

	COMPANY HEALTH AND SAFETY PROGRAM	
	Document No. 7.6	Date: August 17, 2006
	Bloodborne Pathogens Program	Revision: 0

1.0 PURPOSE

The purpose of the Bloodborne Pathogens Program is to provide controls that reduce the likelihood of exposure to pathogenic microorganisms through the requirements set forth in this program and control plan. The minimum requirements needed to protect HES personnel from hazards associated with Bloodborne Pathogens are presented in this program and control plan.

2.0 SCOPE

This program applies to all HES projects, which may involve exposure to infectious materials that result from the performance of an employee's duties and are subject to the provisions of 29 CFR 1910.1030. The exposure control plan (ECP) included within will include:

- Determination of employee exposure
- Implementation of various methods of exposure control, including:
 - Universal precautions
 - Engineering and work practice controls
 - Personal protective equipment
 - Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding exposure incidents

3.0 PROGRAM MAINTENANCE

This program and ECP will be maintained by the Health & Safety Manager and approved by the Director, Environmental Services with each new revision.

4.0 DEFINITIONS

Many of the terms used in this program have been defined in 29 CFR 1910.1030. The following terms are commonly used:

- *Blood* – Human blood, human blood components, and products made from human blood.
- *Bloodborne Pathogen* – Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
- *Exposure Incident* – A specific eye, mouth, other mucous membrane, non-intact skin, or parental contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

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- *Occupational Exposure* – Reasonably anticipated skin, eye, mucous membrane, or parental contact with blood or other potentially infectious materials that may result from the performance of an employee’s duties.
- *Other Potentially Infectious Materials* – includes the following:
 1. Human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
 2. Any unfixed tissue or organ (other than intact skin) from a human;
 3. HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.
- *Parenteral* – Piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.
- *Regulated Waste* – Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.
- *Sterilize* – The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.
- *Universal Precautions* – An approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HIB, and other bloodborne pathogens.

5.0 RESPONSIBILITIES

HES will implement the necessary measures to eliminate and minimize exposures to bloodborne pathogens. Those employees (First Aid/CPR trained) who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices as defined. The proper PPE will be provided to employees along with the appropriate training to use that equipment.

The Health and Safety Manager will provide and maintain all necessary PPE, engineering controls (e.g., sharps containers), labels, and red bags as required by the standard. The Project Managers will ensure that adequate supplies of the aforementioned equipment are available through support of the Health and Safety Manager. The Health and Safety Manager will also be responsible for ensuring that all medical actions required by the standard are performed and that appropriate records are maintained. Training documentation and making the ECP available to employees will also be done.

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6.0 EMPLOYEE EXPOSURE DETERMINATION

The following is a list of job classifications at our company in which employees have occupational exposure:

<u>Job Title</u>	<u>Department/Location</u>
Health and Safety Manager	Safety/HR/Office/Field
Site Safety Officer	Safety/HR/Office/Field
Transportation & Disposal Coordinator	Remediation/Office/Field
Professional/Field/QC Engineer	Remediation/Office/Field
Industrial Hygiene Director	Safety/Office/Field
Director/Project Manager	Remediation/Office/Field
Air Monitoring Technician	Safety/Office/Field
Sampling Technician	Remediation/Office/Field
Field Superintendent	Remediation/Field
Field Foreman	Remediation/Field
Remediation Operator/Oiler	Remediation/Field
Remediation Laborer	Remediation/Field
Remediation Driver	Remediation/Field
Mechanic/Welder	Remediation/Shop/Field
Driller/Carpenter/Welder	Remediation/Shop/Field

The following is a list of job classifications at our company in which some employees at our establishment have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals:

<u>Job Title</u>	<u>Department/Location</u>	<u>Task/Procedure</u>
Housekeeping	Accounting/Office	Handling potential Regulated Waste Cleaning restrooms
Field Clerk	Remediation/Office/Field	Clerical/Field Office
Cost/Schedule Engineer	Remediation/Office/Field	Tracking/Field Office
Survey Crew	Remediation/Office/Field	Survey/Office/Field
Shop Steward	HR/Office/Field	HR/Shop/Field Office

NOTE: Only First Aid and CPR trained personnel are recognized as being occupationally exposed and can directly respond as a first responder to a fellow injured employee. If not a First Aid and CPR trained person then remain clear of injured and call for the Health and Safety Manager and emergency services immediately.

7.0 METHODS OF CONTROL

Universal precautions will be observed to prevent contact with blood or other potentially infectious materials. When differentiation between body fluid types is difficult or impossible, all body fluids are to be considered potentially infectious materials.

Engineering and work practice controls will be used to eliminate or minimize employee exposure. Whenever occupational exposure remains after institution of these controls, PPE will be used.

The following work practice controls will be implemented, when feasible:

- Readily accessible hand washing facilities will be provided.
- When hand washing facilities are not feasible, an appropriate antiseptic hand cleanser in conjunction with paper towels or towelettes will be used. In this case, hands are to be washed with soap and water as soon as feasible.
- Employees will wash their hands as soon as feasible after removal of gloves or other PPE.
- Employees will wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious material.
- Contaminated needles or other contaminated sharps will not be handled directly by employees thereby eliminating this exposure.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure (e.g. injury event in the work area).
- All procedures involving blood or other potentially infectious materials will be performed in a manner as to minimize splashing, spraying, spattering, and generation of droplets of the substances.
- Containerization will be in accordance with the standard.
- Changes in the engineering controls and work practices will be addressed as issues arise and better recommendations by personnel are reviewed.
- New procedures and products will be evaluated periodically.

PPE is provided to employees at no cost for use when there is an occupational exposure. PPE will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the PPE will be

used.

PPE will be repaired or replaced as needed to maintain its effectiveness. PPE will be disposed of accordingly. If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) must be removed immediately or as soon as feasible. All PPE must be removed before leaving the work area and specifically the incident location. When PPE is removed it must be placed in an appropriately designated area or container (e.g. red bags) for storage, washing, decontamination or disposal. This will be coordinated through the Waste Compliance Manager and Health and Safety Manager.

A Bloodborne Pathogens Kit will be located in each company vehicle and available to First Aid/CPR trained exposed personnel if needed. The kit will include, but is not limited to the following:

Gloves Gown CPR pack Clean-up towels
Antiseptic cleansing wipes Biohazard bag Eye shield

Housekeeping involving blood related cleanup activities will be handled by designated personnel. In the office and on field work sites, the cleanup will be coordinated through the Waste Compliance Manager and/or Health and Safety Manager direction.

Contaminated working surfaces and equipment will be decontaminated with an appropriate disinfectant after completion of cleanup procedures immediately or as soon as feasible.

Response and Cleanup procedures include, but are not limited to the following:

1. Access a Bloodborne Pathogens Kit for required PPE and cleanup supplies.
2. Upon the identification of blood or the potential for exposure immediately, contact the Waste Compliance Manager and/or Health and Safety Officer.
3. Only First Aid/CPR trained personnel should confirm affected personnel's and surrounding areas condition. Upon identification of injured, scene survey, and consent to care assess the victim.
4. If the injury or illness is minor treat accordingly, but if it is life-threatening notify emergency services (911) and the Health and Safety Manager.
5. Upon stabilization begin cleanup using appropriate disinfectant (e.g. bleach) and containerize the cleaning materials and waste in an appropriate red bag, etc. for disposal.
6. PPE is to be containerized in a separate appropriate red bag for disposal.

7. Personnel hands and any exposed skin is to be washed with antiseptic wipes or soap and water and if antiseptic wipes are used soap and water must be used as soon as possible to final clean.

8.0 HEPATITIS B VACCINATION

The Health and Safety Manager will provide training to employees on hepatitis B vaccinations, addressing safety, benefits, methods of administration, and availability. Further clarification will be provided by the contract/project specific General Practitioner (GP) or Physician or authorized staff member at the Occupational Health Clinic used as the company provider.

The hepatitis B vaccine and vaccination series is available to all employees who have occupational exposure (e.g. First Aid/CPR trained personnel) and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

Vaccinations will be provided by the contract/project specific General Practitioner (GP) or Physician or authorized staff member at the Occupational Health Clinic used as the company provider.

Employees who decline to accept the hepatitis B vaccination offered by the company must sign the Declination Statement included near the end of this document.

9.0 POST-EXPOSURE EVALUATION AND FOLLOW-UP

In the event an exposure incident occurs, contact the Health and Safety Manager at the office. An immediately available confidential medical evaluation and follow-up will be conducted by the company's occupational health provider. Following initial first aid (clean the wound, flush eyes or mucous membranes if affected, etc.), the following activities will be performed:

- Documentation of the route(s) of exposure and how the exposure occurred.
- Identify and document the source individual (unless the company can establish that identification is infeasible or prohibited by law).
- Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
- If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
- Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and

regulations concerning the identity and infectious status of the source individual (e.g. laws protecting confidentiality).

- After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status.
- If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, testing will be performed as soon as feasible.

The Health and Safety Manager will ensure that the occupational health care professional(s) responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up is aware of where to get a copy of the OSHA bloodborne pathogens standard.

The Health and Safety Manager will ensure that the occupational health care physician evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident,
- Route(s) of exposure,
- Circumstances of exposure,
- If possible, results of the source individual's blood test,
- And relevant employee medical records, including vaccination status

The Health and Safety Manager will provide the employee with a copy of the evaluating occupational health care physician's written opinion within 15 days after completion of the evaluation.

10.0 EMPLOYEE TRAINING

Employees who have occupational exposure to bloodborne pathogens (First Aid/CPR trained personnel) will receive initial and annual training conducted by the Health and Safety Manager.

The training will cover, at a minimum, the following:

- An accessible copy and explanation of the OSHA bloodborne pathogen standard,
- An explanation of the epidemiology and symptoms of bloodborne diseases,

- An explanation of the modes of transmission of bloodborne pathogens,
- An explanation of the ECP and how to obtain a copy,
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials,
- An explanation of the use and limitations of engineering controls, work practices, and PPE,
- Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment,
- An explanation of the basis for PPE selection
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination is free,
- Information on the appropriate actions to take and the persons to contact in an emergency involving blood or other potentially infectious materials,
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available,
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident,
- Only red bags or containers are anticipated as being used, if needed.

11.0 EVALUATION OF CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT

The Health and Safety Manager will review the circumstances of exposure incidents to determine the following:

- Engineering controls in use at the time,
- Work practices followed,
- A description of the device being used (including type and brand),
- Protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shield, safety glasses, etc.),
- Location of the incident (O.R., E.R., patient room, clinic, etc.),
- Procedure being performed when the incident occurred,

- Employee's training

If a revision to the ECP is necessary, the Health and Safety Manager will ensure that appropriate changes are made.

12.0 RECORDKEEPING

Training records are completed for employees upon completion of training. The documents will be kept for at least three years. The training records include the following:

- The date(s) of the training session,
- The contents or a summary of the training session,
- The names and qualifications of persons conducting the training,
- And the names and job titles of persons attending the training session.

Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, "Access to Employee Exposure and Medical Records."

The Health and Safety Manager is responsible for maintenance of the required medical records. These confidential records are kept at the main office in a secured location for at least the duration of employment plus 30 years.

Employee medical records are provided upon written request of the employee or to anyone having written consent of the employee within 15 working days. The requests should be sent to the Health and Safety Manager.

Hepatitis B Vaccine Declination

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Name: _____

Date: _____

Signature: _____

