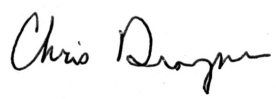


| | | |
|---|---|---|
| Site Name: Pearidge Road Fire | Site Contact: | Telephone: |
| Location: 230 Pearidge Road, Canton, GA | Client Contact: Randy Nattis | Telephone: 404.229.9499 |
| EPA ID No. | Prepared By: Chuck Berry | Date Prepared: 3/14/2011 |
| Project No. TTEMI-05-001-0150 | Dates of Activities: Begin 01/29/10 (HASP is not valid for periods longer than 12 months) | Emergency Response <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Objectives:</p> <p>Perform perimeter air monitoring to ensure public safety; document site conditions and activities using logbook notes and photographs; and conduct air, soil, and surface water sampling as directed.</p> </div> <div style="width: 50%;"> <p>Site Type: <i>Check as many as applicable.</i></p> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input checked="" type="checkbox"/> Active</div> <div style="width: 33%;"><input type="checkbox"/> Landfill</div> <div style="width: 33%;"><input type="checkbox"/> Residential</div> <div style="width: 33%;"><input type="checkbox"/> Inactive</div> <div style="width: 33%;"><input type="checkbox"/> Railroad</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Industrial</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Secured</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Uncontrolled</div> <div style="width: 33%;"><input type="checkbox"/> Urban</div> <div style="width: 33%;"><input type="checkbox"/> Unsecured</div> <div style="width: 33%;"><input type="checkbox"/> Controlled</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Other (<i>specify</i>)</div> </div> <div style="margin-top: 5px;"> <div style="border-bottom: 1px solid black; display: inline-block; width: 100%;"></div> Tire Fire </div> </div> </div> | | |
| <p>Project Scope of Work</p> <p>Tire fire. Perform air monitoring using a multitude of instrumentation to gauge to potential for human health impacts to nearby residences.</p> | | |
| <p>Health and Safety Plan Approver Signature: </p> | | <p>Date: APPROVED By chris.draper at 3:17 pm, Mar 14, 2011</p> |

Note: A minimum of two employees with appropriate training and medical surveillance must be on site for any fieldwork subject to Level 2 HASP requirements.

Note: A detailed site sketch is provided on Page 9 of 12.

Initial Isolation and Protective Action Distances (for emergency response operations only): Defer to and follow evacuation distances established by local responders and EPA

Initial Isolation Distance: This zone should extend in all directions; 660 feet for unknown hazards and 0.5 mile for tanker truck or rail car incidents.

NOTE: Keep a maximum distance away for unknown sites until the identity of the materials is determined.

Isolation distances have already been set by local EMA.

Subsequent Isolation and Protection Action Zones Based on Air Monitoring Results:

NOTE: Distance at sites with unknown hazards should be increased, if necessary, based on air monitoring results.

| | | | | | |
|--|---|--|-----------------------------------|--|--|
| Wind Speed and Direction (Approach from upwind) Based on Roswell, GA @ 1900 | | Temperature (°F) | Humidity % | Precipitation % | Forecast (such as partly cloudy, snow, or other) |
| Speed (mph): 7 | From Direction: E | 72 | 53 | 20 | Partly cloudy in the afternoon - thunderstorms after 8pm. |
| On-Site Supplies: | <input checked="" type="checkbox"/> First Aid Kit | <input checked="" type="checkbox"/> Fire Extinguisher | <input type="checkbox"/> Air Horn | <input type="checkbox"/> Oral Thermometer | <input type="checkbox"/> Noise Dosimeter |
| <input type="checkbox"/> Heat stress | | <input type="checkbox"/> Underground storage tanks | | <input type="checkbox"/> Construction work | |
| <input checked="" type="checkbox"/> Cold stress | | <input type="checkbox"/> Surface tanks | | <input checked="" type="checkbox"/> Excavation or trenching | |
| <input checked="" type="checkbox"/> Explosion or fire hazard | | <input type="checkbox"/> Buried utilities | | <input type="checkbox"/> Benching, shoring, bracing | |
| <input type="checkbox"/> Oxygen deficiency | | <input type="checkbox"/> Overhead utilities | | <input checked="" type="checkbox"/> Heavy equipment | |
| <input checked="" type="checkbox"/> Inorganic chemicals | | <input type="checkbox"/> Permit-Required Confined spaces | | <input type="checkbox"/> Work in strip or underground mines | |
| <input checked="" type="checkbox"/> Organic chemicals | | <input checked="" type="checkbox"/> General slips, trips, falls | | <input type="checkbox"/> Grinding operations | |
| <input type="checkbox"/> Biological hazard | | <input checked="" type="checkbox"/> Uneven, muddy, or rugged terrain | | <input type="checkbox"/> Hand and portable power-tool use | |
| <input type="checkbox"/> Chemical warfare materiel | | <input type="checkbox"/> Industrial truck (forklift) use | | <input type="checkbox"/> Lockout-Tagout | |
| <input type="checkbox"/> Compressed gases | | <input type="checkbox"/> Lift (man lift, cherry picker) use | | <input type="checkbox"/> Machine guarding | |
| <input type="checkbox"/> Asbestos | | <input type="checkbox"/> Scaffold use | | <input checked="" type="checkbox"/> Portable fire extinguisher use | |
| <input checked="" type="checkbox"/> Respirable particulates | | <input type="checkbox"/> Ladder use | | <input checked="" type="checkbox"/> Driving commercial and/or rented vehicles | |
| <input type="checkbox"/> Non-ionizing radiation (lasers, radiofrequencies, UV) | | <input type="checkbox"/> Dangerous goods shipping | | <input type="checkbox"/> Injury and Illness Prevention Program (California only) | |
| <input type="checkbox"/> Blasting and explosives | | <input type="checkbox"/> Elevated work (over 6' high) | | <input type="checkbox"/> Ergonomics (California only) | |
| <input type="checkbox"/> Non-Permit Required Confined spaces | | <input type="checkbox"/> Hot work (welding, cutting, or brazing) | | <input type="checkbox"/> Diving operations | |
| Explosion or Fire Potential: <input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low <input type="checkbox"/> Unknown | | | | | |

Chemical Products Tetra Tech EM Inc. Will Use or Store On Site: (Attach a Material Safety Data Sheet [MSDS] for each item.)

- | | | | |
|---|---|---|---|
| <input checked="" type="checkbox"/> Alconox or Liquinox | <input checked="" type="checkbox"/> Calibration gas (Methane) | <input checked="" type="checkbox"/> Hexane | <input checked="" type="checkbox"/> Isopropyl alcohol |
| <input checked="" type="checkbox"/> Hydrochloric acid (HCl) | <input checked="" type="checkbox"/> Calibration gas (Isobutylene) | <input checked="" type="checkbox"/> Household bleach (NaOCl) | <input type="checkbox"/> Hazcat Kit |
| <input checked="" type="checkbox"/> Nitric acid (HNO ₃) | <input checked="" type="checkbox"/> Calibration gas (Pentane) | <input checked="" type="checkbox"/> Sulfuric acid (H ₂ SO ₄) | <input type="checkbox"/> Mark I Kits (<i>number?</i>) _____ |
| <input checked="" type="checkbox"/> Sodium hydroxide (NaOH) | <input checked="" type="checkbox"/> Hydrogen gas | <input checked="" type="checkbox"/> Acetic acid | <input type="checkbox"/> Other (<i>specify</i>) Eyewash soln_ |

WARNING: Eyewash solution shall be readily available on ALL projects where corrosives (acids or bases) are used, including as sample preservatives
Applicable Safe Work Practices (SWP) Attach to HASP: *Check as many as apply*

- ☒ SWP 6-1 - General Safe Work Practices for Field Work
- ☐ SWP 6-2 - Control of Hazardous Energy (Lockout-Tagout)
- ☐ SWP 6-3 - Work Near Drill Rigs
- ☐ SWP 6-4 - Excavation Work
- ☐ SWP 6-5 - Working Over or Near Water
- ☐ SWP 6-6 - Hot Work
- ☐ SWP 6-7 - Various Special Site Hazards
- ☐ SWP 6-8 - Electrical Work
- ☐ SWP 6-9 - Fall Protection
- ☐ SWP 6-10 - Use of Portable Ladders
- ☐ SWP 6-11 - Drum and Container Handling
- ☐ SWP 6-12 - Shipping Dangerous Goods
- ☒ SWP 6-13 - Flammable Hazards and Ignition Sources
- ☐ SWP 6-14 - Accidental Spill and Discharge Controls
- ☐ SWP 6-15 - Heat Stress
- ☒ SWP 6-16 - Cold Stress
- ☐ SWP 6-17 - Various Biohazards
- ☐ SWP 6-18 - Underground Storage Tank Removal Procedures
- ☐ SWP 6-21 - Sites with Ionizing Radiation Sources
- ☐ SWP 6-22 - Data Collection on Rivers
- ☐ SWP 6-23 - Permit-Required Confined Space
- ☐ SWP 6-24 - Non-Permit-Required Confined Space
- ☐ SWP 6-25 - Oil and other Petroleum Fuel Products
- ☒ SWP 6-26 - Working Near Heavy Equipment
- ☒ SWP 6-27 - Respirator Cleaning
- ☒ SWP 6-28 - Use of Air Purifying Respirators
- ☒ SWP 6-29 - Qualitative Fit Test Procedures
- ☐ SWP 6-30 - Office Employees
- ☐ SWP 6-31 - Hurricane Affected Areas
- ☐ SWP 6-33 - UXO/MEC Field Work

Tasks Performed At Job Site not Covered by SWPs
Attach Activity Hazard Analysis for each non-covered task

- ☐ (non-covered task)
- ☐ (non-covered task)
- ☐ (non-covered task)
- ☐ (non-covered task)
- ☐ (non-covered task)

Tetra Tech Employee Training and Medical Requirements:
Basic Training and Medical

- ☒ Initial 40 Hour Training
- ☒ 8-Hour Supervisor Training (one-time)
- ☒ Current 8-Hour Refresher Training
- ☒ Current Medical Clearance (including respirator use)
- ☒ Current First Aid Training (minimum 1 Tetra Tech employee on site)
- ☒ Current CPR Training (minimum 1 Tetra Tech employee on site)
- ☒ Current Respirator Fit-Test

Other Specific Training and Medical Surveillance Requirements

- ☐ Confined Space Training
- ☐ Level A Training
- ☐ Radiation Training
- ☐ OSHA 10-hour Construction Safety
- ☐ Blood Lead Level and ZPP Pre and Post-Project
- ☐ Blood Arsenic Level Pre and Post-Project
- ☐ Other _____

| Materials Present or Suspected at Site | Highest Observed Concentration (specify units and medium) | Exposure Limit (specify ppm or mg/m ³) | IDLH Level (specify ppm or mg/m ³) | Primary Hazards of the Material (explosive, flammable, corrosive, toxic, volatile, radioactive, biohazard, oxidizer, or other) | Symptoms and Effects of Acute Exposure | Photoionization Potential (eV) |
|--|---|---|--|--|---|--------------------------------|
| Phosgene | Unknown | PEL = 0.1 mg/m ³ REL = 0.1 mg/m ³ | 2 ppm | Toxic | Irritation eyes; dry burning throat; vomiting; cough, foamy sputum, dyspnea (breathing difficulty), chest pain, cyanosis; liquid: frostbite | 11.55 |
| Carbon Monoxide | Unknown | PEL = 50 ppm REL = 35 ppm (30-min) | 1200 ppm | Toxic | Headache, tachypnea, nausea, lassitude (weakness, exhaustion), dizziness, confusion, hallucinations; cyanosis; depressed S-T segment of electrocardiogram, angina, syncope | 14.01 |
| Hydrogen Chloride | Unknown | PEL = 5 ppm (C) REL = 5 ppm (C) | 50 ppm | Toxic; corrosive | Irritation nose, throat, larynx; cough, choking; dermatitis; solution: eye, skin burns; liquid: frostbite; in animals: laryngeal spasm; pulmonary edema | 12.74 |
| Carbon Black (Particulates) | Unknown | PEL = TWA 3.5 mg/m ³ REL TWA 3.5 mg/m ³ Ca TWA 0.1 mg PAHs/m ³ [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)] | 1750 mg/m ³ | Irritant | Cough; irritation eyes; in presence of polycyclic aromatic hydrocarbons: [potential occupational carcinogen] | NA |
| Vinyl Chloride | Unknown | PEL = 1 ppm (C 5) REL = Ca | CARC | Toxic; [potential occupational carcinogen] | Lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite; [potential occupational carcinogen] | 9.99 |
| PAHs (as Coal Tar Pitch Volatiles) | Unknown | PEL = TWA 0.2 mg/m ³ REL = CARC TWA 0.1 mg/m ³ | CARC [80 mg/m ³] | Toxic; [potential occupational carcinogen] | Dermatitis, bronchitis, [potential occupational carcinogen] | ND |
| Benzene | Unknown | PEL = TWA 1 ppm ST 5 ppm REL = Ca TWA 0.1 ppm ST 1 ppm | CARC [500 ppm] | Toxic; flammable; [potential occupational carcinogen] | Irritation eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; anorexia, lassitude (weakness, exhaustion); dermatitis; bone marrow depression; [potential occupational carcinogen] | 9.24 |

Information Sources: Include source information (for example, NIOSH Pocket Guide to Hazardous Chemicals, September 2005)

Note: In the Exposure Limit column, include Ceiling (C) and Short-Term Exposure Limits (STEL) if they are available. Also, use the following short forms and abbreviations to complete the table above.

A = Air
CARC = Carcinogenic
eV = Electron volt
GW = Groundwater

IDLH = Immediately dangerous to life or health
mg/m³ = Milligram per cubic meter
NA = Not available
NE = None established

PEL = Permissible exposure limit
ppm = Part per million
REL = Recommended exposure limit
S = Soil

TLV = Threshold limit value
U = Unknown

Note: If no contingency level of protection is selected, all employees covered under this plan must evacuate the immediate site area if air contaminant levels require upgrading PPE. This information is available on the chemical hazards page of this HASP.

Field Activities Covered Under This Plan:

| Task Description | Level of Protection ¹ | | | | | | | | Date of Activities |
|------------------------|----------------------------------|----------------------------|----------------------------|---------------------------------------|----------------------------|----------------------------|---------------------------------------|----------------------------|--------------------|
| | Primary | | | | Contingency | | | | |
| 1 Air monitoring | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input checked="" type="checkbox"/> D | <input type="checkbox"/> A | <input type="checkbox"/> B | <input checked="" type="checkbox"/> C | <input type="checkbox"/> D | Begin 01/29/10 |
| 2 Site documentation | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input checked="" type="checkbox"/> D | <input type="checkbox"/> A | <input type="checkbox"/> B | <input checked="" type="checkbox"/> C | <input type="checkbox"/> D | Begin 01/29/10 |
| 3 Multi-media sampling | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input checked="" type="checkbox"/> D | <input type="checkbox"/> A | <input type="checkbox"/> B | <input checked="" type="checkbox"/> C | <input type="checkbox"/> D | Begin 01/29/10 |
| 4 | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input type="checkbox"/> D | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input type="checkbox"/> D | |
| 5 | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input type="checkbox"/> D | <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C | <input type="checkbox"/> D | |

Site Personnel and Responsibilities (include subcontractors):

| Employee Name and Office Code | Task(s) | Responsibilities |
|-------------------------------|---------|---|
| Leland Meadows | All | <ul style="list-style-type: none"> Project Manager or Field Team Leader: Directs project investigation activities, makes site safety coordinator (SSC) aware of pertinent project developments and plans, and maintains communications with client as necessary. Site Safety Coordinator (SSC): Ensures that appropriate personal protective equipment (PPE) is available, enforces proper use of PPE by on-site personnel, suspends investigative work if he or she believes that site personnel are or may be exposed to an immediate health hazard, implements the health and safety plan, and reports any deviations observed from anticipated conditions described in the health and safety plan to the health and safety representative. Alternate Site Safety Coordinator (SSC): List the alternate SSC here for projects where the SSC may change. Field Personnel: Complete tasks as directed by the project manager, field team leader, and SSC, and follow all procedures and guidelines established in the Tetra Tech, Inc., Health and Safety Manual. Tetra Tech-hired subcontractor personnel on site: Completes tasks as outlined in the project scope of work in accordance with the contract. Participates in all Tetra Tech on-site safety meetings and follows all procedures and guidelines established in this HASP, as well as the company health and safety plan and program. |
| Paul Prys | All | |

Note:

1. See next page for details on levels of protection

NOTE: Contingency level of protection section should be completed only if the upgraded level of protection is immediately available at the job site. If no contingency level of protection is denoted, all employees covered under this HASP must evacuate the immediate site area if air contaminant levels would require an upgrade of PPE.

Protective Equipment: (Indicate type or material as necessary for each task.)

| Task | Primary Level of Protection (A,B,C,D) | PPE Component Description (Primary) | Contingency Level of Protection (A, B, C, D) | PPE Component Description (Contingency) |
|------|---------------------------------------|--|--|--|
| 1 | D | Respirator type: NA Cartridge type (if applicable): NA CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: SAFETY GLASSES, HARHATS, CLASS 2 HIGH-VISIBILITY VESTS | C | Respirator type: FULL FACE Cartridge type (if applicable): OVA-P100 CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: HARDHAT |
| 2 | D | Respirator type: NA Cartridge type (if applicable): NA CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: SAFETY GLASSES, HARHATS, CLASS 2 HIGH-VISIBILITY VESTS | C | Respirator type: FULL FACE Cartridge type (if applicable): OVA-P100 CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: HARDHAT |
| 3 | D | Respirator type: NA Cartridge type (if applicable): NA CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: SAFETY GLASSES, HARHATS, CLASS 2 HIGH-VISIBILITY VESTS | C | Respirator type: FULL FACE Cartridge type (if applicable): OVA-P100 CPC material: TYVEK Glove material(s): NITRILE Boot material: LATEX OR TYVEK Other: HARDHAT |
| 4 | | Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other: | | Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other: |
| 5 | | Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other: | | Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other: |

Respirator Notes:

Respirator cartridges may only be used for a maximum time period of 8 hours or one work shift, whichever is less, and must be discarded at that time. For job sites with organic vapors, respirator cartridges may be used as described in this note as long as the concentration is less than 200 parts per million (ppm), the boiling point is greater than 70 °Celsius, and the relative humidity is less than 85 percent. If any of these levels are exceeded, a site-specific respirator cartridge change-out schedule must be developed and included in the HASP using Tetra Tech Form RP-2 (Respiratory Hazard Assessment Form)

Notes:

All levels of protection must include eye, head, and foot protection.

CPC = Chemical protective clothing

Thermoluminescent Dosimeter (TLD) Badges must be worn during all field activities on sites with radiation hazards. TLDs must be worn under CPC.

| Monitoring Equipment: All monitoring equipment on site must be calibrated before and after each use and results recorded in the site logbook | | | | |
|---|---|--|---|--|
| Instrument | Task | Instrument Reading | Action Guideline | Comments |
| Combustible gas indicator model: | <input checked="" type="checkbox"/> 1 | 0 to 10% LEL | Monitor; evacuate if confined space | <input type="checkbox"/> Not needed |
| | <input type="checkbox"/> 2 | 10 to 25% LEL | Potential explosion hazard; notify SSC | |
| | <input type="checkbox"/> 3 | | | |
| | <input type="checkbox"/> 4 | >25% LEL | Explosion hazard; interrupt task; evacuate site; notify SSC | |
| | <input type="checkbox"/> 5 | | | |
| Oxygen meter model: | <input checked="" type="checkbox"/> 1 | >23.5% Oxygen | Potential fire hazard; evacuate site | <input type="checkbox"/> Not needed |
| | <input type="checkbox"/> 2 | 23.5 to 19.5% Oxygen | Oxygen level normal | |
| | <input type="checkbox"/> 3 | <19.5% Oxygen | Oxygen deficiency; interrupt task; evacuate site; notify SSC | |
| | <input type="checkbox"/> 4 | | | |
| | <input type="checkbox"/> 5 | | | |
| Radiation survey meter model: | <input checked="" type="checkbox"/> 1 | Normal background | Proceed | <input checked="" type="checkbox"/> Annual exposure not to exceed 1,250 mrem per quarter <input checked="" type="checkbox"/> Background reading must be taken in an area known to be free of radiation sources. <input type="checkbox"/> Not needed |
| | <input type="checkbox"/> 2 | Two to three times background | Notify SSC | |
| | <input type="checkbox"/> 3 | >Three times background | Radiological hazard; interrupt task; evacuate site; notify Health Physicist | |
| | <input type="checkbox"/> 4 | | | |
| | <input type="checkbox"/> 5 | | | |
| Photoionization detector model: <input type="checkbox"/> 11.7 eV <input checked="" type="checkbox"/> 10.6 eV <input type="checkbox"/> 10.2 eV <input type="checkbox"/> 9.8 eV | <input checked="" type="checkbox"/> 1 | Any response above background to 5 ppm above background | Level C ^a is acceptable Level B is recommended | <input checked="" type="checkbox"/> These action levels are for unknown gases or vapors. After the contaminants are identified, action levels should be based on the specific contaminants involved. <input type="checkbox"/> Not needed |
| | <input type="checkbox"/> 2 | > 5 to 500 ppm above background | Level B | |
| | <input type="checkbox"/> 3 | > 500 ppm above background | Level A | |
| | | | | |
| Flame ionization detector model: | <input checked="" type="checkbox"/> 1 | Any response above background to 5 ppm above background | Level C ^a is acceptable Level B is recommended | <input checked="" type="checkbox"/> These action levels are for unknown gases or vapors. After the contaminants are identified, action levels should be based on the specific contaminants involved. <input type="checkbox"/> Not needed |
| | <input type="checkbox"/> 2 | >5 to 500 ppm above background | Level B | |
| | <input type="checkbox"/> 3 | >500 above background | Level A | |
| | | | | |
| Particulates | <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 | Nuisance dust is 5 mg/m ³ Set action level at 3.5 (Carbon Black) | Level C | <input checked="" type="checkbox"/> DataRAMs with PM 2.5s should be used to isolate the respirable fraction of particulates contained in smoke <input type="checkbox"/> Not needed |
| Detector tube models: | <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 | Specify: < ½ the PEL > ½ the PEL | Specify: Varies according to specific compound being monitored for. | <input checked="" type="checkbox"/> The action level for upgrading the level of protection is one-half of the contaminant's PEL. If the PEL is reached, evacuate the site and notify a safety specialist <input type="checkbox"/> Not needed |
| Other (specify): SPM | <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 | Specify: < ½ the PEL > ½ the PEL | Specify: Varies according to specific compound being monitored for. | The action level for upgrading the level of protection is one-half of the contaminant's PEL. If the PEL is reached, evacuate the site and notify a safety specialist <input type="checkbox"/> Not needed |

Notes:

eV= electron volt

LEL=Lower explosive limit

mrem=Millirem

PEL=Permissible exposure limit

ppm=Part per million

a. Level C may be acceptable for certain tasks in some situations. If you are uncertain whether Level C is appropriate, consult the Regional Safety Officer. Additionally, when working with unknown respiratory hazards, Level C cartridge must provide protection for organic vapors, acid gases, ammonia, amines, formaldehyde, hydrogen fluoride, and particulate aerosols.

| Project-Specific Industrial Hygiene Requirements | Emergency Contacts: Telephone No. |
|--|--|
| OSHA-Regulated Chemicals: <i>Check any present on the job site in any medium (air, water, soil)</i> <div style="margin-top: 5px;"> <input type="checkbox"/> No chemicals below are located on the job site <input type="checkbox"/> Friable Asbestos <input type="checkbox"/> OSHA-Regulated Carcinogen (found at 29 CFR 1910.1003) <input type="checkbox"/> alpha-Naphthylamine <input type="checkbox"/> Methyl chloromethyl ether <input type="checkbox"/> 3,3'-Dichlorobenzidine (and its salts) <input type="checkbox"/> bis-Chloromethyl ether <input type="checkbox"/> beta-Naphthylamine <input type="checkbox"/> Benzidine <input type="checkbox"/> 4-Aminodiphenyl <input type="checkbox"/> Ethyleneimine <input type="checkbox"/> beta-Propiolactone <input type="checkbox"/> 2-Acetylaminoflourene <input type="checkbox"/> 4-Dimethylaminoazobenzene <input type="checkbox"/> N-nitrosomethylamine <input type="checkbox"/> Vinyl chloride <input type="checkbox"/> Inorganic arsenic <input type="checkbox"/> Chromium (VI) <input type="checkbox"/> Cadmium <input checked="" type="checkbox"/> Benzene <input type="checkbox"/> Coke oven emissions <input type="checkbox"/> 1,2-Dibromo-3-chloropropane <input type="checkbox"/> Acrylonitrile <input type="checkbox"/> Ethylene oxide <input type="checkbox"/> Formaldehyde <input type="checkbox"/> Methylenedianiline <input type="checkbox"/> 1,3-Butadiene <input type="checkbox"/> Methylene chloride </div> | <div style="margin-top: 10px;"> Work Care and Incident Intervention (800) 455-6155 Tetra Tech EMI 24-hour Anonymous Hazard Reporting Line (866) 383-8070 U.S. Coast Guard National Response Center (800) 424-8802 InfoTrac (800) 535-5053 Fire department 911 Police department 911 Tetra Tech EM Inc. Personnel: Regional Safety Officer: <u>Chris Draper</u> 615.969.1334 Project Manager: <u>Leland Meadows</u> 404.217.5212 SSC: <u>Paul Prys</u> 404.849.7136 </div> <hr/> Medical and Site Emergencies: Signal a site or medical emergency with three blasts of a loud horn (car horn, fog horn, or similar device). Site personnel should evacuate to the area of safe refuge designated on the site map. Hospital Name: North Fulton Regional Hospital Hospital Address: 3000 Hospital Boulevard Roswell, GA 30076 Hospital Telephone: General – (770) 751-2500 Emergency – 911 Hospital called to verify emergency services are offered? Verified online. See page 12 for turn-by-turn directions and map |

Note: This page must be posted on site.

| Decontamination Procedures | | Emergency Response Planning |
|--|--|---|
| <p>The site safety coordinator oversees implementation of project decontamination procedures and is responsible for ensuring they are effective.</p> | | <p>During the pre-work briefing and daily tailgate safety meetings, all on-site employees will be trained in the provisions of emergency response planning, site communication systems, and site evacuation routes.</p> |
| <p>Personnel Decontamination</p> <p>Level D Decon - <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry</p> <p>Level C Decon - <input type="checkbox"/> Wet <input type="checkbox"/> Dry</p> <p>Level B Decon – Briefly outline the level B decontamination methods to be used on a separate page attached to this HASP.</p> <p>Level A Decon – A Level 3 HASP is required. Notify your regional health and safety representative and health and safety director.</p> <p>Equipment Decontamination</p> <p>All tools, equipment, and machinery from the Exclusion Zone (hot) or Contamination Reduction Zone (warm) are decontaminated in the CRZ before they are removed to the Support Zone (cold). Equipment decontamination procedures are designed to minimize the potential for hazardous skin or inhalation exposure, cross-contamination, and chemical incompatibilities.</p> <p>Respirator Decontamination</p> <p>Respirators are decontaminated in compliance with SWP 6-27 and should be included with this HASP.</p> <p>Waste Handling for Decontamination</p> <p>Procedures for decontamination waste disposal meet all applicable local, state, and federal regulations.</p> | <p>Decontamination Equipment</p> <ul style="list-style-type: none"> <input type="checkbox"/> Washtubs <input type="checkbox"/> Buckets <input type="checkbox"/> Scrub brushes <input type="checkbox"/> Pressurized sprayer <input type="checkbox"/> Detergent [Type] <input type="checkbox"/> Solvent [Type] <input type="checkbox"/> Household bleach solution [Indicate Dilution] <input type="checkbox"/> Deionized water <input type="checkbox"/> Disposable face piece sanitizer wipes <input type="checkbox"/> Facemask sanitizer powder <input type="checkbox"/> Wire brush <input type="checkbox"/> Spray bottle <input type="checkbox"/> Banner/barrier tape <input type="checkbox"/> Plastic sheeting <input type="checkbox"/> Tarps and poles <input checked="" type="checkbox"/> Trash bags <input type="checkbox"/> Trash cans <input type="checkbox"/> Duct tape <input type="checkbox"/> Paper towels <input type="checkbox"/> Folding chairs <input type="checkbox"/> Other <p>In the event of an emergency that necessitates evacuation of a work task area or the site, the following procedures will take place.</p> <ul style="list-style-type: none"> The Tetra Tech SSC will contact all nearby personnel using the on-site communications to advise the personnel of the emergency. The personnel will proceed along site roads to a safe distance upwind from the hazard source. The personnel will remain in that area until the SSC or an authorized individual provides further instructions. <p>In the event of a severe spill or a leak, site personnel will follow the procedures listed below.</p> <ul style="list-style-type: none"> Evacuate the affected area and relocate personnel to an upwind location. Inform the Tetra Tech SSC, a Tetra Tech office, and a site representative immediately. Locate the source of the spill or leak, and stop the flow if it is safe to do so. Begin containment and recovery of spilled or leaked materials. Notify appropriate local, state, and federal agencies. <p>In the event of severe weather, site personnel will follow the procedures listed below.</p> <ul style="list-style-type: none"> Site work shall not be conducted during severe weather, including high winds and lightning. In the event of severe weather, stop work, lower any equipment (drill rigs) and evacuate the affected area. Severe weather may cause heat or cold stress. Refer to SWPs 15 and 16 for information on both. <p>All work-related incidents must be reported. According to TtEMI's reporting procedures, you should:</p> <ul style="list-style-type: none"> Immediately notify your Office Health and Safety Representative, Regional Safety Officer, or Rick Ecord directly via phone. Verbally notify Rick Ecord on his cell phone at (404) 234-2834 as soon as possible (immediate notification). Complete a "Tetra Tech Incident Report" (Form IR) within 24 hours and send it to Rick Ecord in the Atlanta office. If an injury or illness has occurred, the Form IR-A and the WorkCare HIPAA form must be completed at the same time the Form IR is completed. | |

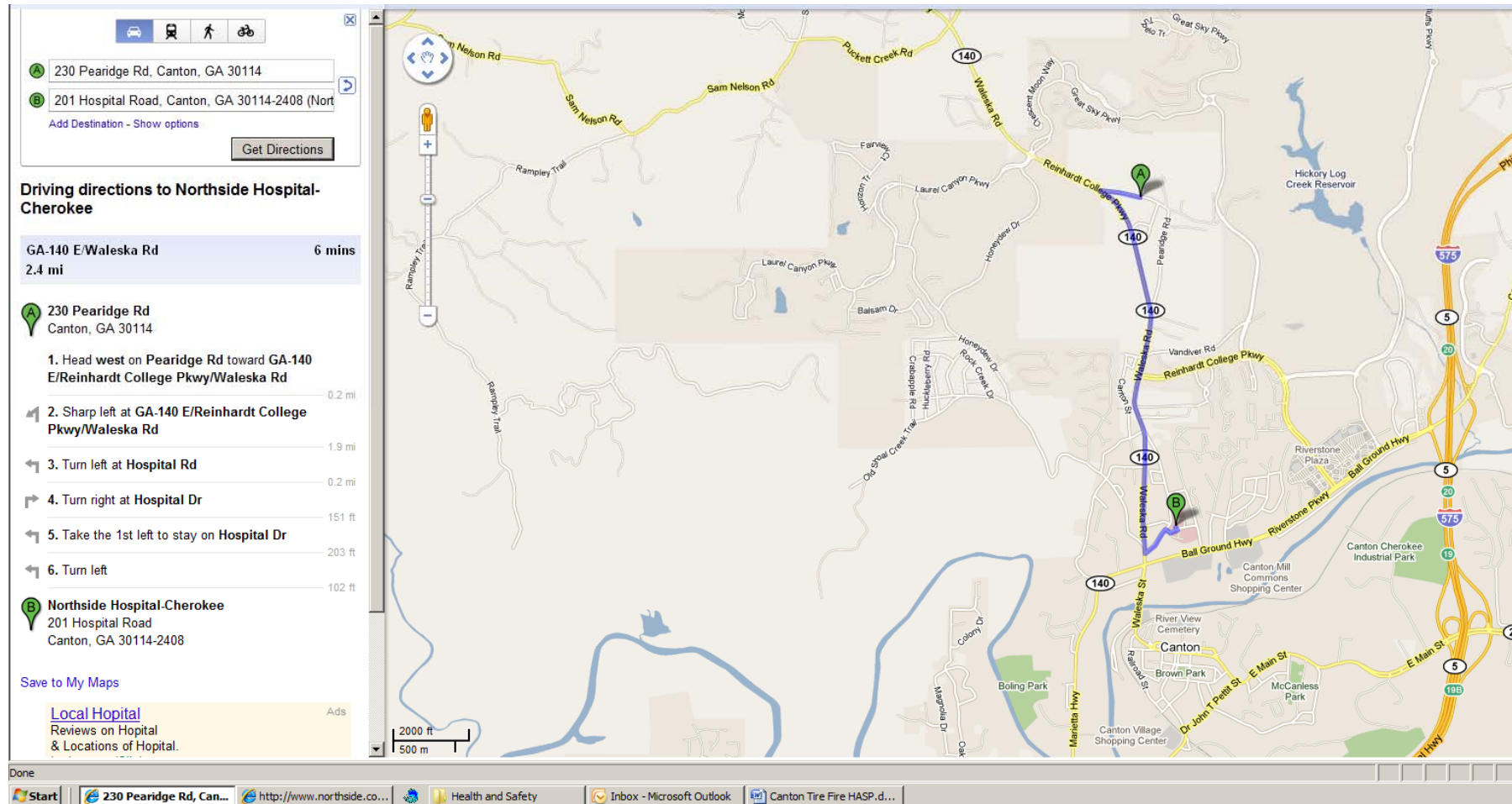
Site Map (May be drawn after crews arrive at site):

Label the following on your map:

1. Orientation
2. Wind direction
3. Evacuation route
4. Area of safe refuge
5. Exclusion zone
6. Contamination reduction zone (CRZ)
7. Support zone
8. Location(s) of hazardous materials
9. Monitoring locations
10. Sampling locations
11. Command post



Hospital Route Map (attach or insert):



Note: A dry-run should be conducted to establish a physical location associated with the map included in the HASP. Verbal verification from the hospital emergency room should also be obtained to ensure that the hospital will accept chemically contaminated patients.

APPROVAL AND SIGN-OFF FORM
Project No.: TTEMI-05-001-0150

I have read, understood, and agree with the information set forth in this Health and Safety Plan and will follow the direction of the Site Safety Coordinator as well as procedures and guidelines established in the Tetra Tech, Inc., Health and Safety Manual. I understand the training and medical requirements for conducting field work and have met these requirements.

Tetra Tech has prepared this plan solely for the purpose of the health and safety protection of Tetra Tech employees. Subcontractors, visitors, and others at the site, while required to read and follow the provisions outlined in this plan at a minimum, should refer to their safety program for specific information related to their health and safety protection.

Leland J. Muna
Name

[Signature]
Signature

3/14/11
Date

Name

Signature

Date

Name

Signature

Date

Name

Signature

Date

[Signature]
Site Safety Coordinator Approval Signature

3/14/11
Date

Leland J. Muna
Project Manager Approval Signature

3/14/11
Date

Note:

Use Additional sheets as necessary to ensure that all personnel, including subcontractor SSC, signs and affirms this document.

Guidance in the *START Health and Safety Plan Approval Procedures*, dated September 19, 2001, must be followed by personnel who prepare and approve any Level 2 HASP.



DEFINITIONS AND NOTES

Emergency Contacts

Work Care - For issues requiring an Occupational Health Physician; assistance is available 24 hours per day, 7 days per week.

InfoTrac — For issues related to incidents involving the transportation of hazardous chemicals; this hotline provides accident assistance 24 hours per day, 7 days per week

U.S. Coast Guard National Response Center — For issues related to spill containment, cleanup, and damage assessment; this hotline will direct spill information to the appropriate state or region

Limitations:

The Level-Two HASP is not appropriate in some cases:

- **Projects involving unexploded ordnance (UXO), radiation sources as the primary hazard, or known chemical/biological weapons site must employ the Level 3 HASP**
- **Projects of duration longer than 1 month must employ the Level 3 HASP**
- **Projects with more than five tasks must employ the Level 3 HASP**

Decontamination:

Decontamination Solutions for Chemical and Biological Warfare Agents^a: PPE and equipment can be decontaminated using 0.5 percent bleach (1 gallon laundry bleach to 9 gallons water) for biological agents (15 minutes of contact time for anthrax spores; 3 minutes for others) followed by water rinse for chemical and biological agents. In the absence of bleach, dry powders such as soap detergents, earth, and flour can be used. The powders should be applied and then wiped off using wet tissue paper. Finally, water and water/soap solutions can be used to physically remove or dilute chemical and biological agents. Do not use bleach solution on bare skin; use soap and water instead. Protect decontamination workers from exposure to bleach.

Decontamination for Radiological and Other Chemicals: Primary decontamination should use Alconox and water unless otherwise specified in chemical specific information resources. The effectiveness of radiation decontamination should be checked using a radiation survey instrument. Decontamination procedures should be repeated until the radiation meter reads less than 100 counts per minute over a 100-square-centimeter area when the probe is held 1 centimeter from the surface and moving slower than 2.5 centimeters per second.

Decontamination Corridor: The decontamination setup can be adjusted to meet the needs of the situation. The Level A decontamination setup is included on Page 10 because it is the most complicated and critical. The decontamination procedures can be altered to meet the needs of the specific situation when compound- and site-specific information is available.

Decontamination Waste: All disposable equipment, clothing, and decontamination solutions will be double-bagged or containerized in an acceptable manner and disposed of with investigation-derived waste.

Decontamination Personnel: Decontamination personnel should dress in the same level of PPE or one level below the entry team PPE level.

All investigation-derived waste should be left on site with the permission of the property owner and the EPA on-scene coordinator. In some instances, another contractor will dispose of decontamination waste and investigation-derived waste. DO NOT place waste in regular trash. DO NOT dispose of waste until proper procedures are established.

Notes:

^a Source: Jane's Information Group. 2002. *Jane's Chem-Bio Handbook*. Page 39.