

SECTION 10.0

SAFETY AND CONTAMINATION CONTROL

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1.0 Purpose

To provide identification of required personnel training and monitoring, job hazard analysis, generic controls, or monitoring of common site hazards, and prevent the inadvertent spread of contamination.

2.0 Responsibilities

- Project Leaders or designated site coordinators are responsible for assuring that activities under their control are evaluated for potential hazards, hazard controls are developed and are performed in accordance with this manual and/or site specific safety plans, when applicable, and for reporting deviations, problems, accidents, and injuries to the program administration.
- The Survey Projects Manager or Project Leader designee is responsible for defining the work scope, developing site specific safety plans, as necessary, implementation of such plans, and coordinating efforts to resolve safety issues.
- Survey team personnel are responsible for performing all activities in accordance with hazard controls, provided both in this section and in site-specific plans, providing input on hazard controls, and bringing to the attention of the site coordinator any previously unidentified hazards.
- Subcontractors are to read site specific safety plans, sign acknowledgment to that effect and adhere to the plan during all site activities and bringing to the attention of the site coordinator any previously unidentified hazards.

3.0 Training

All program personnel must receive safety training, as mandated by the ORISE Environment, Safety & Health (ESH) office. In addition, field survey personnel will receive the following safety training:

- 40 hour Hazardous Waste Operations and Emergency Response training and 8 hour annual refresher training
- 8 hour Hazardous Waste Operations and Emergency Response Supervisors training, as applicable
- Radiation Worker II Training

- Respirator Training (as required)
- First Aid, CPR and Bloodborne Pathogen training and periodic updates as required. At least one member of a field survey team must be certified, however, ESSAP attempts to maintain certification for all field survey personnel.
- Prior to each field survey hazards specific to the site will be discussed with team members, as well as any safety requirements not covered by this manual.
- Site-specific training, as required by Project Management Contractors or other groups responsible for worker safety on site, with the approval of ESSAP project management. Inquiries should be made during the project planning phase concerning site-specific training and/or testing requirements.
- Hazardous Material Transportation training.

4.0 Medical Surveillance

4.1 Physical Examinations

Pre-employment physicals are performed to determine each individual's general health condition and ability to perform job requirements. Employees who are required, by the nature of job assignments, to be fitted for respirator use and/or qualified to work on hazardous waste sites, as defined by 1910.120, must have an annual physical examination.

4.2 External Dosimetry

ESSAP staff members involved in field survey activities will be issued thermoluminescent dosimeters (TLD) by the ESH office. TLDs are analyzed quarterly and results provided to the individual. The ESH office maintains records of all results and monitors the results to ensure that exposure levels are kept as low as reasonably achievable.

The following requirements for dosimetry use must be met:

- Dosimeters must be worn whenever an individual is working with or around sources of radiation.
- Dosimeters must not be worn during off-duty hours.
- Care should be taken to prevent accidental irradiation of a dosimeter.
- Dosimeters are to be worn on the exterior of clothing between the waist and neck.

- Personnel shall not wear dosimeters issued by ORISE while being monitored by a dosimeter issued at another site.

NOTE: You should be informed prior to arrival at a site if you are to be provided with site-specific dosimetry. If not, obtain assurance from the Radiation Safety Officer for the site that the results will be provided to you and to the ORISE ESH office. If you cannot obtain this information notify the ESSAP site coordinator and wear your ORISE issued dosimetry. The site coordinator will notify the ESH office.

- Lost dosimeters must be reported immediately to the Project Site Coordinator.

Pregnant employees who work in Controlled Areas are encouraged to notify their supervisor of their pregnancy. The Supervisor will notify the ESH office and a dosimeter for monthly analysis will be issued.

4.3 Whole-Body Counts and Bioassay

An emergency whole-body count will be performed if a suspected intake of gamma emitting radionuclides occurs.

An emergency bioassay will be performed if a suspected uptake of alpha or beta emitting radionuclides occurs.

4.4 Exposure Follow-up

In the event that a potentially harmful exposure to a hazardous chemical or radioactive material occurs to any employee, supplemental examinations and/or appropriate medical testing will be initiated by the ESH office. Employees should contact a supervisor or the ESH office immediately if such an exposure is suspected.

5.0 Site Safety Assessments and Plans

5.1 Purpose

General approach for determining the safety status of survey sites and implementing appropriate requirements.

5.2 Responsibilities

5.2.1 Survey Projects Manager

- Ensure that safety assessments are performed prior to all field survey activities

- Oversee development of site-specific job hazard analyses (JHAs) and safety plans

5.2.2 Project Leader or Designated Site Coordinator

- Ensure that adequate planning is performed to provide safe work environments on field sites
- Perform preliminary site visits
- Obtain site history and applicable Safety Plans already in place for a site
- Complete Site Safety Assessment Information Sheet
- Determine appropriate type of Safety Plan to be used
- Prepare site-specific JHAs, Safety Plans, or Information Sheets, as appropriate
- Provide safety information to team members during project planning stage and if site conditions change
- Ensure that tasks are performed under safe working conditions
- Resolve safety concerns in a timely manner

5.2.3 Survey Team Members

- Provide input/ideas concerning JHAs and safety aspects of field surveys
- Discuss safety concerns with the Site Coordinator
- Follow requirements of the Safety Plan
- Report all unsafe conditions to the Site Coordinator

5.3 Approach

5.3.1 Pre-survey

- 5.3.1.1 Site coordinator obtains the site history and any safety plans that may have been put in place by the owners or designated project management contractor.

- 5.3.1.2 Based on cost and time constraints, a preliminary site visit may be performed. The visit will include a visual inspection of the site, video taping whenever possible, and interviews with appropriate site representatives to determine site conditions. Requirements for site entry, such as documentation of training or medical surveillance, will also be determined. When a preliminary site visit will not be conducted pertinent information will be requested from site contacts or agency representatives.
- 5.3.1.3 A "Site Safety Assessment" form is completed, including basic site information and suspected hazards. (See Figure 10-1).
- 5.3.1.4 The Survey Projects Manager reviews the Site Safety Assessment Form and may request ESH office assistance to determine the applicability of this manual as the generic plan, use of a project management contractor plan, or the necessity of a site-specific JHA or safety plan. Site specific JHAs will be prepared when unique hazards are identified. Based on these recommendations the Survey Projects Manager determines the approach to be used.
- 5.3.1.5 When a site-specific plan is necessary, a draft is prepared for review by the Survey Projects Manager.
- 5.3.1.6 When ESSAP's generic plan will be used, a Site Hazard Information Sheet is prepared identifying site conditions (see Figure 10-2).
- 5.3.1.7 Site conditions and safety requirements are discussed with the survey team during the pre-survey meeting. Questions and concerns will be discussed and resolved prior to the start of survey activities.
- 5.3.1.8 Requirements for special safety equipment, training, monitoring, and identification of hazardous working conditions that affect subcontracted groups will be defined in related procurement documents. Required documentation of subcontractor training must be obtained prior to the start of work.
- 5.3.1.9 Safety requirements for equipment/supplies to be purchased or rented will be defined in related purchase requisitions.

- 5.3.1.10 ESSAP's long-term projects have the initial safety evaluation performed that is discussed above in Sections 5.3.1.1 through 5.3.1.8. Additionally, staff are required to continually evaluate the work site for changing conditions that may result in new or previously unidentified hazards and report any new hazards to the cognizant site supervisor and Survey Projects manager. Work will be suspended pending the completion of a job hazard analysis and implementation of any necessary controls.
- 5.3.2 On-Site
- 5.3.2.1 An on-site meeting for ESSAP subcontracted personnel will be held by the site coordinator to ensure that all individuals understand requirements and documentation to that effect is obtained.
- 5.3.2.2 Changes to initially identified safety requirements by site or agency representatives for equipment, procedures, or worker training should be reported to the Survey Projects Manager at the first opportunity, and documented in the site logbook.
- 5.3.2.3 All survey team members are required to report unsafe conditions to the site coordinator immediately. All safety concerns will be addressed and resolved prior to start of work in the area/situation in question. Documentation of the resolution of concerns is required. Any injuries are to be reported immediately to the Project Leader or Survey Projects Manager and ORAU reporting and follow-up procedures implemented.
- 5.3.2.4 The site coordinator should contact the Survey Projects Manager for guidance in unexpected situations where completion of survey plan requirements would require re-evaluation of safety conditions or significantly more time than expected. As necessary, new JHAs may be prepared when unexpected safety concerns are identified on site.
- 5.3.3 Post-Survey
- 5.3.3.1 Pertinent information concerning safety, such as incidents of personnel injury or contamination, will be identified in the trip report and other records completed as required by ESH procedure. For surveys performed in multiple phases, identify the presence of significant changes to site conditions requiring re-assessment of the present safety plan.

5.3.3.2 Lessons learned are to be shared with other staff members as appropriate.

5.4 Safety plans

5.4.1 Generic Plans

For most work sites, special hazards have been removed as part of the remedial action activities; associated safety hazards are typically limited to those common to industrial and construction sites. Requirements for safe work at such sites are presented in this manual. Some typical hazards encountered on survey sites are:

- Trenches and excavations
- Working at heights; ladders, scaffolds, man lifts
- Trip hazards
- Working with or around motorized equipment
- Temperature extremes
- Biological hazards, such as poisonous plants, snakes, insects
- Electrical hazards

5.4.2 Site-Specific ESSAP Plans

Site-specific plans will be developed when the guidance provided in this manual is not sufficient to provide direction to ensure acceptably safe working conditions or where specific information/direction is needed to have a safe working environment. Some examples of such situations are:

- Special personnel monitoring requirements
- Requirement for respirator use
- Protective clothing requirements for contamination control
- Special decontamination requirements for personnel or equipment
- Identified potential for the generation of radioactive or hazardous waste
- Confined space entry

The plan will include the following information, at a minimum.

- Site history and description
- Objectives and scope of work
- Project safety responsibilities
- Hazard analysis
- Site access controls
- Engineering controls
- Exposure monitoring plan
- Personal protective equipment
- Procedures for safe conduct of special tasks

Decontamination methods
Communication methods
Personnel training
Medical surveillance
Stop work indicators
Emergency response plan

Copies of these plans will be provided to all ESSAP employees and/or ESSAP sub-contractors working on the site. One copy will be available on site at all times.

5.4.3 Working under the plans of others

In situations where a site management contractor or other group is responsible for safety on a site, it may be requested that ESSAP employees meet the requirements of that group's safety plan. The plan in question will be reviewed by ESSAP project management and ESH to determine the completeness and applicability of the information provided. ESSAP requirements for safety must always be met. More stringent requirements may be adopted, as necessary.

6.0 Communications

Conditions on typical survey sites allow for normal voice and/or hand signal communications. Cellular phones may also be mounted in survey vehicles or short-range radios carried by survey personnel.

Program personnel, to the degree possible, should work in teams of at least two people. Personnel may work individually if they are within visual or voice range of either coworkers or other cognizant project subcontractors or regulators. Use of short-range radios may also be used as a means to permit staff to work individually, provided there are no unusual hazards either within the work area or with the task being performed.

7.0 Site Controls

When entry controls have been established at a site by other responsible groups, appropriate procedures will be referenced or provided in the specific safety plan. In cases where the need for such controls is identified by ESSAP personnel based on findings as a survey progresses, the Site Coordinator will be responsible for determining the type and duration of use.

8.0 Area Monitoring

8.1 General

Results of area monitoring pertaining to ESSAP work activities that are performed

by non-ESSAP personnel should be obtained, reviewed and placed in the project file. In the event that a review identifies significant concerns about working conditions, the ESH office must be informed.

8.2 Assessment of Exposure Level

With very few exceptions, ESSAP activities deal with radiation levels and radioactive material concentrations near typical background values; it is very unlikely that measurable radiation exposures will occur. Special precautions will be taken in cases where the possibility of significant personnel exposure exists.

When unanticipated situations arise which cause exposure rates to exceed the detection capability of a NaI(Tl) detector, personnel must leave the area and contact the Site Coordinator.

8.3 Removable Contamination Assessment

Review of available site history will usually be sufficient to identify the potential for removable contamination. Routine survey activities provide the means for continuous monitoring by way of smear sampling and direct surface scans and measurements.

8.4 Air Quality Assessment

Prior to entering areas having questionable air quality, monitoring must be done or results of monitoring by others must be reviewed, to assure safe working conditions.

Assessment of areas having excessive airborne particulate can be performed in conjunction with the ESH office.

NOTE: Air quality monitors other than those described below may be rented and used at survey sites. The calibration procedures of the manufacturer will be followed in these cases and noted in the site logbook.

8.4.1 Combustible Gas Indicator/Oxygen Meter Calibration and Use

8.4.1.1 Purpose

To describe the procedure for calibration and use of combustible gas indicator/oxygen meter (CGI/O₂).

8.4.1.2 Responsibilities

- Site Coordinator is responsible for assuring that this procedure is implemented

- Survey team personnel are responsible for following this procedure

8.4.1.3 Equipment

- ✓ MS Microgard; or equivalent equipment
- ✓ Calibration gas (0.75% pentane/15% oxygen in nitrogen air mixture)

8.4.1.4 Calibration Procedure

8.4.1.4.1 Press the ON/OFF key pad. Verify that the display functions appear.

8.4.1.4.2 Perform battery check. Press "Batt Volts" key pad. The acceptable range is 2.20 to 2.90 volts. When battery pack voltage is no longer sufficient to provide accurate readings (approximately 2.10 volts), the audible alarm latches on and sounds continuously (non pulsing).

8.4.1.4.3 Press the "RESET" key pad after 10 seconds to allow Microgard to stabilize. The combustible gas alarm will sound and % LEL will be displayed. The pump motor turns on, and the flow indicator verifies air flow with a bouncing bead. Press "RESET" again to silence the alarm and obtain a display of 000% LEL.

NOTE: If the 000% LEL display is not obtained adjust the zero control (Z:LEL) located under the side coverplate.

8.4.1.4.4 Oxygen Calibration - In fresh air, press "SELECT" key until the display indicates %OXY and release. Allow sufficient time for stabilization. The accepted value is 20.8% OXY. If needed, adjust the span control (OXY:S) in fresh air until the display indicates 20.8.

8.4.1.4.5 Combustible Gas Calibration - Instrument must be calibrated for oxygen in a fresh air environment prior to this calibration. Press "SELECT" key pad until %LEL mode is displayed.

Connect regulator and hose to calibration gas bottle, open valve to begin flow, and connect hose to the meter. Allow the gas to pass through the instrument.

The acceptable reading should stabilize at 47-55%. If the reading is not in this range adjust the S:LEL control (located under the side coverplate) to 50%. The factory set alarm level is set at 25% LEL. Change the setting to 19% LEL.

Disconnect hose from the instrument, turn off gas, and remove regulator.

8.4.1.5 Measurement Procedure

8.4.1.5.1 The combustible gas indicator should be used whenever there is a concern for the oxygen content of the air or a potential for the presence of combustible gas.

8.4.1.5.2 To use, turn the instrument on. An extension tube may be used to remotely monitor, such as in a confined space. Typically, the air is monitored in both the breathing zone (1.5 to 2 m high) as well as at ground level where heavier than air gases or fumes may accumulate.

8.4.1.5.3 If the alarm should sound, a light indicator will show which situation, either oxygen or combustible gas, has occurred. Corrective action must be taken and no entry allowed to an area in which levels are the following:

≤ 19.5% OXY indicates low oxygen content

≥ 21.5% OXY indicates enriched oxygen content

> 10% LEL indicates action required for combustible gas

25% LEL sounds alarm for combustible gas

NOTE: LEL interference could occur in low oxygen environments.

8.4.2 Organic Vapor Meter Calibration

8.4.2.1 Purpose

To describe the procedure for calibration and use of organic vapor meters.

8.4.2.2 Responsibilities

- Site Coordinator is responsible for assuring that this procedure is implemented
- Survey team personnel are responsible for following this procedure

8.4.2.3 Equipment

- ✓ Organic Vapor Meter, Thermo Environmental Instruments, Inc., Model 580B, or equivalent
- ✓ Zero Air Tank
- ✓ Span Gas (isobutylene, 250 ppm, or other)

8.4.2.4 Calibration Procedure

8.4.2.4.1 Install the appropriate energy lamp (10 eV or 10.6 eV dependent upon potential contaminants) into unit according to instrument manual.

8.4.2.4.2 Attach power plug (on attached chain) into RUN/CHG port and turn on.

8.4.2.4.3 Zero Air Calibration - Calibration mode may be entered by pressing "RESET". The window display will be "RESTORE BACKUP, + = YES".

Press "-/CRSR" to continue calibration mode. The display will show: "ZERO GAS - RESET WHEN READY".

Connect regulator and hose to the zero air bottle, open valve to begin flow, and connect hose to the meter. Allow air to flow through the meter.

Press "RESET" to calibrate. When the 580B has been zeroed the display will show: "SPAN PPM 0000".

Disconnect hose from instrument, turn off gas, and remove regulator.

8.4.2.4.4 Span Gas Calibration - Set the span gas concentration (labeled on gas bottle) by simultaneously pressing "RESET" and either "+/INC" to increment the digit above the cursor or "-/CRSR" to move the cursor.

When the correct concentration has been entered, press "+/INC" (without the "RESET", as above).

Connect regulator and hose to span gas bottle, open valve to begin flow, and connect hose to the meter. Allow the gas to flow through the meter.

Press "RESET" to calibrate. When the 580B has been calibrated the display will show: "RESET TO CALIBRATE".

8.4.2.5 Measurement Procedure

8.4.2.5.1 The organic vapor meter should be used whenever there is a potential for the presence of organic vapors.

8.4.2.5.2 To operate, enter operating mode by pressing "MODE/STORE". Air monitoring is then performed either on a continuous basis or at prescribed intervals in the breathing zone and at ground level, borehole, etc.

8.4.2.5.3 The alarm may be set at a threshold which corresponds to the permissible exposure limit (PEL) of known contaminants at a site. If potential contaminants are

unknown, select an alarm level of 2 ppm.

9.0 Personal Protective Equipment

Personal protective equipment (PPE) is provided whenever conditions are present that could cause bodily injury or impairment of the body through absorption, inhalation or physical contact of/with hazardous substances. These conditions may be present due to hazards produced by the environment, chemical, or radiological materials or mechanical irritants.

PPE is used in accordance with 29 CFR 1910.120 and 132, and the ORAU Chemical and Industrial Hygiene Manual. The ESH office will assist ESSAP management in all issues related to selection, use, training and limitations of PPE. In all situations where possible, engineering controls will be used to reduce or eliminate hazards. Respirators are used in accordance with ANSI Standard Z88.2

9.1 Responsibilities

- Supervisors - Assure that appropriate protective equipment is provided and used correctly.
- Employees -
 - ▶ Follow established guidelines
 - ▶ Notify supervisor about incorrect use of PPE
 - ▶ Notify supervisor about faulty or worn out PPE

9.2 Selection of PPE

PPE requirements will be determined on a site-specific basis and, if determined to be applicable, will address the following:

- Site hazards
- Conditions for use
- Limitations of use
- Task duration
- Maintenance and storage
- Decontamination and disposal
- Training and fitting

- Donning and doffing procedures
- Equipment inspection procedures
- On-going evaluation of PPE effectiveness

10.0 Radiation and Contamination Control

With very few exceptions, Program activities deal with radiation levels and radioactive material concentrations near typical background values; it is very unlikely that measurable radiation exposures will occur. Special precautions will be taken in cases where the possibility of significant personnel exposure exists. Of greater concern in survey activities is the potential contamination of field and laboratory equipment and cross contamination of analytical samples. Should site conditions warrant, ESH will prepare a radiological work permit (RWP). The ORISE RSO has provided additional clarification to the ORISE Radiation Protection Plan (RPP) requirements for when an RWP is to be prepared. Personnel may work in areas with fixed activity levels in excess of the RPP Appendix B values provided removable activity levels are less than the Appendix B values and dose rates do not exceed 5 rmem/h in any one hour.

10.1 Personnel

In potentially contaminated areas all personnel shall wear appropriate personal protective clothing and refrain from eating, drinking, smoking, or other activities that could lead to intake of material. Radiation dosimeters are to be worn during all assignments having a potential for exposure to personnel.

ESSAP will provide appropriate personnel radiation monitoring services and contamination control clothing for use by subcontractor personnel. Details regarding selections and assignment of monitoring devices and control equipment will be provided by the ESH office. Upon exiting potentially contaminated areas, thorough monitoring of clothing and skin surfaces is required. If contamination is identified, the site coordinator will determine the appropriate action to be taken. Instances of personal contamination and steps taken to remove the contaminant shall be recorded in the site logbook.

Gamma scanning will be performed as part of the survey activities and will detect any levels of radioactivity not previously identified that could pose a significant radiological external exposure to site personnel. Should situations arise which cause exposure rates to exceed the detection capability of the NaI(Tl) detector, personnel should leave the area and contact the site coordinator.

When dealing with radiological contamination, consideration should also be given to the control of related biological, chemical, and physical hazards.

10.2 Radioactive Source Control

Sealed or electroplated sources used for operational check-out of portable survey instruments are tracked using a computer inventory program. Sources must be logged out prior to removal from the Oak Ridge facility and logged in upon return to inventory. In the event sources are loaned to another organization, they will be tracked by means of chain-of-custody. Calibration sources must not be removed from the Oak Ridge facility without the approval of the ESSAP Laboratory Manager.

ORAU operates under a DOE a contract, and is license exempt by Section 30113, Part 30, by-product material, Title 10, CFR.

10.3 Equipment and Vehicle Surveys

All equipment and vehicles used in potentially contaminated areas are to be scanned, and cleaned if necessary, prior to leaving the site to assure that contamination is not inadvertently moved out of controlled areas. The results of these scans must be documented in the site logbook.

When there is a potential for contamination of containers or vehicles during sample transport, suspect surfaces will be surveyed. Should decontamination be necessary, a follow-up survey will be performed to assure that all surface activities are maintained as low as reasonably achievable. The results of vehicle surveys must be documented in the logbook or on the Vehicle Survey Summary Form (Figure 10-3). Documentation that no potential for contamination was encountered can be done by noting the situation on the Vehicle Checklist (Figure 10-4). Surveys of equipment or other items should be documented in the site logbook.

10.4 Decontamination

10.4.1 Equipment

Equipment used for sample collection should be surveyed, and cleaned as necessary, following each use.

Cleaning supplies which may be required:

- ✓ tap water
- ✓ deionized water
- ✓ non-phosphate detergent
- ✓ alcohol (isopropanol)

- ✓ spray bottles
- ✓ stiff bristle brush
- ✓ paper towels

10.4.2 Procedure

- 10.4.2.1 Wipe equipment surfaces free of loose material using paper towels or brushes.
- 10.4.2.2 Rinse with tap water.
- 10.4.2.3 Wash with detergent solution and brush.
- 10.4.2.4 Rinse with tap water.
- 10.4.2.5 Rinse with deionized water.
- 10.4.2.6 Rinse thoroughly with isopropyl alcohol.
- 10.4.2.7 Allow to air dry.

NOTE: Monitoring routinely performed at the sampling location will provide an indication as to the need for special attention following sampling. Any necessary decontamination should be performed such that potentially contaminated waste, generated in the process, can be collected and assessed to determine the appropriate disposal method. All samples known or suspected of containing levels of radioactivity which could present a contamination or exposure problem in the field or laboratory are to be placed in clean outer containers and identified with a radiation warning label or other explanatory information, as appropriate.

10.4.3 Personnel

The risk of personnel contamination is very low on most ESSAP survey sites; however should it occur, soap and water should be used to remove any contaminated material, and the area monitored with appropriate instrumentation to assure the material has been completely removed. Documentation of all instances of personnel decontamination activities must be documented in the site logbook and the ORISE RSO notified.

Portable showers and eyewash stations should be set up for ready access during work activities having a potential for eye contamination or significant skin contamination.

10.4.4 Vehicles

Vehicle exteriors will be surveyed and decontamination performed, if necessary, prior to removal from areas of the site suspected of having accessible removable contamination. See Section 10.4 for cleaning procedures.

11.0 Handling of Hazardous Material

It may occasionally be necessary to transport materials which require special packaging, labeling, and vehicle placarding. Examples of such materials are compressed gases, chemical reagents, and radioactive materials. The site coordinator, or their designee, is responsible for working with the Laboratory Manager and the ORISE Transportation Services Section (TSS) to assure that the appropriate paperwork is completed according to Department of Transportation regulations and that the appropriate containers and restraining devices are used.

11.1 Procedures for hazardous material transport

11.1.1 The Laboratory Manager, or designee will call the ORISE TSS and provide the following information:

- Destination name
- Destination address
- Name of contact person at destination
- Material type
- Quantity and size of containers

11.1.2 The TSS office will send the Laboratory Manager or designee the following:

- Material Safety Data Sheets
- D.O.T. regulation
- Shipping papers for transport (one way or round trip, as applicable)

11.1.3 The driver transporting the material must sign the shipping papers before leaving the Scarboro Facility. The completed paperwork must be carried in the cab of the vehicle at all times that hazardous materials are being transported. When the driver is in the vehicle, the documents must be carried in the driver's side door pocket or on the seat to the right of the driver. When the driver is not in the vehicle they must be in the driver's side door or on the driver's seat.

11.1.4 When it is necessary to transport the material (or any remaining portions) back to the Scarboro Facility, the return trip shipping papers must be signed by the driver prior to departure.

- 11.1.5 Upon arrival at the Scarboro Facility, the driver must give the signed shipping papers to the Laboratory Manager, or designee, for return to the ORISE TSS.

NOTE: If you are unsure of the classification of a material, contact a TSS representative.

12.0 Radioactive/Hazardous Waste Handling and Disposal

Routine field survey activities do not generate radioactive or hazardous waste material. In situations where the potential for such material to be generated has been identified, handling and disposal procedures will be included in the site-specific safety plan.

13.0 Standard Safe Work Practices

The following safe work practices should be followed at all times.

- All work will be conducted in accordance with applicable regulations, ESSAP procedure manuals and site survey plan.
- Potential hazards identified during survey activities will be communicated to all site personnel immediately. Survey personnel must then perform a job hazard analysis, develop and implement hazard controls, and work within established controls. New situations encountered, that had not been previously addressed, must be documented in the site log book.
- Team members will work in pairs or have assistance available by other workers present in the vicinity.
- A first aid kit will be available on site.
- Work areas will be kept as clean as possible and will be kept orderly and free of obstacles.
- Open excavations, trenches, etc. will be clearly marked and protected.
- Underground utilities will be identified prior to beginning any subsurface activities.
- Caution will be used and generous clearance given when overhead wires or other electrical hazards are present.
- Non-sparking tools, ventilation, purging and other precautionary measures will be taken when working with or in the vicinity of flammables.

- Area or task specific personal protective equipment will be worn and maintained properly.
- Eating, drinking, or smoking will be limited to designated locations only after the locations have been determined to be free of contamination and any other adverse conditions (poison ivy, flammables, etc.). These activities are allowed only after appropriate personnel decontamination procedures have been followed.
- Emergency equipment will be readily available and contaminant free.
- Work activities will be planned so that contact with potentially contaminated surfaces and/or materials is kept to a minimum.
- Field personnel will monitor themselves, and one another, for signs of physical stress and communicate any adverse effects that are noticed to the site coordinator.
- Air monitoring will be conducted as appropriate.
- Injuries, no matter how minor, will be reported to the site coordinator. Accident report forms will be prepared when applicable.
- Appropriate personnel and equipment decontamination procedures will be instituted to prevent the migration of contaminants.
- A copy of the Survey Procedures Manual and, if applicable, Site-Specific Safety Plan will be kept available on site at all times.

14.0 Excessive Noise

Survey sites will be assessed for the presence of excessive noise conditions. Identification of the potential for an 8 hour time weighted average of 85 dBA during survey activities will necessitate further monitoring and/or the use of hearing protection. The ESH office will be contacted for assistance in determining appropriate protection devices.

15.0 Heat Stress

15.1 Excessively hot and humid working conditions can cause stress and discomfort which may diminish work performance. Individual physiological characteristics such as age, body composition and size, fitness level, and level of acclimation will influence susceptibility to heat stress.

15.2 Responsibilities

- Site Coordinator
Assess working conditions on site for heat stress potential. Monitor workers as necessary. Institute adequate work breaks for the conditions. Ensure availability of potable water.

- Team Members
Use all required protective clothing and equipment. Be aware of heat stress symptoms and assess self and co-workers conditions. Drink water frequently. Work at a pace appropriate for the work conditions.

15.3 Work Task Assessment

- Planned work activities will be assessed for associated heat stress potential, and will be identified in the Site Safety Assessment. The ESH office is available to assist with work activity evaluations.
- Required PPE, equipment or procedures will be specified in the Site-Specific Safety Plan or the Site Hazard Information Sheet.
- Work conditions and requirements will be discussed with the team in the pre-survey meeting.

15.4 Precautions and Monitoring

- Some options for personal protection are: circulating air systems, ice cooling garments and reflective clothing.

General work practices for potential heat stress situations are:

- Self evaluation
- Frequent fluid replacement
- Acclimation
- Buddy system
- Scheduling of such activities during the coolest possible times
- Determination and use of "stay" and "recovery" times.

16.0 Confined Space Entry

A confined space is an enclosed area having all of the following characteristics:

- It is not designed for human occupancy
- It has restricted entry and exit
- It contains potential or known hazards

Examples are storage tanks, boilers, ventilation or exhaust ducts, sewers, and manholes. Open top spaces more than four feet deep may also be confined spaces if the above characteristics apply. Confined spaces have been implicated in serious bodily harm and death. Extreme caution should be exercised in encountering any conditions having the appearance of a confined space.

When the need for confined space entry on a survey site has been identified during the project planning stages, a written entry plan will be developed in accordance with 29 CFR 1910.146. Entry may be performed under the requirements of another organization, designated by the applicable funding agency as responsible for safety for a site, i.e. a Project

Management Contractor. In such cases, the safety plan will be reviewed, and approved by the ESSAP Survey Projects Manager prior to the start of on-site activities.

A permit-required confined space is a confined space that has one or more of the following characteristics:

- Contains or has the potential to contain a hazardous atmosphere;
- Contains a material that has the potential for engulfing an entrant;
- Has an internal configuration such that the entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section;
- Contains any other serious safety hazard.

When the need for permit-required confined space entry has been identified an entry permit system must be in place. In situations where such a system has been established by site owners or by a management contractor the ESSAP Survey Projects Manager may choose to utilize that system. The written procedure must be obtained, reviewed, and approved by the Survey Projects Manager, and consent from the responsible group must be obtained prior to beginning work activities in the space. In situations where ESSAP will be required to establish a permit entry system, the ESH office should be contacted for assistance.

17.0 Heavy Equipment Operation

Heavy equipment such as drilling rigs and man lifts will, in most cases be operated by personnel from contracted organizations or representatives from the survey site. ESSAP employees will not operate such equipment unless prior arrangements have been made to ensure that appropriate training and protective equipment concerns have been addressed by the Site Coordinator. The following general rules will apply in all cases:

- The operator will use all safety devices provided with the equipment.
- Personnel not required in the area must keep a safe distance from the equipment during operation.
- Personnel who must work in proximity of operating equipment will be responsible for avoiding the equipment's path and areas that may be blinded from the operator's vision.

- Occupancy limits will be observed at all times.
- Good housekeeping will be practiced at all times in equipment operation areas.

18.0 Asbestos

18.1 Site Assessments

Survey sites will be assessed for the presence of asbestos. A visual investigation will be performed during the preliminary site visit, if possible. Information will also be requested from site and/or agency representatives. If asbestos is determined to be present, the locations and characteristics will be determined. If monitoring results are available the results will be evaluated. Concentration of fibers present in the air that is greater than 0.02 fibers/cc requires that respiratory protection be used in the area. OSHA recommends an action level of 0.01 fibers/cc to determine whether any personal protective equipment is required. The ESH office personnel are available to conduct area monitoring on sites where a potential exists but data are not available.

18.2 Countermeasures

Every effort should be made to provide an asbestos-free working atmosphere. The Survey Projects Manager will attempt to schedule survey activities after asbestos remediation is complete or the asbestos has been contained. Activities that must take place when greater than 0.02 fibers/cc are present will require that respiratory protection be used.

19.0 Work at Heights

19.1 Ladders

- Should be inclined so that the horizontal distance from the top support to the foot of the ladder is one-quarter of the ladder length.
- Should be placed to prevent slipping, or it must be lashed or otherwise held in position.
- Ladders used for access to a roof should extend at least 3 feet above the point of support.
- Position the ladder to prevent overreaching.

19.2 Scaffolds

- Footing and anchorage must be sound, rigid and capable of supporting the maximum intended load without displacement.

- Scaffolds and their components must be capable of supporting at least four times the maximum intended load.
- Arrangement of planking for platforms must leave no spaces and must not overlap. Planks must extend between 6 and 18 inches past their end supports.
- Scaffolds may not be altered or moved horizontally while they are in use.
- An access ladder or equivalent safe access shall be provided.
- When overhead hazards exist protection must be provided.
- Where persons are required to work or pass under the scaffold, a screen must be provided between the toe board and the guardrail over the entire opening.
- Employees shall not work outside on scaffold during storms or high winds, or with snow or ice present on scaffold.
- For scaffolds more than 10 feet above the ground, guardrails at least 2 × 4 inches in size and between 36 and 42 inches high, and toe boards must be installed at all open sides.

19.3 Man lifts

- Only trained persons may operate aerial lifts.
- Employees will stand firmly on the floor of the basket, and shall not sit or climb on the basket edge.
- A body harness must be worn with the lanyard attached to the boom or basket.
- Boom and basket load limits specified by the manufacturer will not be exceeded.
- Breaks must be set and outriggers, when used, must be positioned on a solid surface.
- Only specifically designed aerial lift vehicles may be moved when the boom is elevated with workers in the basket.
- Articulating and extendible boom platforms must have both platform and lower controls. Lower level controls must provide for overriding platform controls, however, they must not be operated unless permission has been obtained from the employee in the lift, except in emergencies.

20.0 Electrical Hazards

- Consider all electrical circuits to be dangerous. Do not assume that a line is "dead." Treat all lines as though voltage is connected.
- Respect all lock-out tag-out situations.
- All extension cords must be the three-wire type; worn or frayed cords will not be used. Cords must be kept clear of working spaces, walkways, and water.
- Temporary lights should be equipped with guards to prevent accidental contact with bulb unless bulb is deeply recessed.

21.0 Compressed Gas Cylinders

- Cylinders will be stored secured to a wall or post or placed in specifically designed crates when not attached to survey carts.
- Caps will be kept in place when cylinders are not in use.
- Do not lift cylinders by the valve or cap.

22.0 Excavation Entry

- A safe means of egress must be located in trench excavations that are 4 feet or more in depth so as to require no more than 25 feet of lateral travel.
- No employee will be permitted underneath loads handled by lifting or digging equipment.
- For excavations greater than 4 feet in depth where oxygen deficiency, less than 19.5% oxygen, or a hazardous atmosphere exists or could reasonably be expected to exist, the atmosphere in the excavation must be tested prior to entry.
- Adequate precautions must be taken to prevent employee exposure to atmospheres containing less than 19.5% oxygen and/or a concentration of a flammable gas in excess of 10% of the LEL of the gas.
- When atmospheric controls are in place, testing must be performed as often as necessary to ensure that the atmosphere remains safe; emergency rescue equipment must also be available and manned.
- Employees will not work in excavations in which there is accumulated water, or in which water is accumulating, unless adequate precautions have been taken to protect employees, such as support or shield systems to protect from cave-in, water removal to control the level of accumulating water, or use of safety harness and lifeline.

- Adjacent structures must be stabilized.
- Adequate protection from loose rock, soil, or other materials that could fall or roll from the excavation face is required.
- Daily inspections must be conducted prior to the start of work and as needed thereafter.
- Employees must be protected from cave-ins except when the excavation is made entirely of rock or it is less than 5 feet deep and an examination provides no indication of potential cave-in.

23.0 Vehicle Operation

The following requirements are in place for the operation of any ORISE DOE vehicle or rented vehicle.

- Use for official business only.
- Practice defensive driving and adjust driving practices to road and weather conditions.
- Report all accidents to your supervisor immediately. Supervisor must report accidents to the Site Safety Representative as soon as practical. Appropriate forms and instructions are provided in all DOE vehicles. In the event of an accident, these forms must be completed and sent to the ESH office within seven days, with copies to the ESSAP.
- Vehicles used for out of town travel are to be inspected before leaving Oak Ridge, before leaving to return to Oak Ridge, and after returning to Oak Ridge using the Vehicle Checklist, Figure 10-4. The site coordinator or designee must review the inspection results and approve the vehicle for use by signing and dating the form.
- Vehicles used under conditions which pose a contamination potential will be monitored and results documented.
- Transport of hazardous materials must meet the requirements of Subsection 11.0.

24.0 Emergency Response

24.1 General Guidelines for Injuries/Illnesses

- Non-critical emergencies—render first aid.
- Serious incidents—render first aid and transport to medical facility
- Critical incidents—call 911 and request ambulance.

- Report incident to supervisor as soon as practical

24.2 Emergency Assistance

- 24.2.1 Emergency services are rarely available on survey sites, however, 911 service (police, fire, ambulance) is usually available for the area. A mobile phone will be mounted in one of the survey vehicles or carried by the site coordinator whenever possible.
- 24.2.2 Survey teams should have at least one individual who holds current certification for first aid, cardiopulmonary resuscitation, and bloodborne pathogen training. As general practice, ESSAP prefers that all field personnel hold current certifications.
- 24.2.3 The most direct route to the nearest medical facility will be identified by the Site Coordinator prior to start of work on the site and the information provided to the survey team.
- 24.2.4 All injuries should receive prompt medical attention; first aid and/or professional medical treatment. Personnel are encouraged to call the local rescue squad and/or ambulance and hospital services when, in their judgement, such services are required. The following forms must be completed and submitted to the ESH office within seven days of the event (see Figures 10-5, 10-6, and 10-7):

Employee's First Report of Work Injury
Supervisor's Investigation Report
Authorization to Release Medical Information

If medical attention is required, apprise the attending physician that the injury will be covered under ORISE's Worker's Compensation Program (Policy ESH-1100). If the provider should refuse treatment on this basis, notify the ESH office immediately at (865) 576-3333 or call the ESH office Hotline number at (865) 310-5555.

24.3 Vehicle Accidents

- In the event of an accident involving a DOE vehicle, call for police assistance, follow instructions, and complete the forms provided in the vehicle.
- In the event of an accident involving a rented vehicle, call for police assistance. Obtain copies of all reports including pertinent information about other individuals who may have been involved.

24.4 Fire

In the event of a fire:

- Evacuate the area
- Account for all personnel
- Call 911, or other available emergency number as soon as it is safe to do so.

Integrated Safety Management Site Health and Safety Hazard Assessment

1. GENERAL INFORMATION

Site Name:	Site Acronym:	Initiated by:	
		Date:	
Mailing Address:	Project Objective:		
Contact Information: Guide or Contact Name:	Phone Number:		Tentative Survey Date:

2. SITE SPECIFIC INFORMATION PART I

1. Does the site require site-specific training or have entry requirements for the preliminary site visit? ___ Yes ___ No

Site Entry Requirements (Check all that apply)

- ___ Site-specific training
- ___ OSHA training
- ___ Security clearance
- ___ Worker qualification record
- ___ Confined space entry
- ___ Bioassay
- ___ Dosimetry

2. Will PPE be required for the preliminary site visit? ___ Yes ___ No

Will PPE requirements differ for the survey activity? ___ Yes ___ No

PPE: Level A B C D (Circle the appropriate level and select all that apply)

- ___ Coveralls
- ___ Safety glasses
- ___ Gloves
- ___ Safety shoes
- ___ Hard hat
- ___ Safety covers
- ___ Other (list)
- ___ Hearing protection
- ___ Respiratory protection

3. Does the site have a Health and Safety Plan? ___ Yes ___ No (If yes, please attach document)

4. Will there be activities at the site that have the potential to impact survey operations? ___ Yes ___ No (If yes, please describe. Use the back of this form for additional space)

5. Will a Job Hazard Analysis be required? ___ Yes ___ No (If yes, please describe. Use the back of this form for additional space to identify potential hazardous conditions)

6. Has the site been abandoned? ___ Yes ___ No (Describe the site condition. Use the back of this form for additional information)

Figure 10-1

Figure 10-1

SITE SPECIFIC INFORMATION PART 2: HAZARD ASSESSMENT (Identify known and suspected hazards, and describe as necessary on the back of this form.)

Physical Hazard Assessment	Biological Hazard Assessment
<ul style="list-style-type: none"> <input type="checkbox"/> Confined spaces <input type="checkbox"/> Unsteady floor <input type="checkbox"/> Poor structural integrity <input type="checkbox"/> Unprotected high areas <input type="checkbox"/> Excessive/large quantity of hazardous material storage <input type="checkbox"/> Explosives (gran/dust hazard) <input type="checkbox"/> Trip/slip/fall hazards <input type="checkbox"/> Head hazards <input type="checkbox"/> Heavy equipment movement <input type="checkbox"/> Open trenches & excavations (Include the depth & indicate if shoring is in place) <input type="checkbox"/> Natural environmental occurrences <input type="checkbox"/> Underground utilities <input type="checkbox"/> Temperature extremes <input type="checkbox"/> Asbestos (Include monitoring results) <input type="checkbox"/> Excessive noise <input type="checkbox"/> Eye hazards <input type="checkbox"/> Electrical <input type="checkbox"/> High energy equipment <input type="checkbox"/> High pressure sources <input type="checkbox"/> Elevated mass ("high" potential energy) <input type="checkbox"/> Other (list) 	<ul style="list-style-type: none"> <input type="checkbox"/> Animal droppings <input type="checkbox"/> Insect infestation <input type="checkbox"/> Excessive mold or mildew <input type="checkbox"/> Poison ivy, oak, sumac <input type="checkbox"/> Open/exposed sewage <input type="checkbox"/> Potential for bacterial/viral infection <input type="checkbox"/> Animal carcass <input type="checkbox"/> Dangerous animal species (list) <input type="checkbox"/> Carcinogens <input type="checkbox"/> Other (list)

Chemical Hazard Assessment	Radiological Hazard Assessment
<ul style="list-style-type: none"> <input type="checkbox"/> Asphyxiant <input type="checkbox"/> Corrosives <input type="checkbox"/> Flammable material <input type="checkbox"/> Poisons <input type="checkbox"/> Explosive material <input type="checkbox"/> Other (list) <input type="checkbox"/> Incompatible chemical material <input type="checkbox"/> Reactive material <input type="checkbox"/> Toxic material <input type="checkbox"/> Inorganics <input type="checkbox"/> Organics 	<ul style="list-style-type: none"> <input type="checkbox"/> Contaminants <input type="checkbox"/> U natural <input type="checkbox"/> U enriched <input type="checkbox"/> Th natural <input type="checkbox"/> Pu <input type="checkbox"/> Other (list) <input type="checkbox"/> Co-60 <input type="checkbox"/> Cs-137 <input type="checkbox"/> H-3 <input type="checkbox"/> C-14 <input type="checkbox"/> Removable surface activity <input type="checkbox"/> Airborne activity <input type="checkbox"/> Exposure rate <input type="checkbox"/> Contamination areas

ADDITIONAL INFORMATION

Are the listed services available at or near the site?

Restroom Sufficient lighting Phone

Potable water Break areas Shelter

Utilities Other (Please identify)

Note any additional information applicable to characterize the Health and Safety conditions at the site. (Attach site drawings or design process information)

EMERGENCY INFORMATION

Is there emergency equipment and/or personnel available? Yes ___ No ___
(If yes, please identify)

Are there any emergency alarm systems in place? Yes ___ No ___
(If yes, please identify)

If 911 service is not available in the area, provide phone numbers for the following:

Police _____ Ambulance _____ Fire _____

Hospital _____

Describe emergency route from site.

Reviewed by Survey Projects Manager _____ Date _____
Figure 10-1 (continued)

SITE HAZARD INFORMATION SHEET

SITE NAME: _____

LOCATION: _____

SITE CONTACT: _____

SITE HAZARDS & SPECIAL REQUIREMENTS:**

**Attach copies of site-specific JHA's.

LOCATION OF NEAREST PHONE: _____

LOCATION OF NEAREST HOSPITAL (INCLUDING DIRECTIONS):

ORISE CONTACTS

ESSAP OFFICE: (865) 576-3180

ENVIRONMENTAL SAFETY & HEALTH: (865) 576-3333

Figure 10-2

VEHICLE CHECKLIST

The vehicle should be inspected (1) before it leaves Oak Ridge, (2) before leaving the site, and (3) after it returns to Oak Ridge. Copy to Project Leader of trip and completed original to Laboratory Manager. Please explain in detail any discrepancies on back of form.

Trip destination _____ Trip dates _____

Vehicle _____ License number _____

Ending mileage _____

Before Starting	With Motor Running
<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 1 2 3 </div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Accident/insurance package in glove compartment	<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 1 2 3 </div> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Oil pressure (light or gauge)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Parking brake (apply)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Instrument panel (warning lights and buzzers)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Check seat belts	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Windshield wipers/washer
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Check oil level and coolant level	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Heater/defroster/air conditioning
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Check belts, hoses, etc.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fuel Level (guage reading)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fire extinguisher, warning devise, and flares	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Steering wheel (excessive play)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Tires and wheels (lugs)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Head lights
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Tires and wheels (pressure visual)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Tail lights, brake lights, backup light
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Mirrors (outside and inside)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Turn signals (front, back, and side)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fuel tank and cap	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Running lights (side and top)
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Cargo doors latch and lock	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Emergency flashers
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ice scrapper and/or deicer (winter)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Transmission fluid level (automatic)
	Vehicles Transporting Hazardous Material
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Marking and placards
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Shipping papers (P-10 gas and other hazardous materials)

Survey 1 _____

Date _____

Survey 2 _____

Date _____

Survey 3 _____

Date _____

Project Leader _____

Date _____

Reviewed by _____

Date _____

Figure 10-4

Tennessee Employer's First Report of Work Injury

Wausau	The use of this form is required under the provisions of the Tennessee Workers' Compensation Law and must be completed and filed with your insurance carrier immediately after notice of injury. <i>It is a crime to knowingly provide false, incomplete or misleading information to any party to a workers' compensation transaction for the purpose of committing fraud. Penalties include imprisonment, fines, and denial of insurance benefits.</i> If you have questions, the state now has a benefit review system where a Tennessee Department of Labor Workers' Compensation Specialist can provide assistance. Call 1-800-332-2667 (TDD).
Name of Insurance Carrier	
Marsha Allen	
Name/Address of Claims Handling Office	
City State Zip	
(615) 292-8177	
Phone #	

<p><u>EMPLOYER</u></p> <p>1. Name Federal Employer Identification #</p> <p>2. Address City State Zip Code</p> <p>3. Nature of business Phone#</p> <p><u>INJURED EMPLOYEE</u></p> <p>4. Name Social Security #</p> <p>5. Address City State Zip Code</p> <p>6. Phone# Occupation (job title) Department</p> <p>7. Age DOB <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Married <input type="checkbox"/> Single</p> <p>8. Number of hours worked: per day ; per week ; number of days per week</p> <p>9. Wages: per hour \$; per day \$; per week \$; extra wages \$</p> <p><u>DESCRIPTION OF THE INJURY OR OCCUPATIONAL DISEASE</u></p> <p>10. Did the injury or exposure occur on the employer's premises? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, give the address of where it occurred City State Zip County</p> <p>11. Describe what the employee was doing when the injury or exposure occurred; list tools, equipment or materials involved</p> <p>12. Describe fully how & why the injury or exposure occurred</p> <p>13. Describe the injury or exposure in detail, giving the body part affected (examples: amputation of right index finger, fell down injuring low back, exposed to chemicals causing breathing problems)</p> <p>14. Date of the injury ; Hour of day am/pm. Give the date of the notice of the injury or exposure to the employee, if different than the date it occurred</p> <p>15. Was the employee paid in full for the date of injury or exposure? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>16. Has employee missed work because of the injury or exposure on any day after the date it occurred, including weekends or regularly scheduled days off? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give date last worked.</p> <p>17. Has employee returned to work? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give date</p> <p>18. Did employee die? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, give date Name/address of nearest relative</p> <p>19. Name/Address of physician</p> <p>20. If hospitalized, name/address of hospital</p> <p>Date report written Prepared by Title/Position</p> <p>I certify that the information given in this form is true, correct, and complete to the best of my knowledge.</p> <p>Signature of injured employee _____ Date: _____ If employee is unable or refuses to sign, state reason</p>	<p style="text-align: center;"><u>DO NOT WRITE IN THIS COLUMN</u></p> <hr/> Carrier#(6)
	<hr/> County #(3)
	<hr/> Occupation (3)
	<hr/> Industry(4)
	<hr/> Ownership(2)
	<hr/> Nature(3)
	<hr/> Body Part (3)
	<hr/> Type (3)
	<hr/> Source (4)
	<hr/> Agency (4)
	<hr/> Disability (1)

Figure 10-5

AUTHORIZATION TO RELEASE MEDICAL INFORMATION

I, _____, hereby authorize and consent to the release of copies of my hospital, laboratory, physician, and other medical records to any Occupational Medicine Program representative of Oak Ridge Associated Universities (ORAU) or ORAU's Workers' Compensation insurer. This authorization shall be valid until revoked by me in writing.

All medical providers and records custodians shall consider this document as my personal authorization to provide all records in their possession pertaining to me to the Occupational Medicine Program representative presenting a copy of this authorization. Any costs of complying with this authorization to release medical information will be the responsibility of the person presenting this authorization.

Date: _____

(Signature)

Address: _____

Witness

Witness

PRIVACY ACT STATEMENT
[Privacy Act of 1974, P.L. 93-579]

Collection of this information, to be contained in DOE System of Records DOE-40, is authorized by the Department of Energy Organization Act (P.L. 95-91, as amended); 5 United States Code Section 301; and Executive Order 12009. Participation in the system by execution of this release is voluntary, but, if information is not provided, the determination of any claim for which the employee might be eligible will be based on existing information of record within the system. The primary uses of this system are to process claims under workers' compensation insurance and third party claims. These records may be used to assist insurance companies in administering claims against DOE contractors and DOE; to assist state and local agencies in the consideration of insurance claims; and to assist physicians, lawyers, state industrial commissions, and claims adjustment service firms in the evaluation of claims. Additional uses are established by the DOE in Appendix B of the DOE Publication of System Notices, 47 Federal Register 14333, as amended.

Figure 10-7