

BLOODBORNE PATHOGENS EXPOSURE
CONTROL PLAN

SURE-WAY SYSTEMS, INC.
SURE-WAY TRANSPORTATION, INC.
SURE-WAY SHARPS DISPOSAL SERVICE
Amended

OCTOBER, 2004



BIOHAZARD

In accordance with OSHA Bloodborne Pathogens standard the following exposure control plan has been developed and implemented:

PURPOSE

To establish responsibilities and procedures for the protection of personnel from bloodborne pathogens, i.e. HIV and HBV.

OBJECTIVES

- A. To protect personnel from the health hazards associated with bloodborne pathogens.
- B. To provide appropriate treatment and counseling should an employee be exposed to bloodborne pathogens.
- C. To reduce the risk of being infected by bloodborne pathogens.
- D. To comply with OSHA regulation.

DEFINITIONS

Blood means human blood, its components and products created from human blood.

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause diseases in humans. These pathogens include, but are not limited to, Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV).

Bodily Substance Isolation, is equivalent to Universal Precautions, is an infection control system where all body substances are considered to be potentially infectious.

Cerebrospinal pertains to the brain and spinal cord.

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

Contaminated laundry is laundry which has been soiled with blood or other potentially infectious materials or which may contain sharps.

Contaminated Sharps means any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken capillary tubes, and exposed ends of dental wires.

Decontamination means the use of physical, thermal or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles, and rendering the surface or item safe for handling, use, or disposal.

Engineering Controls means controls (i.e. sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogenic hazard from the workplace.

Exposure Incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

Gloves refers to "latex type" gloves designed to provide limited protection for existing abrasions and cuts, on the hands, during emergency operations and station/equipment cleaning, by providing a barrier against bodily fluids and disinfectants.

Handwashing Facility means an adequate supply of waterless soap or potable running water, single use towels or hot air drying machines.

HBV means Hepatitis B Virus.

HIV means Human Immunodeficiency Virus Type-1

Leakproof Bags are bags that are sufficiently sturdy to prevent tearing or breaking and can be sealed securely to prevent leakage. Such bags are red in color and/or display the universal biohazard symbol.

Occupational Exposure means reasonably anticipated exposure to skin, eye, mucous membrane, or parenterally infectious materials that may result from the performance of job related duties.

Other Potentially Infectious Materials refers to the following human body fluids: semen, vaginal secretions, cerebrospinal fluid, pleural fluid, peritoneal fluid, pericardial fluid, synovial 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; and

* Any unaffixed tissue or organ (other than intact skin) from a human (living or dead); and

* HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV containing culture medium or other solutions.

Parenteral refers to piercing mucous membrane or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Pathogens refers to any disease-producing microorganism or material.

Personal Protective Equipment (PPE) is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (i.e. uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are **not** considered to be personal protective equipment (PPE).

Regulated Waste refers to 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.

Source Individual means any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure. Examples include, but are not limited to, hospital and clinic patients, trauma victims, clients of drug and alcohol facilities, and human remains.

Sterilize refers to the use of a physical, thermal or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal Precautions is 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 with HIV, HBV, and other bloodborne pathogens.

Work Practice Controls are controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique, removal of contaminated clothing prior to leaving work site or as soon as feasible).

1. Exposure Determination

OSHA requires employers to perform an exposure determination to identify which employees may incur occupational exposure to blood or other potentially infectious materials. This exposure determination is made without regard to the use of personal protective equipment, (i.e. employees are considered exposed even if wearing personal protective equipment.) . This exposure determination is required to list all job classifications in which employees may be expected to incur such occupational exposure, regardless of frequency. Sure-Way Systems, Inc. considers the following job classifications in this category:

- A. Plant personnel:
 - a. Plant Manager
 - b. Plant Operator(s) / Technicians
 - c. Plant Laborer(s)
- B. Transportation personnel:
 - a. Transportation Manager
 - b. Collection Technician(s) (drivers)
- C. Sharps personnel:
 - a. Sharps Manager
 - b. Sharps Operator(s) / Technician(s)

2. Implementation Schedule and Methodology

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of this standard. The following complies with this requirement:

Compliance Methods

Universal precautions will be observed by Sure-Way Systems, Inc. personnel, Sure-Way Sharps Disposal Service personnel, Sure-Way Transportation, Inc. personnel (hereafter referred to as "Sure-Way employees" or "personnel") to prevent contact with blood or other potentially infectious substances. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source.

Work practice and engineering controls will be utilized to minimize and/or eliminate exposure to all personnel. Where occupational exposure remains after the institution of these controls, personal protective equipment will be utilized.

- A. Handwashing and shower facilities will be made available. All employees shall wash their hands and other exposed or potentially exposed skin with soap and water or antiseptic solutions, or flush with water as soon as possible following contact with blood or other potentially infectious materials.
- B. Contaminated needles and other contaminated sharps shall be placed immediately in appropriate containers for disposal.
- C. Eating, drinking, smoking, applying cosmetics (to include lip balms), and contact lens handling are prohibited in areas where there is a reasonable likelihood of exposure.
- D. Foods and drinks shall not be kept in trucks or in the plant where the potential of exposure is present. (this does not refer to office space, lunch or break rooms)
- E. All procedures involving blood or other potentially infectious materials shall be performed in such a way as to minimize splashing, spraying, splattering, and the generation of droplets of these substances.
- F. Laundry facilities or services will be available at all work stations. All garments which are penetrated by blood shall be removed, and deposited in an appropriate container, prior to leaving work stations or as soon as feasible. All employees shall have one change of clothing at work station.

The above controls will be reviewed and updated at least annually or whenever necessary by the Managers, General Manager and involved and interested personnel in a collaborated effort between the above parties.

After removal of gloves or other personal protective equipment, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water or antiseptic agents in conjunction with clean cloth/paper towels. When antiseptic hand cleansers or towelettes or waterless soaps are used, hands shall be washed with soap and running water as soon as feasible.

If exposure is incurred to skin or mucous membranes, these areas shall be washed or flushed as appropriate.

Needles

Contaminated needles and other sharps will not be bent, recapped, removed, sheared or intentionally broken. OSHA allows an exception to this if the procedure requires that the contaminated needle be recapped or removed, no other alternative is feasible and the action is required by the medical procedure. If such an action is required then the recapping or removal of the needle must be done by the use of a mechanical device or a one-handed technique.

Contaminated Equipment

Equipment which has become contaminated with blood or other potentially infectious material shall be examined prior to servicing or shipping and shall be decontaminated as necessary (unless it can be demonstrated that decontamination is not feasible).

- A. An appropriate biohazard warning label shall be attached to any contaminated equipment, identifying the contaminated portions.
- B. Information regarding the remaining contamination shall be conveyed to all potentially impacted personnel, as well as the person(s) handling, shipping and servicing the equipment.

Warning Labels:

- A. Warning labels must be affixed to containers of regulated waste containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials.

B. Labels must include the following:



- C. These labels must be fluorescent orange or orange-red or predominately so, with lettering or symbols in contrasting color. Labels must either be an integral part of the container or must be affixed as close as feasible to the container by string, wire, adhesive or other method that prevents their loss or unintentional removal. Red bags or containers may be substituted for labels.

- D. Labels required for contaminated equipment must also indicate which portions of the equipment remain contaminated. Regulated waste that has been decontaminated does not need to be labeled or color-coded.

Personal Protective Equipment

Personal Protective Equipment is the employees' "last line of defense" against bloodborne pathogens. All personal protective equipment used by Sure-Way personnel shall be provided without cost to the employee. Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use for the duration of time which the protective equipment will be utilized.

The following protective equipment will be made available to Sure-Way personnel:

- A. Impervious gowns
- B. Latex/rubber gloves
- C. Particle mask
- D. Eye protection
- E. Rubber boots

All personal protective equipment will be removed prior to leaving the work area. All disposable personal protective gear will be placed in a red trash bag designating biomedical waste and prepared for appropriate disposal.

Gloves will be utilized during the handling of waste and or waste containers. Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as feasible when their ability to act as an effective barrier is compromised, (e.g., punctured or torn).

Masks and eye shields or combination devices are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. Disposable masks and eye shields are for single use only and shall not be washed or decontaminated for re-use and are to be replaced as soon as feasible when their ability to act as a barrier is compromised, (e.g., saturated, torn or punctured).

The OSHA standard also requires appropriate protective clothing be used, such as lab coats, gowns, aprons, clinic jacket, or similar outer garments be worn whenever potential exposure to the body is anticipated.

Contaminated work surfaces, bins, trays, container tippers, carts, pails or receptacles will be decontaminated with bleach solution and/or EPA registered germicide as soon as feasible after completion of procedures with any spill of blood or other potentially infectious materials.

Immunization

All Sure-Way personnel will be offered Hepatitis B vaccine at no cost to the employee. The vaccination series will be offered before employment and again after 10 working days of initial assignment, unless the employee previously had the vaccine or wishes to submit to antibody testing, showing the employee to have sufficient immunity. Employees who decline the Hepatitis B vaccine will sign a declination statement (appendix A). Employees who initially decline the vaccine will retain the option to change their mind and have the vaccine provided at no cost.

Exposure/Contamination Procedures

The following guidelines will be followed:

- A. An employee should not remain at work when ill. An employee who remains in a working capacity while ill:
 - a) may contaminate co-workers with whom they come in contact.
 - b) is more susceptible (due to their lowered immune system) to contracting communicable diseases.
- B. Employees with minor wounds (open cuts, sores, breaks in the skin, etc.) should not report to their work area until they have properly dressed and bandaged the wounds.
- C. Employees with extensive skin lesions or severe dermatitis on hands, arms, head, face, or neck shall not handle equipment or waste unless the effected areas are adequately covered or protected.

Post-Exposure Evaluation and Follow-Up

When an employee incurs an exposure incident during the performance of their job, it will be immediately reported to their immediate supervisor and they must be seen at a medical facility. The exposure will be carefully and accurately documented on the Infectious Exposure Form (Appendix B).

Any exposure contamination or contraction of an infectious disease that occurs off the job shall be reported to their supervisor. This information will remain a confidential part of the employees' medical records.

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard.

This follow-up will include the following:

- *Documentation of the route of exposure and the circumstances related to the incident (Infectious Exposure Form).

*Completion of the State Workers Comp. Report Form by affected personnel.

*If possible, the identification of the source and its status.

*Results of testing of the source will be made available to the exposed employee.

*The employee will be offered the option of having their blood collected for testing of his or her HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted, then the appropriate action can be taken and the blood sample discarded.

*The employee will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service and recommendations from the consulting physician.

*The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

The following person(s) will assure that the policy outlined here is implemented and will maintain records pursuant to this policy:

- A. General Manager / Personnel Director
- B. Plant Manager
- C. Sharps Manager
- D. Transportation Manager
- E. Personnel File Clerk

A written opinion shall be obtained from the health care professional who evaluated the employee when requested, and if available. Written opinions will be obtained in the following instances:

- A. Whether Hepatitis B vaccination is indicated for the employee.
- B. Whether the employee has received the Hepatitis B vaccination.
- C. Whenever the employee is sent to a health care professional following an exposure incident.
- D. Confirmation that the employee has been told about any medical conditions resulting from the exposure incident which require further evaluation or treatment.

Health care professionals shall be instructed to limit their opinions to:

- A. whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine or for evaluation following an incident;
- B. whether the employee has been informed of the results of the evaluation; and
- C. whether the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials.

Medical Record Keeping

Managers are responsible for implementation and maintenance of pertinent medical records of their employees. These records will include the following:

- A. name of employee
- B. social security number of employee
- C. copies of the employee's Hepatitis B vaccination status
 - a) date of any vaccinations
 - b) medical records relative to the employee's ability to receive vaccination
- D. copies of the results of the examinations, medical testing and follow-up procedures which took place as a result of an exposure
- E. copies of information provided to the consulting healthcare professional as a result of any exposure to bloodborne pathogens

As with all information in these areas, it is the responsibility of the manager/supervisor to maintain the confidentiality of these records. There will be no disclosure of this information without the employee's written consent (except as required by law). The company shall maintain employee medical records in accordance with law.

Training

Training for all personnel will be conducted prior to initial assignment of tasks where occupational exposure may occur. Training will include the following:

- A. The OSHA standard for bloodborne pathogens
- B. Epidemiology and symptomology of bloodborne diseases
- C. Modes of transmission of bloodborne pathogens
- D. Explanation of this Exposure Control Plan, (i.e. points of the plan, lines of responsibility, how the plan will be implemented, etc.)
- E. Procedures which might cause exposure to blood or other potentially infectious materials

- F. Control methods which will be used to control exposure to blood or other potentially infectious materials:
 - a) Engineering controls
 - b) Work practice controls
 - c) Personal protective equipment
- G. Personal protective equipment available for emergency personnel
 - a) Location(s)
 - b) Application
 - c) Removal
 - d) Disposal
- H. Post exposure evaluation and follow-up
- I. Signs and labels utilized in system
- J. Hepatitis B vaccination program
 - a) No cost program
 - b) Method of administration
 - c) Benefits of vaccination

All training records required by the OSHA standard will be maintained by the manager and stored in the Sure-Way Systems central office (or archives) for a period of three years from the date on which training occurred.

Dates

All provisions required by the standard will be implemented by the manager of each region/division or his/her representative. They will be responsible for scheduling training for their personnel.

All employees will receive annual refresher training.

Training materials will be made available for personnel by the company.

APPENDIX A

Employee's Name: _____ **Date:** _____

Address: _____

Home Phone: _____ **S.S./Employee ID #** _____

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. (FR Doc. 91-28886 Filed 12-2-91; 8:45 am)

Declining Employee's Signature: _____

Witness: _____

Date: _____

Date to review decision again: _____

APPENDIX B

Sure-Way INFECTIOUS EXPOSURE FORM

Exposed employee's name: _____ Title: _____

Social security #: _____ Employee #: _____ Home phone: _____

Source: _____

Location of exposure: _____

Suspected or confirmed disease: _____

Type of exposure: _____

Date of exposure: _____ Time of exposure: _____ a.m. / p.m.

What were you exposed to?:

What parts of your body became exposed? Be specific: _____

Did you have any open cuts, sores, or rashes that became exposed? Be specific: _____

How did the exposure occur? Be specific: _____

Did you seek medical attention? Yes No

Where? _____ Date: _____

Supervisor notified Yes No Date: _____ Time: _____ am / pm

Supervisor's signature: _____ Date: _____

Your signature: _____ Date: _____

**Sure-Way
Bloodborne Pathogen Exposure Control Plan**

Training recognition / confirmation

Date(s) of training: _____

Employee's name: _____ Title: _____

Address: _____ City: _____ State: _____ Zip: _____

Social security #: _____ Home phone: _____

I received training specific to the Sure-Way Bloodborne Exposure Control Plan on the date above. I agree to utilize the precautions as indicated.

Instructor's signature: _____ Date: _____

Employee's signature: _____ Date: _____

GENERAL

- A. Type of Treatment: Steam Sterilization
- B. Facility Status: New Facility

FACILITY INFORMATION

- A. Name: Sure-Way Systems, Inc.
- B. Facility Contact: Dudley Chilcott, VP Operations
All correspondence: Sure-Way Systems Inc.
107 South Parkmont
Butte, MT 59701
- C. Facility Mailing Address: Sure-Way Systems, Inc.
P.O. Box 899
Deer Lodge, MT 59722
- D. Facility Location: As Listed above
- E. Ownership Status: Sure-Way-Systems, Inc. (SWS) is currently processing biohazard medical waste. SWS is a privately held Montana corporation with over eleven (11) years collective waste treatment and transportation experience.

OPERATOR INFORMATION

- A. Name: Sure-Way Systems, Inc.
- B. Owner of Operation: Same

FACILITY OWNER

Sure-Way Systems, Inc.

MAP

Map of the property has been provided. Major access roads have been highlighted and photos of the property have been provided.

PRIMARY ACTIVITIES OF THE FACILITY

Sure-Way Systems, Inc., is a company comprised of professionals with over forty (40) years of experience in medical waste, transportation and treatment. SWS currently services the Montana Hospital Association, the Big Horn Basin Hospital Group, and the N D Healthcare Association in Montana, Wyoming, and North Dakota. Additional services in Florida, Hawaii, Alabama, Georgia and Utah.

FACILITY INFORMATION

The average monthly quantity of medical waste to be treated on the property is estimated to be 250 tons per month. The rated capacity of autoclave sterilizer is 1.2 tons per hour. Each processing cycle will be based on the condition of the waste to be processed; historical bacillus stearothermophilus spore testing on the time and temperature profiles necessary for proper treatment. The treatment time is approximately 30 minutes, depending on the waste condition, and total approximate time from start of one load to the next is 40 to 50 minutes. The rated capacity of the steam sterilizer are averages provided by the manufacturer, taking into consideration the varied nature of waste, including density. The typical hours of operation will be 8:00 AM to 5:00 PM, Monday through Saturday excluding all "Emergency Action Plans". The facility reserves the right to operate 24 hours per day 7 days per week. Waste being treated is limited to infectious waste as defined by the Montana Solid Waste Management Rules following waste items:

1. Cultures and stocks
2. Pathological waste
3. Human blood and blood products
4. Sharps
5. Animal waste
6. Isolation waste
7. Unused sharps
8. Trace contaminated chemotherapy waste

The following non-conforming wastes are not accepted by Sure-Way Systems:

1. Explosive or volatile materials.
2. Chemotherapy wastes including full or partially full chemotherapy drug vials or I.V. bottles or bags.
3. Compressed gas cylinders, canisters or aerosol cans.
4. Radioactive waste including low level radioactive waste. Prior to treatment, a portal radiation detection system will scan all containers of biohazardous/medical waste. Any waste container reflecting a level of radiation above two times background will activate the code yellow alarm (see facility contingency plan). Any waste measured above 25 millirem (current code red alarm level) of existing medical waste facilities.
5. Hazardous waste, including but not limited to, waste following into one of the four hazardous characteristics:
 - a) Ignitability: A waste is ignitable if it is easily combustible or flammable, or if ignited, burns so vigorously that it creates a hazard.
 - b) Corrosivity: A waste is corrosive if it dissolves metals and other materials or burns the skin or eyes on contact.
 - c) Reactivity: A waste is reactive if it is unstable or undergoes rapid or violent chemical reactions, such as catching fire, exploding, or giving off fumes when exposed to or mixed with air, water, or other materials.
 - d) Toxicity: A waste is hazardous by virtue of the toxicity characteristics if it exceeds specific concentrations of certain metals and organic compounds, based on a laboratory analysis referenced in the regulations.

If any of the above non-conforming waste is received by SWS, it will be rejected. The generator will be liable for all unacceptable waste.

FACILITY PLAN

A scale drawing of the facility indicating ingress, egress, storage area, treatment location, and security measures will be included. Entrance to the storage and treatment area will be properly signed for service and other authorized vehicles only. The secured area is used for medical waste operations only. Only authorized personnel will be permitted access to the storage area. Warning signs will appear prominently on the access door in English with international biohazard symbol and the words, "**CAUTION: BIOHAZARDOUS WASTE STORAGE AREA. UNAUTHORIZED PERSONS KEEP OUT**". Warning signs will be legible from a distance during daylight hours of at least 25 feet. This area is protected from animals and natural elements and does not provide a breeding place or a food source for insects or rodents.

DISCLOSURE STATEMENT

A. Introduction.

Sure-Way Systems, Inc. is submitting this permit application in an effort to provide competition to a market that is dominated by two to three companies. Sure-Way Systems, Inc. corporate position is that more generators will comply with the Clean Air Act of 1990 if additional safe and economical options are available for treatment and transportation. SWS anticipates being able to offer additional value to our clients by providing a sharps exchange program as an optional service. Once operations are established SWS will enter into a second phase of operations, offering onsite container segregation of all recyclable items, including medical waste. The facility receiving this waste will be automated to virtually eliminate handling.

B. Capability.

This plant can process approximately 1 (one) ton per hour.

C. Operation.

SWS is submitting this operation plan in compliance with the Montana solid waste management facility permit which reflects the standard operating procedures to be followed by the company.

D. Waste Generation.

Physician practices, skilled nursing homes, hospitals, clinics, dental practices, laboratories, veterinary clinics and other health facilities will typically generate waste treated under the requirements of this permit. Sure-Way Systems will pick up the biohazardous waste at the request/convenience of the Generator and, in many cases, the biohazardous waste will be picked up in conjunction with the sharps exchange program. Given the expertise of Sure-Way Systems and the need for more generators to be in compliance with the Clean air Act of 1990, it is likely that more healthcare facilities will comply when proper, economical medical waste treatment and disposal are available.

All waste must be segregated at the point of generation as follows:

Sharp Waste. Any device having acute rigid corners, edges, or protuberances capable of cutting or piercing, including but not limited to:

- Hypodermic needles, syringes with or without attached needle
- Blades, Glass pasture pipettes/pipette tips
- Culture dishes (regardless of presence of infectious agents)
- Needles with attached tubing
- Blood vials, any rigid plastic pipette/pipette tips
- All contaminated glass (broken or non-broken) to include slides and cover slips
- Wooden applicator sticks

Soft Biohazardous Waste. Any soft waste, which does not have protuberances capable of piercing a biohazard, bag.

INFECTIOUS WASTE = BIOHAZARDOUS WASTE

Each generator of biohazardous waste will package waste in red bags clearly labeled with the words **"BIOHAZARDOUS WASTE"** or with the international biohazard symbol and the word **"BIOHAZARD"** in accordance with State Solid Waste Management Rules. Unless otherwise noted all regulatory references county and state rules. A biohazard bag is a disposable red or orange bag with is impervious to moisture and has the strength sufficient to preclude ripping, tearing, or bursting under normal conditions while handling the waste filled bag. The bags will meet the criteria prescribed by the Stand D 1709-85 of the American Society for Testing and Materials (ASTM) and certified by the bag manufacture. Bags will be filled no more than 75% of capacity and shall be tied, closed or sealed to prevent leakage or expulsion of contents during all future storage, handling, or transport. Biohazard bags will be placed in rigid, lidded/covered containers for transport. Prior to being delivered to a customer site, all reusable containers will be decontaminated using chemical or thermal methods. As stated in Section VIII all non-conforming waste will not be a part of the SWS treatment operation. In the event SWS were to receive unauthorized waste for treatment not included in this application, (hazardous or radioactive) containers would be marked and set aside until proper arrangements can be made for return or transport to an appropriate facility, by a transporter licensed to haul that waste.

TRANSPORT

Transport to the SWS facility will be done by one of the following methods. SWS drivers will pick up the waste from numerous generator's locations and transport it to the SWS facility for treatment and disposal. Alternatively, SWS may from time to time utilize the services or allow an experienced medical waste hauler to pick up directly from the generators and deliver the waste to the SWS facility. Rigid, covered containers will be used to transport all biohazardous waste. Vehicles used to transport medical waste will have a spill kit on containing an approve disinfectant solution and absorbent. Drivers and operational personnel will have uniforms or coveralls, gloves and protective eyewear provided by SWS. Additional PPE for operations personnel are outlined below.

TREATMENT

Upon arrival at Sure-Ways Systems, technicians will unload the containerized waste past the portal radiation detection system and into the storage area. On a first in, first out basis (FIFO), waste will be emptied into custom designed carts utilizing a custom "container dumping system" which will transfer bagged waste from the containers to the steel carts which will go into the autoclave. Two steel carts fit in the autoclave. The waste is then sterilized in the autoclave at a minimum of 250 degrees Fahrenheit for approximately 30 minutes. Total cycle time to account for loading, pressurizing, run time, depressurizing and unloading is estimated at 40-50 minutes. When the waste has been properly sterilized, the carts are removed from the autoclave and transported to the solid waste compactor for holding until final disposal. All sharps are processed through the shredder before being transported to the solid waste compactor. At no time, before or after treatment is the infectious waste handled manually. Once the waste is compacted, the steel carts are returned to the autoclave. At the conclusion of day's treatment, these steel carts are secured in the autoclave for storage.

CLEANING AND DECONTAMINATION OF REUSABLE CONTAINERS

Thermal cleaning system;

An area has been set aside for the decontamination and cleaning of containers used to transport the bagged waste. All containers will be sanitized using hot water of at least 82 degrees centigrade (180 degrees Fahrenheit) for a minimum of 15 seconds, or a solution of sodium hypochlorite. If the surfaces of the containers have been completely protected from the contamination by disposable liners, bags or other devices removed with the waste, the containers will be decontaminated as needed. Otherwise, they will be decontaminated each time they are emptied. Following decontamination, the containers will be returned to service. The area for decontamination and cleaning will have a sloping floor and a drain with a direct connection to the sanitary sewer. Operations personnel will have personal protective equipment consisting of uniform or coveralls, hard hats (as necessary), and gloves. Protective eyewear will be worn during loading and unloading of the autoclave, and available as needed. Additionally, hepafilter masks will be utilized when dumping containers, and available as needed. The autoclave and decontamination areas are sloped to prevent runoff. A footprint of equipment placement in relationship to the existing facility is shown in Appendix C

Chemical cleaning system;

An area has been set aside for the decontamination and cleaning of containers used to transport the bagged waste. All containers are sanitized using the 'AUTO CHLOR' system. A specially designed mechanical pressure washer washes each container through a pre-rinse, pressure wash, rinse and sanitized. Each stage is automatically monitored and chemically fed through the chemical feed system. Primary chemical agents include 'Super Red Detergent' Hi-Alkaline and 200p.p.m. Auto Chore Sanitizing Solution. Even if the surfaces of the containers have been completely protected from the contamination by disposable liners, bags or other devices removed with the waste, they are decontaminated each time they are emptied. Following decontamination, the containers are air dried and individually inspected for residue, and odor. A deodorizer is applied to each container before they are returned to service. Sure-Way System goes beyond any regulatory standards in the cleaning process. Periodically, given the nature of the material placed in the reusable containers, we will find that an odor persists even after the container is washed. These cans are identified, soaked in bleach and washed again, if this does not eliminate the odor they are pulled out of circulation. The area for decontamination and cleaning has a sloping floor and a drain with a direct connection to the sanitary sewer to assist in proper sterilization. Additionally there is a barrier partition and controlled airflow between the processing room and the clean room, this insures that contaminated surfaces or unspecialized cans are not in proximity to each other. This is unique in the medical waste industry and gives our customers the added security of the very best in reusable containers, unlike any other processor in the Northwest. Operations personnel have personal protective equipment consisting of uniform or coveralls, hard hats (as necessary), and gloves. Protective eyewear will be worn during loading and unloading of the autoclave, and available as needed. OSHA has completed a full review of operations insuring employee safety. The autoclave and decontamination areas are sloped to provide adequate runoff to allow for cleaning. A footprint of equipment placement in relationship to the existing facility is shown in Appendix C.

EMERGENCY ACTION PLAN

A. Purpose.

The purpose of the emergency action plan is to assist in the event of major first aid accidents and incidents until emergency services personnel arrive onsite to take charge. Regulated medical waste and radiation are the other kinds of material, which may cause the implementation of the plan (see contingency plan).

B. Procedures.

In the event of a major first aid accident or incident, radiation alarm, or regulated medical waste incident, employees will notify their immediate supervisors. Management personnel have the capabilities and knowledge to respond and administer first aid or deal with minor incident problems. Supervisory personnel would make the 911 phone call for emergency medical services assistance and transportation of the injured to the appropriate medical facility, or for assistance from the fire department or HAZMAT unit (see contingency plan).

As part of their normal business operation, the local fire department will be familiar with SWS's operations. The first response unit will be thoroughly aware of certain aspects of this permit to be prepared to respond to any problems. In the event of an equipment breakdown, waste will continue to be stored at the facility until equipment becomes operational. In the event of a fire, explosion, or natural disaster where all operations are terminated, receipt of waste at SWS's Valley City facility will be routed to the Butte, Montana, treatment facility or another, more proximate facility, if available.

TRAINING PLAN

1. Introductory Program Outline:

The training programs are divided into two parts, which are introductory training and continuing education. The training program covers biohazardous (medical) waste handling, radiation equipment operation and procedures.

A. Type of Training:

The program is designed to meet the requirements set forth under OSHA regulation for bloodborne pathogens, CRCPD Publication 98-3 detection and prevention of radioactive contamination in solid waste facilities, and ND requirements.

B. Qualifications of Training Program:

A person trained in the appropriate waste management procedures will direct the training program.

C. Contents of the Training Program:

Bloodborne Pathogens.

- All employees in exposure Categories I and II are required to be trained prior to assignment to the exposure area and at least annually thereafter.
- Employees with no previous experience in handling biohazardous waste will be given a gradual training program. Such employees should only be allowed to work with biohazardous waste to the extent of the safety training provided.
- All training on biohazardous waste shall be documented and the records retained for three years from the date of last training.

The training program shall contain the following elements as a minimum:

1. An explanation of the OSHA's Bloodborne Pathogen Exposure Control, the facility's exposure control plan, and a copy of the applicable departmental safety procedures.

2. A general explanation of the epidemiology and symptoms of bloodborne diseases.
3. An explanation of the modes of transmission of bloodborne pathogens.
4. An explanation of the methods for recognizing tasks and other activities that may involve exposure to blood and infectious materials. Such tasks must include providing emergency rescue services if part of the employee's responsibility.
5. An explanation of the use and limitations of the special practices for preventing or reducing exposure including engineering controls, work practices, and personal protective equipment (PPE).
6. An explanation of the basis for selection of personal protective equipment (PPE).
7. Information on the types, proper uses, location, removal, decontamination and/or disposal of personal protective equipment (PPE).
8. Information on Hepatitis B vaccine, including information on efficacy, safety, and the benefits of being vaccinated.
9. Information on the appropriate actions to take and persons to contact in an emergency.
10. 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. Also, information on the medical counseling that the employer is providing for exposed individuals.
11. An explanation of the signs and labels.
12. An explanation of the facility's biohazardous spill procedures and location of the spill equipment.
13. An overview of the equipment used in the management and treatment process, including the autoclave, and any equipment or materials used to clean and decontaminate containers or the treatment area.
14. Introduction of guidelines for waste acceptance. These guidelines will be reviewed twice a year.

Radiation Detection and Prevention.

- All employees working with medical waste are required to be trained prior to assignment to the exposure area and at least annually thereafter.
- Employees with no previous experience in radiation detection and prevention shall be given a gradual training program. Such employees should only be allowed to work with the assistance of previously trained employees.
- All training on radiation detection and prevention shall be documented and the records retained for three years from the date of last training.

The training program shall contain the following elements as a minimum:

1. An explanation of the CRCPD Publication 98-3 Detection and prevention of Radioactive contamination in solid waste facilities, ND requirements, the facility's exposure control and reporting plan, and equipment operation and use.
2. A general explanation on radiation, the types of radiation, radioactive contamination, exposure protection, and safety.
3. Detailed instruction and explanation on the operation, use of, and testing of the Eberline RMS-3 area portal monitor system, and the Eberline ASP-2/SPA-8 hand held monitors.
4. Information and demonstration of proper procedures for the radiation readout to the chart recorder, and computer (future).

2. Continuing Education:

A. Type of Training:

The continuing education portion of the training program is ongoing during the employee's tenure with the company. Employees are required to complete directly supervised on-the-job training for any new tasks, which the employee or his supervisor would like him to assume. Formal documented training where a test is administered is performed annually.

B. Qualifications of Training Director:

A person trained in infectious waste management procedures will direct the training program.

C. Bloodborne Pathogen Training:

Training will be ongoing, with annual updates.

D. Radiation Detection and Prevention:

Training will be ongoing, with annual updates.

E. Documentation, which confirms training, has been completed:

As an employee completes a training requirement from their introductory training through their continuing education, the employees will sign an attendance sheet which is labeled with the course content, date, trainer's name and qualifications, and employee's job title. A copy of this sheet will be kept in the employee's file. The records will be kept on file for three years.

CLOSURE PLAN

Should SWS terminate operation of the treatment of infectious waste, a specific closure plan will be implemented. The following steps outline the closure plan for SWS.

- A. All transport of infectious waste to the SWS facility would cease. All waste onsite would be treated and disposed of according to the operation plan.
- B. All infectious waste transport containers, transport carts, and autoclave carts would be decontaminated using hot water of at least 82 degrees centigrade (180 degrees Fahrenheit) for a minimum of 15 seconds or a solution of sodium hypochlorite. All equipment, including but not limited to the autoclave, compactors, dumpers and etc. parts of the treatment process will be similarly decontaminated.
- C. The concrete pads, berms, and any other surfaces in the treatment area would be decontaminated using the hot water or a solution of sodium hypochlorite as described in Item #2.
- D. All equipment would then be moved or diverted for other use.

This four-part plan will be reviewed periodically along with other aspects of the operation plan as part of Sure-Way's on going effort to maintain an efficient, cost effective, and comprehensive waste treatment program.

MONITORING SCHEDULE

SWS has established a comprehensive monitoring program to insure appropriate waste treatment. This monitoring is both load by load, and periodic to monitor equipment performance, as well as, waste treatment. The following components comprise the monitoring program.

- Prior to bringing the equipment on line, the autoclave will be tested using *bacillus stearothermophilus* spores to determine the minimum time and temperature profiles necessary for treatment.
- Time and temperature recording charts will record the activity in each load. At the conclusion of each load, before the waste is removed, the operator will make a visual inspection of the chart to insure that the required temperature was reached and maintained for the required amount of time. These charts will be maintained for at least three years. Heat sensitive tape will be placed at various points in the load periodically as an additional check, however, since they only verify that a minimum operating temperature was reached, they are not as accurate to verify sterility as chart evaluation and spore tests. All monitoring devices will be calibrated at least once a year.
- The first eight weeks, spores of *bacillus stearothermophilus* were placed in the center the waste positioned in the center of the autoclave and at other random points. These spores were incubated along with a control to verify sterility. After the initial eight-week period testing showing minimum base kill the autoclave will exceed those minimum by 20%. Continued testing will be done on a monthly basis, or as required.
- A visual inspection will be made of the autoclave, including seals, hinges, door connections, steam inlet and outlet connections, and recording equipment on a daily basis.
- At least once a month, routine maintenance will be performed on the unit. This includes greasing all hinges and seals, inspecting pipe fittings and connections, and cleaning the inside of the autoclave using hot water as explained in the operation plan. In the event any repair is deemed necessary, the unit will not operate until those repairs have been completed.

CONTINGENCY PLAN

- A. The Sure-Way Systems contingency plan will have an emergency response directory, job descriptions, purpose and implementation information, emergency equipment information, emergency procedures, radiation alarm procedures, radiation alarm incident report, and a facility layout drawing. See Attached.

EQUIPMENT

Information at Processing Facility
Including

Autoclaves
Autoclave Pressure System
Carts
Cart Dumpers
Shredder
Compactor
Roll Off Containers
Roll Off Truck
Tipper Washer Reusable
Sharps Container
Shuttle System
Others as Required

FACILITY PLAN/SITE LAYOUT

Attached

PROPERTY MAP

JOB DISCRPTIONS

SURE-WAY SYSTEMS INC.

CONTINGENCY PLAN

**Butte
Montana**

4 - 3 May 2003

- PURPOSE AND IMPLEMENTATION
- RADIATION DAILY SOP for PLANT OPERATIONS
- EMERGENCY RESPONSE DIRECTORY
- EMERGENCY PROCEDURES EVACUATION
- ARRANGEMENTS
- EMERGENCY EQUIPMENT
- EMERGENCY PROCEDURES
- RADIATION ALARM PROCEDURES
- RADIATION ALARM INCIDENT REPORT
- JOB DESCRIPTIONS
- FACILITY LAYOUT DRAWING

406-846-2033
800-822-3929

Purpose and Implementation

The contingency plan is designed to minimize any hazard to human health or the environment as a result of any fire, explosion, high level radiation, or release of waste (biomedical) being processed or stored at the Sure-Way Systems facility. The provisions of the plan would be carried out immediately whenever a fire, explosion or release of waste (biomedical), which could threaten human health or the environment, occurs.

As this facility will not handle or produce any hazardous wastes. The Contingency Plan as provided is voluntarily submitted. This Contingency Plan, although not required, will be reviewed and amended as necessary, whenever:

- 1) The facility permit is revised.
- 2) The plan fails in an emergency.
- 3) The facility changes in its' design, construction, operation, maintenance, or other circumstances, in a way that materially increased the potential for fires, explosions, or releases of waste or waste constituents, or changes the response necessary in an emergency.
- 4) The list of emergency coordinators changes.
- 5) The list of emergency equipment changes.

As agents for Sure-Way Systems, the emergency coordinator and the alternate emergency coordinator shall have the authority to commit the resources needed to carry out the contingency plan.

Copies of this plan are being provided to the necessary contacts discussed in the plan, and this plan is always available in the Plant Manager's office. All involved personnel have been trained in this plan.

SURE-WAY SYSTEMS

107 Parkmont.
Butte, MT 59701
800-822-3929

Emergency Response Directory

Emergency Response Coordinator: **Dudley Chilcott**
Alternate Emergency Coordinator: **Jim Close**

General Manager	Dudley Chilcott	800-822-3929
Operations Manager	Jim Close	406-494-8460 (office/plant)
	107 Park Mont	406-490-9316
	Butte, MT 59701	406-846-3737 (home)
Assist Plant Manager	Dustin Leprowse	406-490-8954

Plant Operator	Jim Close
Plant Operator	Dustin Leprowse
Plant Laborer	Robert
Maintenance/Mechanic	Patrick Bowler

Emergency Dispatch	911
Valley City Fire Department	406-497-6481
Valley City Police Department	406-497-1120
County Sheriff	406-782-4224

Emergency Equipment Locations and Descriptions

Date: 17 April 2003

Sure-Way Systems facility is provided with equipment, alarms and communication devices to deal with emergency conditions. There are at least four (4) locations for fire extinguishers in the building, and typically extra units available near the boiler. The facility layout drawing shows the approximate location of the extinguishers.

A telephone is available to the operating staff in the office and on the plant floor serving as the primary communication device in case of an emergency. Emergency numbers including the numbers of the emergency response coordinators are listed at all phone locations.

Emergency spill kit, first aid kit, and personnel protective equipment (PPE) are located in the safety cabinet.

The emergency full body shower and the emergency eyewash station are located by the right autoclave.

The emergency equipment is tested regularly, with the spill kit contents checked regularly. Specifically, the phone is used on a regular basis and hence tested constantly. The fire extinguishers systems are tested as part of a normal fire inspection routine.

Emergency equipment and communication devices are readily available to the operating staff. Staff personnel can easily move from any area of the facility to obtain whatever equipment or assistance may be needed.

Emergency Procedures

- I. Whenever there is an imminent or actual emergency situation, the emergency coordinator or the coordinator's designee when the emergency coordinator is on call, shall immediately:
 - A. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel.
 - B. Notify appropriate state or local agencies with designated response roles if their help is needed.
- II. Whenever there is a spill, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and aerial extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- III. Concurrently, the emergency coordinator shall assess possible hazards to human health of the environment that may result from the spill, fire, or explosion. This assessment must consider both direct and indirect effects of the spill, fire or explosion, e.g., the effects of any toxic irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoffs from water or chemical agents use to control fire and heat-induced explosions.
- IV. If the emergency coordinator determines that the facility has had a spill, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall report his findings as follows:
 - A. If the coordinator's assessment indicates that evacuation of local areas may be advisable, the coordinator shall immediately notify appropriate local authorities. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.
 - B. The coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area or the national response center (using their twenty-four-hour toll-free-number 800-424-8802). The report must include:
 - 1) Name and telephone number of reporter.
 - 2) Name and address of facility
 - 3) Time and type of incident, e.g., release, fire.
 - 4) Name and quantity of materials involved, to the extent known.
 - 5) The extent of injuries, if any.
 - 6) The possible hazard to human health or the environment, outside of the facility.
- V. During an emergency, the emergency coordinator shall take all reasonable measures to ensure that fires, explosions, and releases do not occur, recur or spread to other waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- VI. If the facility stops operations in response to a fire, an explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- VII. Immediately after an emergency the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a spill, fire, or explosion at the facility.
- VIII. The emergency coordinator shall ensure that, in the affected area of the facility:
 - A. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
 - B. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

- IX. The owner or operator shall notify the department and other appropriate state and local authorities that the facility is in compliance before operations are resumed in the affected areas of the facility.
- X. The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, the owner or operator must submit a written report on the incident to the department. The report must include:
- A. Name, address, and telephone number of the owner or operator.
 - B. Name, address, and telephone number of the facility.
 - C. Date, time, and type of incident, e.g., fire, explosion.
 - D. Name and quantity of materials involved.
 - E. The extent of injuries, if any.
 - F. An assessment of actual or potential hazards to human health or the environment.
 - G. Estimated quantity and disposition of recovered material that resulted from the incident.

Emergency Procedures

The emergency coordinator will coordinate all emergency responses involving the biomedical waste or high level radiation. The waste being dealt with, Regulated Medical Waste, makes facility evacuation for any reason other than fire or high level radiation unlikely.

Evacuation Procedure

In the event that evacuation is necessary, the evacuation procedure will be activated. All personnel should exit the building through the nearest exit door as indicated by the facility layout drawing. Following building evacuation, all personnel will muster in the front of the Sure-Way Systems building, (West Side), at a safe distance, and await further instructions.

- I. Any time an air or water borne release of biomedical waste, spill, or a code red radiation alarm occurs, the emergency coordinator will be immediately contacted. The telephone or person to person contact should be used for this notification, if possible. If needed other emergency systems will be used. Employees should: 1) if possible, turn off waste handling/producing equipment, 2) isolate area, 3) contain spill, and 4) notify the emergency coordinator.
- II. The emergency coordinator will assess the nature of the spill. If warranted, he will provide for the clearing of personnel, cordoning off of the area and notification of emergency response organizations. If the release or spill is a hazardous waste and a reportable quantity is released, notification and reporting will commence. Sure-Way Systems does not intentionally accept hazardous wastes.
- III. The coordinator will check for adequate ventilation and dust control. If contact with the waste is required, proper clothing and respiratory equipment will be worn. In addition, if liquids have been in contact with the waste, skin contact with these liquids will be prevented.
- IV. Safe and reasonable methods will be used by the coordinator to affect the containment and clean-up of the waste spill.
- V. The coordinator will contact Sure-Way Systems management as to the problem and the action taken. If necessary, the coordinator will file the required reports with local and state officials.
- VI. Upon proper resolution of the emergency condition, the coordinator will check all response alarms and equipment to ensure they have been decontaminated, if appropriate, and are in good working order.