Background and Purpose of the Following Draft Reclamation Safety and Health Standards (RSHS)

The RSHS are being updated by the Bureau of Reclamation Safety and Occupational Health Office to reflect new guidance from Reclamation, the Department of the Interior, and the Occupational Safety and Health Administration. This public release is intended to provide the public an opportunity to comment on each updated section in draft form. This process will enhance transparency and eliminate potential confusion about Reclamation’s safety standards.

The RSHS are incorporated into the Reclamation Manual through SAF 01-01, *Occupational Safety and Health Directive – General*. The Reclamation Manual is used to clarify program responsibility and authority and to document Reclamation-wide methods of doing business. All requirements in the Reclamation Manual are mandatory for Reclamation employees.

See the following pages for the draft RSHS.
Section 35

Bloodborne Pathogens

35.1 Scope
This section establishes the safety requirements, guidelines, and precautions for personnel who may have contact with human blood products and possible exposure to bloodborne pathogens (BBP).

35.2 General Requirements
Occupational exposure to blood or other potentially infectious materials (OPIM) is regulated by Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1030, Bloodborne Pathogens.

35.3 Responsibilities

35.3.1 Area Office Managers
35.3.1.1 Shall delegate, in writing, the area office program coordinator (PC) for BBP.

35.3.2 Area Office Program Coordinator
35.3.2.1 Shall identify job classifications and tasks with an increased risk of occupational exposure to blood, OPIM, or BBP.
35.3.2.2 Shall annually review and update the Exposure Control Plan (ECP).
35.3.2.3 Shall develop/provide/coordinate initial training for tasks with possible occupational exposure, annually thereafter, and when changes in tasks or procedures occur.
35.3.2.4 Shall coordinate the pick-up/disposal of all regulated waste.
35.3.2.5 Shall regularly schedule reviews of existing engineering controls for adequacy and investigate new engineering controls as feasible and/or necessary.
35.3.2.6 Shall send all required medical documentation (see 35.4.3.1) to Human Resources for retention in the exposed employees personnel files.
35.3.2.7 Shall assess and select personal protective equipment (PPE) for tasks where occupational exposure may occur.
35.3.2.8 Shall ensure the purchase of BBP kits with PPE and supplies for all occupational exposure tasks.
### 35.3.3 First-Line Supervisors

35.3.3.1 Shall ensure all affected employees complete the required training in paragraph 35.4.

35.3.3.2 Shall provide and train employees in the use of required PPE.

35.3.3.3 Shall ensure employees follow the ECP.

35.3.3.4 Shall immediately notify the PC when an employee has contact with blood, body fluids, or OPIM.

35.3.3.5 Shall contact the PC to restock BBP kits.

35.3.3.6 Shall ensure all BBP exposures are entered into the Safety Management Information System (SMIS).

35.3.3.7 Shall review any BBP exposure reports from their employees in SMIS.

35.3.3.8 Shall ensure clean and sanitary worksites per the ECP.

### 35.3.4 Employees

35.3.4.1 Shall complete BBP training prior to participating in tasks which will or may have occupational exposure.

35.3.4.2 Shall wear the ECPs PPE for occupational exposure tasks or procedures.

35.3.4.3 Shall immediately notify the first-line supervisor of contact with blood, body fluids, or OPIM.

35.3.4.4 Shall complete exposure incident documentation after contact with blood or OPIM (see 35.7.6).

35.3.4.5 Shall enter all BBP exposures in SMIS.

### 35.4 Training Requirements

#### 35.4.1 Initial

35.4.1.1 General. Upon initial job assignment, all employees must receive basic BBP training and be trained on how to reduce risks of exposure. The training must include tasks with increased risk, the universal precautions about self-protection, where to find the ECP, and exposure reporting procedures. If BBP is a module of a separate training, such as First Aid/Cardiopulmonary Resuscitation (CPR), it meets the requirements of this section.
35.4.1.2 Employees with Increased Risk of Exposure. Initial training for employees with occupational exposure must include the following:

- 29 CFR 1910.1030 bloodborne pathogen standard;
- bloodborne diseases and their transmissions (a general discussion);
- ECP;
- engineering and work practice controls;
- PPE;
- Hepatitis B virus (HBV);
- Hepatitis C virus (HCV);
- response to emergencies involving blood;
- how to handle exposure incidents;
- proper handling and disposal methods of infectious waste;
- post-exposure evaluation and follow-up program; and
- biohazard labels and waste containers.

35.4.2 Refresher/Recertification
Employees with increased risk of exposure must complete refresher training annually and when changes, such as administrative or work practice controls and/or modification of tasks or procedures, contribute to the employee’s occupational exposure.

35.4.3 Recordkeeping
35.4.3.1 Medical Records. Retain the exposed employee’s medical records in the official Department of the Interior (DOI) personnel repository for the duration of employment and for 30 years after separation. Keep records of HBV vaccination status (including dates), results of any examinations, a copy of the health care professional’s written opinion, and a copy of information provided to the health care professional.

35.4.3.2 Training Records. All Reclamation training records shall be kept in the DOI official repository. Training records must include dates, contents of the training program or a summary, trainer’s name and qualifications, and the names and job titles of all people attending.

35.4.3.3 Sharps Injury Log. Maintain a sharps injury log for percutaneous injuries from contaminated sharps and record incidents in the log in such a manner as to protect the confidentiality of the injured employee. The log must contain the type and brand of device, the department or work area where the exposure incident occurred, and an explanation of how the incident occurred.

35.4.3.4 Safety Management Information System Reporting. Report bloodborne pathogen exposures as personal injuries in the SMIS. If the exposure is a known infectious exposure, enter as a standard injury report through the standard injury
reporting process. If the exposure outcome is unknown, enter using the exposure module, until the outcome is known.

35.5 Hazard Identification, Assessment, and Safety Measures

35.5.1 Exposure Determination
The PC shall complete an exposure determination, which includes lists of all job classifications and specific tasks and procedures with confirmed and possible occupational exposure. Make this exposure determination without regard to PPE.

35.5.2 Exposure Control Plan
The PC shall develop and implement an ECP for employees with confirmed and possible occupational exposure. The plan must be accessible to all affected employees. The ECP must include:

- the exposure determination based on the tasks, procedures, and job classifications;
- the schedule and methods of compliance (universal precautions, work practices, and/or engineering controls);
- procedures for evaluating circumstances surrounding exposure incidents;
- HBV vaccination, post-exposure and follow-up evaluations;
- communication of hazards to employees; and
- recordkeeping.

The PC shall review and update the plan, at a minimum, annually to reflect changes in technology which reduce or eliminate exposure to BBP. Document consideration and implementation of commercially available and safer medical devices designed to eliminate or minimize occupational exposure.

35.6 Personal Protective Equipment
First-line supervisors shall provide and train employees in the use of required PPE to eliminate or minimize the risk of infectious material entering employees’ bodies. PPE must prohibit OPIM from reaching the employees’ outer clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use.

35.6.1 Gloves
Provide hand protection (e.g., disposable (single use) gloves) whenever contact with blood or OPIM is possible.

35.6.2 Masks, Eye Protection, and Face Shields
Use a combination of masks, eye protection, and face shields whenever splashes, spray, or droplets of infectious materials can occur.

35.6.3 **Gowns, Aprons, and Other Protective Clothing**
Wear gowns, aprons, and other protective clothing when splashing of OPIM fluids is possible.

35.6.4 **Resuscitation Equipment**
Provide CPR mouthpieces, pocket masks, resuscitation bags, or other ventilation equipment to eliminate direct mouth-to-mouth contact.

35.6.5 **Contamination**
Do not wear PPE if it has lost its effectiveness for protecting employees from BBP hazards. Repair and/or replace PPE at no cost to the employee. Remove all potentially contaminated PPE prior to leaving the work area or accident/incident site, if possible, and place it in a biohazard waste container for disposal or decontamination.

35.7 **Safe Practices**

35.7.1 **Universal Precautions**
All employees must use universal precautions when any contact with blood or OPIM is possible. Treat all human blood and OPIM as if they are infectious for HBV, HCV, human immunodeficiency virus (HIV), and other BBPs. Consider all body fluids infectious in situations where it is hard or impossible to differentiate between types. Use the following methods to eliminate or reduce risk for transmission of BBP:

- wash hands frequently and use disposable garments;
- select gloves for the hazards of a specific job;
- avoid spray or splash of body fluids; and
- label and package contaminated wastes properly.

35.7.2 **Cleanup of Contaminated Areas**
Use PPE when disinfecting contaminated areas. Clean up methods must prevent physical injury from direct handling of broken glass, needles, or other sharps. Dispose of infectious waste using an approved contractor in accordance with Federal, state, and local regulations.

35.7.3 **Handling Contaminated Materials**
Immediately discard contaminated materials in a closable, puncture-resistant, leakproof, and properly labeled container. Contaminated materials containers must be easily accessible, upright, and near sharps use locations. Do not allow containers to overfill. Employees
handling contaminated materials must not press down, smash, step on, or otherwise compress any regulated waste containers.

35.7.4 Container Labeling
Affix warning labels to regulated waste containers. Labels shall meet the specific requirements of 29 CFR 910.1030(g)(1)(i).

35.7.5 Methods of Compliance
Following universal precautions and implementing engineering controls and work practices, will effectively aid in eliminating or minimizing exposure to employees.

35.7.5.1 Engineering Controls and Work Practices. As the primary means of eliminating or minimizing employee exposure, engineering controls and work practices shall isolate or remove BBP hazards from the work environment.

35.7.5.2 Housekeeping. In the ECP, the PC shall include a schedule and method for cleaning and decontamination based on the location within the facility, surfaces and waste to clean, and tasks or procedures performed in that location. First-line supervisors shall ensure clean and sanitary worksites per the ECP.

35.7.5.3 Specific Requirements for Contaminated Work Surfaces. If an incident occurs, block off access to the area until clean-up and decontamination is complete. Immediately, or as soon as feasible, clean and decontaminate work surfaces when blood or OPIM spills. Dispose of all contaminated cleaning materials and PPE in biohazard waste containers.

35.7.5.4 Laundry. Remove and dispose of contaminated clothing as soon as possible. Contaminated fire-rated and arc-rated clothing shall be cleaned following manufacturer’s instructions.

35.7.5.5 Regulated Wastes/Medical Wastes. Separate medical/infectious wastes from other wastes at the point of origin. Examples of regulated wastes are used needles, disposable resuscitators, used bandages (blood soaked), and contaminated PPE. Dispose of all regulated wastes according to Federal, state, and local regulations.

35.7.5.6 Biohazard Waste Labels. Labels will be fluorescent orange or orange red with lettering and symbols in a contrasting color. It is possible to substitute red bags or containers for labels.

35.7.6 Exposure Incident Documentation
Report all exposure incidents involving the presence of blood or OPIM to the employee’s first-line supervisor and local safety professional as soon as possible. The incident must be recorded in the SMIS.

35.7.6.1 **Non-specific Exposure.** The HBV vaccination series must be available as soon as possible, but not later than 24 hours, to all unvaccinated first aid providers that assist in situations with blood or OPIM regardless of whether a specific exposure incident occurred.

35.7.6.2 **No Cost to the Employee.** All medical evaluations and procedures including the HBV vaccine, vaccination series, prophylaxis, and post-exposure evaluations and follow-ups will be available at a reasonable time and place; performed by, or under the supervision of, a licensed physician or other licensed health care professional; and at no cost to the employee.

35.7.6.3 **Follow-up.** Following an exposure incident, the local safety professional shall coordinate a confidential medical evaluation and follow-up.

35.7.6.3.1 **Source Individual.** Obtain consent to test the source individual’s blood as soon as feasible in order to determine HBV, HCV, and HIV infectivity. If consent is not obtained, Reclamation shall establish that legally required consent cannot be obtained.

35.7.6.3.2 **Results.** Inform the exposed employee about disclosure laws and regulations concerning the identity and infectious status of the source individual and provide the results of the source individual’s testing to the exposed employee. If the employee consents to baseline blood collection, but does not consent to HIV testing, the sample shall be preserved for at least 90 days. The employee has the right to change consent within the 90-day time frame of HIV testing.

35.7.7 **HBV Vaccination and Post-Exposure Evaluation Follow-up**
The local safety professional will ensure the HBV vaccine and vaccination series are available to all employees with occupational exposure, as well as, post-exposure evaluation and follow-up for BBP exposure.

35.7.7.1 **HBV Vaccination.** The vaccination shall be made available after the employee has received training on the HBV vaccine, its efficacy, safety, method of administration, and the benefits of being vaccinated. The vaccination is provided free of charge to all employees with occupational exposure within 10 working days of initial assignment. If the employee initially declines the vaccination, they can decide later to accept the vaccination. Any employee that declines the vaccination must sign a statement and which will be retained in their medical file (29 CFR 1910.1030).
35.8 Definitions

**Contaminated**
Presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

**Engineering Controls**
Help isolate or remove the bloodborne pathogen hazard from the workplace. Controls include but are not limited to proper storage facilities and containers, syringes designed to prevent accidental needle sticks, autoclaves, and disinfectant equipment.

**Exposure Incident**
Specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials during the performance of an employee’s duties.

**Blood**
Human blood, human blood components, and products made from human blood.

**Bloodborne Pathogens (BBP)**
Pathogenic microorganisms present in human blood which cause disease in humans (e.g., HIV, Hepatitis B, etc.).

**Hepatitis**
A bloodborne viral disease that has an incubation period of 2 weeks to 5 months, depending on the type. Hepatitis results in inflammation of the liver in varying severity. Hepatitis is transmitted through fecal contamination or ingested material, skin penetration by infected objects (needles), injection of contaminated blood or blood products, and contamination of mucous membranes (eyes, mouth). There are three types of Hepatitis – A, B, and C. Hepatitis A (HAV) - is excreted in the feces and is generally introduced to the body via the oral route. Hepatitis B (HBV) – is contained in the blood and other body fluids. It is transmitted by exposure to blood or body fluids by through the mucous membranes, non-intact skin, and directly into the blood stream (parenteral route). Hepatitis C (HCV) – is also contained in blood but is mainly transmitted through a blood transfusion.

**Human Immunodeficiency Virus (HIV)**
A virus that attacks cells which help the body fight infection, making a person more vulnerable to other infections and diseases.

**Medical/Infectious Wastes**
All waste emanating from human or animal tissues, blood or blood products, or fluids. This includes used first aid bandages, syringes, needles, sharps, material used in spill cleanup, and contaminated PPE or clothing.
Reclamation Safety and Health Standards
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Section 35: Bloodborne Pathogens

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<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Occupational Exposure</strong></td>
<td>Any reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials which may result from the performance of an employee’s duties.</td>
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<tr>
<td><strong>Other Potentially Infectious Materials (OPIM)</strong></td>
<td>Includes synovial fluid, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, semen, vaginal secretions, saliva in dental procedures, any body fluids visibly contaminated with blood such as saliva or vomit, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response.</td>
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<tr>
<td><strong>Parenteral Contact</strong></td>
<td>Piercing of mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.</td>
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<td><strong>Percutaneous</strong></td>
<td>Made, done, or effected through the skin.</td>
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<tr>
<td><strong>Personal Protective Equipment (PPE)</strong></td>
<td>Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be PPE.</td>
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<tr>
<td><strong>Regulated Waste</strong></td>
<td>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.</td>
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<tr>
<td><strong>Contaminated Sharps</strong></td>
<td>Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.</td>
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<tr>
<td><strong>Sharps Injury</strong></td>
<td>Any injury caused by a sharp, including, but not limited to, cuts, abrasions, or needlesticks.</td>
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<tr>
<td><strong>Source Individual</strong></td>
<td>Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.</td>
</tr>
<tr>
<td><strong>Universal Precautions</strong></td>
<td>Practice of treating all human blood and certain body fluids as if known to be infectious for HIV, HBV, HCV and other bloodborne pathogens.</td>
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<tr>
<td><strong>Work Practice Controls</strong></td>
<td>Reduce the likelihood of exposure by altering the way a task is performed (e.g., wearing gloves and/or other PPE).</td>
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### 35.9 References

Occupational Safety and Health Administration (OSHA).  

Occupational Safety and Health Administration (OSHA). 1910 Subpart Z toxic and Hazardous Substances, 1910.1030 App A Hepatitis B Vaccine Declination (Mandatory).  