and Other Injuries

Potential Hazard:
There is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

Protective Action:
Steel-toe boots with steel shanks and long pants should be work when conducting work at the site. Kevlar or cut resistant gloves should be used when handling sharp objects.

The Project Manager is responsible for making First Aid supplies available at the work site to treat minor injuries. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment in not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to the Project Manager. Serious injuries are to be reported immediately to the Site Safety Officer.

Injury Due to Exposure of Chemical Hazards

Potential Hazards:
Potential exposure to contaminants of concern (COCs) (e.g. VOC vapors, hydrogen sulfide) may be encountered during work at the site. Inhalation of high concentrations of organic vapors and hydrogen sulfide can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

Dust particulates could also present an inhalation hazard. Inhalation of high concentrations of dust can cause irritation of the eyes and skin; coughing; chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis.

Protective Action:
The presence of potential COC may be detected by their odor and by monitoring instrumentation. Dust particulates may be detected by monitoring instrumentation. Approved employees will not work in environments where hazardous concentrations of potential COC are present.

Continuous air monitoring (refer to Section 7.0) of the work area will be performed within the work area. Personnel are to leave the work area whenever PID measurements of ambient air exceed 5 ppm consistently for a 5 minute period for total VOCs, exceed 5 ppm for hydrogen sulfide, and are less than 19.5% per instantaneous readings for oxygen.

Injuries Due to Extreme Hot or Cold Weather Conditions

Potential Hazards:
Extreme hot weather conditions can cause heat exhaustion, heat stress and heat stroke. Extreme cold weather conditions can cause hypothermia.

Protective Action:
Precaution measures should be taken such as dress appropriately for cold weather conditions. If necessary work shall not be conducted or take necessary measures to heat up the body.

To protect from heat stress, drink plenty of fluid before and during work. Take adequate number of breaks to prevent fatigue.

Subsurface Soil and Groundwater Sampling

Potential Hazards:

Contact with contaminants
Back strain and muscle fatigue due to lifting, shoveling, and augering techniques.
Contact with or sharp objects

Protective Actions:

Nitrile gloves over Kevlar or cut resistant gloves
To minimize exposure to chemical contaminants, a thorough review of suspected contaminants should be completed and implementation of an adequate protection program.
Proper lifting (pre-lift weight assessment, use of legs, multiple personnel) techniques will prevent back strain. Use slow easy motions when shoveling, augering, and digging to decrease muscle strain.
Use of PPE

Soil Borings/Drilling

Potential Hazards:
Noise levels exceeding the OSHA PEL of 90 dBA are both a hazard and a hindrance to communication. Fumes (carbon monoxide) from the drill rig. Overhead utility wires, i.e., electrical and telephone, can be hazardous when the drill rig boom is in the upright position. Underground pipelines and utility lines can be ruptured or damaged during active drilling operations. Moving parts, i.e. augers, on the drill rig may catch clothing. Free or falling parts from the cat head may cause head injury. Moving the drill rig over uneven terrain may cause the vehicle to roll over or get stuck in a rut or mud. Be aware of hazards associated with moving heavy machinery and other associated injury.

Protective Actions:
Ear muffs and ear plugs effectively reduce noise levels. Hard hats should be worn at all times when working around a drill rig. Secure loose clothing. Check boom prior to approaching drill rig. To avoid contact with any overhead lines, the drill rig boom should be lowered prior to moving the rig. Overhead utilities should be considered “live” until determined otherwise. The rig mast should not be erected within 10 feet of an overhead electrical line until the line is de-energized, grounded, or shielded and an electrician has certified that arcing cannot occur. Inspect terrain prior to moving drilling rig. Maintain a distance of 20 feet away from the drill rig when possible.

11.0 SUBCONTRACTOR RESPONSIBILITIES

RE&LS is the prime contractor for the activities associated with this project and, therefore, is responsible for subcontractor health and safety while under contract with One Flint Street, LLC and engaged in work at the work site. RE&LS will inform subcontractors of the site emergency response procedures, and any potential fire, explosion, health, safety, or other hazard by making this HASP available on-site. All RE&LS subcontractors are responsible for:

- Attending the general health and safety briefing given by RE&LS covering the requirements of this HASP. Each new employee must be briefed on site-specific safety procedures.
- Providing their own company-provided PPE.
- Providing documentation that their employees have been trained in health and safety in

accordance with applicable federal, state, and local laws and regulations.

- Providing evidence of medical surveillance and medical approvals for their employees.
- Designating their own Site Safety Officer (SSO) responsible for ensuring that their employees comply with their own HASP and taking any other additional measures required by their site activities.

Appendix 1

- Sign-in/sign-out sheet
- HASP Compliance Sheet

5, 15 Flint Street Sign-In/Sign-Out Sheet

Name	Company	Reason for site visit	Time-in	Time-out

ACKNOWLEDGEMENT

I have read and understand the 5, 15 Flint Street Health and Safety Plan or was informed of health and safety issues at the worksite by the site safety supervisor.

Signature	Date