****

Lessee

Safety & Environmental Manual

*At The*

*Wyoming Integrated Test Center*

Last update: February 2021

TABLE OF CONTENTS

[Introduction 1](#_Toc65155878)

[Revision and Reporting 1](#_Toc65155879)

[Scope 1](#_Toc65155880)

[Commitment to Working Safe and Environmental Protection 3](#_Toc65155881)

[Reporting Injuries and Incident Investigation 4](#_Toc65155882)

[“Class A” Work Requirements 4](#_Toc65155883)

[Site Access 4](#_Toc65155884)

[General Site Safety Rules 5](#_Toc65155885)

[Working Alone – The Buddy System 6](#_Toc65155886)

[Site Inspections 6](#_Toc65155887)

[Communications 7](#_Toc65155888)

[Emergency Action Plan 7](#_Toc65155889)

[Personal Protective Equipment (PPE) 8](#_Toc65155890)

[Respirators 9](#_Toc65155891)

[Fall Protection 10](#_Toc65155892)

[Risk Management Plan 10](#_Toc65155893)

[Confined Space 11](#_Toc65155894)

[Hot Work 12](#_Toc65155895)

[Hazardous Energy Isolation (Lockout / Tagout) 12](#_Toc65155896)

[Public Health (COVID-19) 13](#_Toc65155897)

[Barricades 13](#_Toc65155898)

[Scaffolding 14](#_Toc65155899)

[Rigging 15](#_Toc65155900)

[Forklift, Aerial, Scissor Lift Operation 16](#_Toc65155901)

[Hazard Communication (Right to Know) 16](#_Toc65155902)

[Respiratory Protection and Facial Hair 18](file:////Users/williammorris/Documents/WIA/ITC%20Safety%20Manual/1%20ITC%20Lessee%20Safety%20&%20Environmental%20Manual%20Feb2021.docx#_Toc65155903)

Attachments:

1. Safety and Training Forms
   1. ITC General Safety and Environmental Rules Form
   2. Safety and Environmental Training Record
   3. Lessee Safety Lead
   4. Lessee Safety and Environmental Manual Acknowledgement Form
   5. ITC Incident Report Form
   6. ITC Contractor Approval Application
   7. Annual Report Checklist
2. Public Health (COVID 19) Procedures
3. Emergency Action Plan (EAP)
4. Hazardous Energy Isolation (Lockout \ Tagout)
5. Environmental Compliance

## Introduction

This manual is designed to provide Lessees of the Wyoming Energy Authority (WEA) with safety and environmental policies and procedures established at the Integrated Test Center (ITC). Many of the safety and environmental topics outlined in this document are supplementary to government rules, codes and regulations.

These rules are in addition to any policies and procedures established by the Lessee. *When company policies or procedures conflict with ITC procedures(s); Lessees will adhere to the more stringent standard.* In the event that Lessee employees are observed violating any of the rules outlined in this manual, the supply of flue gas provided by Basin Electric Power Cooperative (BEPC) may be discontinued until BEPC and ITC ensure all rules outlined in this manual are observed for safe operations. If conditions observed are severe or recurring, the Lessee may be required to remove a particular employee or employees from the ITC site. Lessees will solely supervise and direct the work of their employees and contractors; ITC or BEPC personnel may intervene if personal injury or equipment damage is imminent. Failure to address safety or environmental items may result in a breach of contract and consequently the termination of the lease between WEA and the Lessee.

The information provided in this manual complies with all federal and state rules and regulations. Federal and state law may be subject to change at any time. Although this manual is an important tool for Lessees, it may not account for rules subject to change. Revisions may be made at the sole discretion of WEA or ITC.

## Revision and Reporting

This manual shall be reviewed at least annually and updated as may be needed. Each calendar year a Safety and Environmental review and report will be completed and made available to ITC stakeholders. A checklist has been prepared and attached to this manual as a guide to this annual endeavor.

## Scope

This manual applies to all Lessees performing work at the Wyoming Integrated Test Center. Although developed primarily for Lessees, this manual also applies to all those who access and work at the ITC, including WEA and ITC employees, contract employees, and contractors. In this manual the terms Lessee, employee, contractor, personnel and individual are often inter-changeable.

As a condition prior to gaining badged access to the ITC, all Lessee employees will be responsible to review, complete and return a copy of the ITC General Safety and Environmental Rules Form and the Lessee Safety and Environmental Training Record, included in the attachment section of this document.

**Work Classifications**

Work at the ITC is classified as follows:

Class A: “Hands-on” work on equipment or facilities which is not classified as Class B or C. Class A work is generally referred to as construction and maintenance. *Any Lessee or contractor performing Class A work must have their own applicable safety procedures and training program.* Approval to perform Class A work is detailed in the section titled “Class A Work Requirements”.

Class B: Non-construction and maintenance activities such as, operations of tenant owned facilities, operating switches, operating valves, calibrations, snow removal, copier repair, janitorial services, office repair, fencing, weed control, dust control. Also includes consultants, trainers, engineers and service representatives/technicians whose work is “hands-off.”

Class “C” – Delivery (designated as C.1 or C.2)

Class C.1 – chemical and fuel deliveries – for gasoline, diesel, fuel, propane, and other chemicals.

Class C.2 – freight deliveries – including equipment, dirt, gravel, rock and concrete.

The safety procedures outlined in this manual do not apply to all types of work. In these situations, Lessees will follow their safety procedures.

**Lessee Safety Lead**

Lessees are required to assign a safety lead who shall submit the completed Lessee Safety Lead form to the ITC Operations Manager before construction and/or operations may begin. The Lessee Safety Lead will be the primary contact person for all safety and environmental processes, procedures and concerns for the Lessee’s project. The Safety Lead will also ensure all Lessee employees and contractors receive satisfactory safety and environmental training.

## Commitment to Working Safe and Environmental Protection

The Wyoming Integrated Test Center is committed to protecting the safety and health of all personnel by providing safe working conditions and requiring that safe work practices be employed. Further the ITC seeks to prevent environmental harm and to comply with all environmental permits, laws, and requirements. ITC will not depart from this philosophy to enhance technology development, lower costs, or expedite tasks.

In fulfilling this commitment, we will provide and maintain a safe and healthy work environment according to acceptable business practices and legislative requirements. We will strive to eliminate any foreseeable hazards which may result in fires, security losses, damage to property, personal injury and illness.

Safety and environmental procedures and standards will be observed in the performance of all activities. Appropriate job planning is required of all personnel to minimize exposure to potential hazards and prevent accidents.

All employees are expected to play an active role in accident prevention and safe guarding the environment. It is the duty of all employees to perform their work courteously, efficiently and with maximum regard for the safety of themselves, others and the environment.

Lessee cooperation in identifying hazards and controlling these hazards is essential. Informing the Lessee Safety Lead and/or ITC Operations Manager of any conditions that may pose a threat to safety, health or environment is a requirement of this manual.

All individuals at the ITC are empowered to:

* Conduct their work in a safe manner.
* Stop work immediately to correct any unsafe condition or at-risk work practice.
* Take corrective action so that work may proceed in a safe manner.



**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Jason Begger

Managing Director

Wyoming Integrated Test Center

## Reporting Injuries and Incident Investigation

Any individual involved in an incident, near-miss, property and/or equipment damage while at the ITC will be required to provide immediate notification to the Lessee Safety Lead and the ITC Operations Manager. The Lessee Safety Lead will complete and submit an Incident Report Form within twenty-four hours.

Lessee’s and contractors are required to perform an investigation and provide a formal report with effective solutions following any incident which requires medical care other than basic first aid. Reports must be provided within forty-eight hours following the incident.

## “Class A” Work Requirements

Any entity engaged in “Class A” work must be an approved contractor for work at the ITC. The ITC maintains a list of approved contractors and Lessees may request new contractors be added to the list. The process for ITC contractor approval is outlined in the “ITC Contractor Approval Application” (attached). This process is initiated by Lessees with the assistance of the ITC. Requirements for becoming an approved ITC Contractor vary depending on the nature of the contracted work.

## Site Access

Prior to any work at the ITC, a list of Lessee ITC site employees shall be given to the ITC Operations Manager along with their Lessee Safety and Environmental Training Record and a signed copy of the ITC General Safety and Environmental Rules Form. The training records are required for badge access.

Badges are required for entry into the ITC. All personnel are required to badge in and out any time they enter or exit the site. Any person without a badge (visitor) must be 100% escorted by a trained (badged) employee. All visitors (people without a badge) will sign in and out daily using the visitor log book located in the ITC office.

Personnel, except Basin Electric Power Cooperative employees, with DFS badge access are required to complete ITC site specific safety training in order to gain access to the ITC site (see the Lessee Safety and Environmental Training Record form).

Personnel are restricted to those areas specifically designated for their work assignments. Site access is permitted for the ITC only. Entry into Dry Fork Station is not permitted unless invited and accompanied by DFS personnel. The ITC and DFS sites are separated by fences, however gates may be periodically left open. An open gate does NOT constitute permission to enter the DFS plant site.

All personnel will be made aware that vehicles, lunch boxes, and other personal property may be subject to inspections while on ITC property.

Vehicles will be driven at or below the posted speed limits on the ITC site. Vehicle speeds will be slower in work areas where conditions create additional congestion. Obey all traffic signs and rules. Seatbelts will be worn by all vehicle occupants.

Parking on site will only be in designated areas. All personal vehicles will park in the paved parking lot. Vehicles left in the parking lot when employees are not working may be towed at the driver’s or owner’s expense. Loitering and group activities are not allowed in the parking lot.

## General Site Safety Rules

All personnel are required to follow the rules and procedures outline in the Lessee Safety and Environmental Manual, and other standards that apply to your work.

Personnel have an individual responsibility to observe safety and health standards established for his/her protection and the protection of their co-workers. Disregarding safety rules and established ITC safety policies and procedures will not be tolerated. Lessees, their personnel and contractors not complying with safety rules, policies and procedures may be found in breach of lease/contract and subject to removal from job site.

Each Lessee employee shall carefully study and comply with all safety standards and is required to be aware of and follow the minimum general safety rules:

* Keep the work area clean and orderly at all times.
* Report all fire hazards to the Lessee Safety Lead.
* Report all near misses, accidents and injuries to the Lessee Safety Lead and ITC Operations Manager.
* Report unsafe conditions to the Lessee Safety Lead.
* Dress according to the conditions under which you may be required to work, including any required PPE.
* All personnel have the right to refuse to work under conditions which may cause serious injury or death.
* Look for and report to the Lessee Safety Lead any conditions that may cause injury or property damage and warn other exposed personnel:

1. Hazards that can be readily corrected shall be eliminated immediately.
2. Hazards requiring additional resources to correct should be barricaded and/or otherwise identified to warn exposed personnel.

* All Lessees are encouraged to make suggestions to their Lessee Safety Lead for correction of unsafe conditions.
* Be aware of the potential hazards associated with the chemicals encountered in the workplace; refer to provided Safety Data Sheets.
* Watch your footing when in slick areas. Never run, or take more than one step at a time, when using stairs. Have one hand free for the handrail. Keep stairs clear of loose objects.
* Remove any snow and ice prior to starting work. Snow and ice may cause major injuries.
* Actions that may be considered horseplay are prohibited. Serious accidents have occurred as a result of practical jokes and pranks.
* Personnel shall protect long hair and loose jewelry. Hair should be tucked back, or a hairnet should be worn. Excessively baggy clothing is prohibited.
* All personnel working where there is a danger of falling shall utilize fall protection equipment. Lessees must follow their company fall protection procedures.
* Cranes, forklifts, aerial work platforms, and manlifts are to be operated only by trained and authorized operators. All personnel shall keep clear of loads about to be lifted and all suspended loads.
* Inspect all ladders prior to use. Place extension ladders with the base one-fourth of the ladder length from the wall or object against which they lean. When used as access to an elevated work, the top of the ladder must extend at least three feet beyond the supporting object and be secured. Always use stepladders in a fully open position, set level on all four feet, and lock spreaders in place. Do not use as a straight ladder.
* Keep all tools, cords, hoses, and materials out of aisles, platforms, stairways, and other walking areas. Practice good housekeeping. Keep your work area clean and orderly. Pick up after each job and secure your tools, equipment, and parts when leaving the work site.
* Smoking is not permitted in indoor areas, mobile equipment, or outdoors within thirty-five feet of flammable and/or combustible materials and other sign posted areas. Smokers will dispose of cigarette/cigar butts in butt cans or by other equivalent means.
* Flammable storage areas must have “no smoking” and other applicable signs posted in area.
* Expectorating of tobacco and food items is prohibited throughout the ITC.

## Working Alone – The Buddy System

*Working alone should be avoided whenever possible.*  However, sometimes it may be necessary to be on site at the ITC alone.  In these cases, the Lessee’s shall establish their own “virtual” buddy system by notifying an appropriate individual of their organization of their presence at the ITC, the purpose of their presence at the ITC, and the intended duration of the visit.  Periodic check-ins with another member of the Lessee’s organization are strongly recommended to verify the safety of any individual alone on site.  If a check-in is missed, then the Lessee “virtual” buddy shall notify ITC personnel.

The badge entry system will be used in an emergency to determine the number of personnel on site in an emergency. This is why it is critical to badge out whenever leaving the ITC. However, the ITC (and DFS) do not actively track the whereabouts or welfare of personnel working at the ITC site under normal circumstances. Therefore, it is not possible to rely on the badge system in place of the buddy system. When working at the ITC, always let someone know what work will be done, and when personnel expect to leave site.

## Site Inspections

Lessees may be requested to perform regular safety inspections with the ITC Operations Manager. During site inspections it will be the responsibility of the Lessee to correct all identified hazards. Lessees will provide a follow-up list of all items corrected and those pending. Inspections are generally necessary based on the Lessee’s project size, complexity, duration on site, and past performance. In addition, copies of training records may be requested at the discretion of the ITC Operations Manager.

## Communications

All personnel shall ensure they are able to communicate with others (such as co-workers, emergency services and the DFS main control room) who may lend assistance during an accident or emergency (see the Emergency Action Plan for more information). All personnel will establish reliable communications prior to beginning work. Options for communicating on the ITC site include:

1. Two-way plant radios. DFS plant hand-held radios are available for use on an assigned and shared basis. The Operations Manager is available to assign and train personnel on radio use. All personnel are responsible to acquire a radio and understand its use.
2. Cell phones: Coverage is spotty and varies depending on carrier. Check your connection before relying on this communication means.
3. WIFI calling (internet based, WIFI coverage areas only)
4. Office phones as listed in the Emergency Action Plan (EAP)

## Emergency Action Plan

A detailed ITC Emergency Action Plan (EAP) is attached to this document. This paragraph is a summary of the EAP.

Lessees are responsible for their own safety and for recognizing and responding to emergencies impacting their personnel.

For medical or other emergency conditions immediately notify the local emergency services by phone (911), then using a separate line contact DFS’s Main Control Room at 307-687-8401. Give a detailed location as described below:

*The Integrated Test Center (ITC) at the Dry Fork Station*

*12480 North Highway 59*

*Include the name or identifier of the individual test bay*

Describe the situation as well as possible and stay on the phone until you are released. If possible, send someone to meet the first responders at the ITC entrance and lead them to the emergency.

The county emergency services officials (contacted through 911) will lead the emergency response. DFS control room operators will aid in communicating with emergency services and provide site access and site escort if necessary.

DFS has an alert system that is intended for those working on the DFS site. The DFS alert system and instructions given over loudspeakers may be audible to those working at the ITC. Although these instructions and warnings may be useful, they are not intended for ITC personnel. The ITC does not have a general alert or central emergency command center.

Depending on the emergency, personnel will report immediately to the closest Designated Indoor Shelter or Outdoor Assembly Area.

|  |  |
| --- | --- |
| **Indoor Shelter** | **Outdoor Assembly** |
| 1. ITC Office Building 2. Small Test Bay Tornado Shelter 3. Large Test Bay Tornado Shelter | 1. Flagpole Outside ITC Office Building 2. Southeast corner of the LTC 3. The ITC main entrance gate |

The ITC will receive emergency notification of a gas or ammonia leak from BEPC via DFS’s plant radio system. In the event of a gas or ammonia release, always move crosswind or upwind depending on your location relative to the area of the release. The windsocks on-site or the flags on the flagpole outside of the ITC Office building will help personnel determine the wind direction.

Refer to the ITC Emergency Action Plan for further details in the attachment section of this document.

## Personal Protective Equipment (PPE)

Lessees will provide all necessary PPE, tools and equipment to safely perform their job.

The Lessee is responsible for wearing appropriate PPE during all activities where there is an exposure to hazardous conditions or where OSHA standards indicate the need for using such equipment to reduce the hazards to employees. *At minimum* Lessees must comply with the following PPE requirements while on the ITC site:

* Eye Protection Requirements

Safety glasses with side shields shall be worn. Dark glasses are not permitted indoors, at night, and in other low-light areas.

Employees who wear prescription lens eyeglasses will also be required to wear ANSI Z87.1-1989 approved safety glasses, which include safety frame, lenses and side shields. Employees that do not have ANSI Z87.1-1989 prescription glass will be required to wear OTG’s or Goggles which meet the standard.

Exceptions may be made for escorted visitors who are *not* performing Class A, B or C work and who will not be in the vicinity of such work. In these situations, non-safety rated prescription glasses without side shields are acceptable.

* Head Protection

Head protection is required when on the jobsite. All hard hats will meet ANSI Z89.1-1971 standards. Do not alter or modify the shell or suspension system.

* Hearing Protection

Personnel must wear hearing protection in all areas where there is exposure to 80+ dBA.

* Foot Protection

Safety boots meeting the ANSI Z41-1999 are required. Tennis shoe or casual safety footwear is not allowed. Exceptions may be made for visitors, delivery drivers and identified services, however at minimum sturdy closed toed shoes must be worn.

* Clothing

Shirts with sleeves (four inch minimum) and full-length pants are required. Shorts, sweat pants, tank tops, excessively torn or loose clothing is not allowed.

When personnel work with exposure to moving vehicles or equipment, high-visibility clothing will be required. The American National Standards Institute (ANSI) classifies the type of clothing required depending on the work being performed. At a minimum, personnel performing work near roadways will be required to have Class II high-visibility clothing.

Exceptions to the clothing policy may be made for escorted visitors who are not performing Class A, B or C work and who will not be in the vicinity of such work.

* Hand Protection

Gloves must be appropriate for work being performed.

* Personal Care of PPE

PPE is an essential component of performing a job safely. PPE is an employee’s “personal” equipment; proper care and maintenance will be taken to retain the structural integrity and longevity of the equipment. Equipment shall not be modified or altered in any way and properly stored when not in use.

## Respirators

Lessees performing work requiring a respirator at the ITC are expected to follow the ITC’s facial hair policy (clean shaven) that can be found in the attachments section. Lessees must provide their own respirator program and protection requirements, both air purifying and air supplied as necessary. Respiratory protection shall be worn as the job dictates. Lessees are expected to understand the respiratory protection requirements for products and processes they typically use and are expected to utilize such protection as appropriate.

Lessees shall inform other Lessee Safety Leads of adjacent or nearby test sites if they believe the service(s) performed or products used will create respiratory hazards for adjacent site personnel. SDSs for those products must be provided to the Lessee Safety Leads of the adjacent test sites.

The following areas and/or assignments may require the use of respiratory protection and should be used as guidelines. The Lessee/contractor will have the ultimate responsibility to assess appropriate respirator use:

|  |  |  |
| --- | --- | --- |
| **AREA OR JOB** | **TYPE** | **LIMITS OF USE** |
| Grinding, cutting, welding or assisting in operations with specialty metals, such as stainless steel, galvanized metals or those coated with chromium, copper, chlorine, fluorine or bromine. | Half Mask with HEPA Cartridges  or  Full Face with HEPA Cartridges | HEPA Cartridge, P100 Particulate filter approved for nuisance level organic vapor (odor) relief below the OSHA PEL.  Approved for solids such as those from processing coal dust and fly ash. Liquid or oil-based particles from sprays that do not emit harmful vapors. Metal fumes produced from welding, brazing, cutting and other operations involving heating of metals. Approved for respiratory protection against dust and mists having a time weighted average not less than .05 milligram per cubic meter or 2 million particles per cubic foot. Not for use in atmospheres containing less than 19.5% oxygen. Not for entry into atmospheres immediately dangerous to life or death. |

## Fall Protection

Lessees performing work on elevated walking and working surfaces may be required to use fall protection systems. Work at/or above elevations of four feet will require the use of a standard handrail or personal fall arrest system. Fall protection equipment is required under the following conditions:

* When operating from the platform of an aerial work platform.
* When working higher than four feet on stationary platforms or other support not equipped with guardrails. Stationary platforms will include, but are not limited to: rooftops, tanks, scaffolding, steel beams and members, leading edge work, and piping.
* When working from a personnel platform suspended from a crane.
* When working in a confined space where employees may be lowered into or raised from the space.
* When working adjacent to an unguarded floor or wall opening four or more feet above the other levels.

Lessees will adhere strictly to OSHA and their company Fall Protection Program requirements.

## Risk Management Plan

Dry Fork Station maintains a Risk Management Program for the plant’s Anhydrous Ammonia System. The DFS Risk Management is summarized below and is available at the DFS office for reference by ITC Lessees.

* Dry Fork Station, adjacent to the ITC, is required to follow the Risk Management Program; EPA 40 CFR 68 and Process Safety Management; OSHA 29 CFR 1910.119. The requirements of OSHA’s PSM program are a subset of those contained in the EPA’s RM Program. Recognizing this, the requirements of both the PSM and RM Programs have been addressed in a single compliance program in order to simplify the implementation process and improve program maintenance efficiency. This combined compliance program, covering process safety and risk management for the Anhydrous Ammonia System, is referred to as the “Risk Management Plan” (RMP).
* The purpose of these regulatory elements is to ensure that facilities with processes containing highly hazardous chemicals maintain a complete and detailed collection of written process safety information for their processes.
* Anhydrous Ammonia
  + Colorless gas or compressed liquid with a pungent, suffocating odor.
  + Liquid ammonia reacts violently with water and vapor cloud is produced.
  + Avoid contact with vapor and liquid.
  + Stay upwind and use water spray to absorb vapor.
  + Evacuate upwind/crosswind.

## Confined Space

Lessees/contractors required to perform work in confined spaces will administer their own confined space safety program and will be required to adhere to OSHA CFR 1910.146 Permit-Required Confined Spaces standard. When Lessees perform work that involves confined space entry, the Lessee Safety Lead shall [OSHA CFR 1910.146(c)(8) – 1910.146(c)(9)(iii)]:

* Inform the employee/contractor that the workplace contains permit spaces and that permit space entry is allowed only through compliance with a permit space program meeting the requirements of OSHA CFR 1910.146.
* Apprise the employee/contractor of the elements, including the hazards identified and the facilities experience with the space, that make the space in question a permit space.
* Apprise the contractor of any precautions or procedures the Lessee has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
* Coordinate entry operations with the entrant.
* Debrief the entrant at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.

Each employee/contractor who is retained to perform permit space entry operations shall:

* Obtain any available information regarding permit space hazards and entry operation from the Lessee Safety Lead.
* Coordinate entry operation with the Lessee Safety Lead.
* Inform the Lessee Safety Lead of the permit space program that employee/contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during entry operations (information can be obtained through permit).

Lessees and contractors will be required to train their employees in the applicable confine space procedures.

## Hot Work

Lessees/contractors required to perform hot work will administer their own hot work safety program.

Hot Work is defined as any work involving electric or gas welding, cutting, brazing, burning or similar flame, spark producing operations, and open flames. This includes but is not limited to acetylene torches, arc welding equipment, portable grinders, propane torches and powder actuated guns.

The Lessee Safety Lead will advise all employees and contractors about flammable materials or hazardous conditions of which they may not be aware. When conditions warrant “hot work” to be performed, employees and/or contractors must follow all procedures identified in the applicable Hot Work Program. Lessees shall recognize their responsibility for the safe usage of cutting and welding equipment and:

* Shall provide trained personnel knowledgeable of applicable hot work procedures to serve as fire watch for their hot work activities.
* Shall not initiate any hot work activities until a permit is received according to the applicable hot work procedures.

Dedicated extinguishers for hot work must be provided by the Lessee\contractor. A Hot Work Permit is required for all hot work.

## Hazardous Energy Isolation (Lockout / Tagout)

A detailed Hazardous Energy Isolation (Lockout / Tagout) procedure is included in an attached document. This paragraph is a summary of the detailed procedure.

The ITC Hazardous Energy Isolation (lockout/tagout) program covers hazardous energy isolation of ITC owned\controlled equipment. Lessees and their contractors must have their own hazardous energy isolation programs and procedures for energy isolation of their equipment.

Hazardous energy isolation is required prior to any work, servicing, or maintenance of/on machines and equipment in which the unexpected start up or energization of the machine or equipment, or the release of stored energy, could cause injury or death. Examples of such energy include electrical, air pressure, hydraulic pressure, chemical, thermal, or springs under tension.

These procedures apply to all ITC owned\controlled equipment., The main isolation points are for flue-gas (small test center eight inch valve) and electrical supply (480V disconnect switches) to the individual test centers. The flue gas supply to the large test center must be isolated by Basin Electric under their procedures.

The Lessee Safety Lead will work with personnel to identify energy isolation boundaries which must be established prior to the start of work. Lessees shall apply their own personal lock to the appropriate lockout\tagout device. Lessees will account for their personnel through the use of a roster or by some other equivalent means. The Lessee Safety Lead must receive verification that all employees involved are free and clear prior to releasing any clearance.

## Public Health (COVID-19)

A detailed Public Health procedure is included in an attached document. This paragraph is a summary of the detailed procedure.

The ITC implemented COVID-19 Procedures in April of 2020 in response to that public health situation. The COVID-19 procedures have been renamed “Public Health”. The Public Health procedures, which now center on COVID-19 will remain a part of the ITC’s Safety and Environmental program after COVID-19 is brought under control. The ITC’s Public Health Procedures are intended to be dynamic and will be modified in response to public health emergencies and public health orders that may develop in the future.

It is up to all individuals working at the ITC to be aware of current guidance with respect to federal, state, and local public health orders and procedures.

## Barricades

Barricades are required and constructed to isolate hazardous areas and to warn personnel of hazardous conditions. Barricade tape is a warning line only and should not be considered for use as a guardrail. Barricade tape must be supplied by the Lessee\contractor.

Barricades are required when:

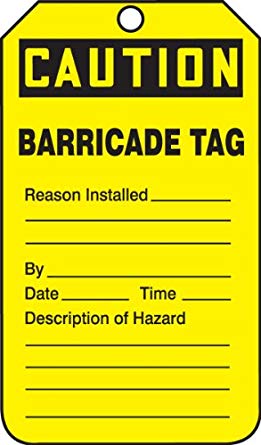
* overhead work creates a hazardous condition below, all exposed walkways and/or aisle ways below will be flagged off
* there are openings in floors, roofs, or elevated platforms
* tripping hazards are created by work in progress
* excavations are started and remain open
* a condition exists that may cause a hazardous substance to drain, spill, spray or leak on any personnel
* electrical cabinet covers have been removed exposing live parts. Barricades will be placed six feet beyond the minimum approach distance for the specific voltage encountered
* using explosive activated fastening tools (Hilti guns)
* vehicle driving hazards are present
* hoses and electrical cords are run across roadways, unless they are protected.
* cleaning vessels, pipes, or equipment creates hazardous conditions in the work area (e.g., hydroblasting, chemical cleaning)
* spray painting is being done
* personnel are exposed to the rotating superstructure of aerial lifts, cranes and excavating equipment (i.e. backhoe)
* encountering other potentially hazardous areas

Barricade Tape Procedure

* Barricades are to be tagged at normal routes of entry. Several tags may be needed for large areas.
* Red, “DANGER, Do Not Enter” tape is to be used for serious, immediately dangerous to life or health. These barriers may only be crossed or entered by those employees directly involved in correcting the problem within the hazard area and are knowledgeable of and prepared to deal with the hazard. If other individual’s need access to this area, they must obtain authorization from the Lessee Safety Lead.
* Yellow, “CAUTION” tape is to be used for less-serious hazards. Personnel may cross these barriers provided they are aware of the hazard and have taken actions to protect themselves from it.
* Barricade tape should be installed approximately forty-two inches above the walking surface and placed at least six feet from the hazard boundary.
* Barricade tape shall be placed to isolate the hazard from all sides accessible by people (including outside access).
* Each piece of tape installed must have a barricade tape tag corresponding to the color of tape erected properly filled out and placed in visible sight.
* Do not close off walkways and traffic areas unnecessarily.
* Barricades around excavations or hazardous areas will be illuminated at night to ensure their visibility.
* Remove all tape when the job is finished.

Open Holes

* Attempt to first mark and cover hole. Make sure hole covers are adequately secured.
* Open holes that cannot be covered should have a hard barricade such as scaffolding built to protect employees from entering.
* If holes cannot be covered or a hard barricade is not feasible, the area will be flagged off with red “Danger, Do Not Enter” tape a minimum of six feet back. All employees authorized to work within this area will need to be protected with a personal fall arrest system, preferably a restraint system.



## Scaffolding

Scaffolds shall be erected, inspected, moved, dismantled and /or altered only under the supervision and direction of a competent person. Inspections must be conducted each shift and/or prior to use. Lessees are responsible to use a standardized tagging system to identify hazards and fall protection. Upon completion of the inspection, the competent person will initial and date the tag.

Multiple Lessees or contractors working in similar areas will coordinate scaffolding efforts and tagging requirements. Lessees are not allowed on another Lessee’s scaffolding without first obtaining permission.

Scaffolds and scaffold components shall not be loaded in excess of their maximum intended load.

Scaffolds must maintain proper clearance from energized power lines. Clearance are 10 feet for 50 KV (50,000 volts).

Work on scaffolds is prohibited during high winds or storms. Employees will not work on scaffolds that are covered with snow, ice or other slippery materials, unless all ice or snow is removed, and planking sanded to prevent slipping.

Scaffold erected outside subject to high winds must be adequately secured to prevent scaffold components from falling.

Tool belts, tool bucket, and rope or other acceptable means will be used to raise and lower tools and parts from scaffolds.

Tools, materials, and debris shall not be allowed to accumulate on platforms. Scrap materials are not to be thrown down from elevated locations but lowered with a rope or other acceptable means.

Scaffolds shall be erected to protect employees from falling objects through the installation of toe boards, screens, or guardrails, or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects. Debriefing will be necessary if any crane activity will be done adjacent to scaffolding.

## Rigging

Lessees performing rigging functions must have qualified riggers (and apprentices only under the direct supervision of a qualified rigger).

The qualified rigger shall inspect rigging equipment prior to use on each shift and as necessary during its use to ensure that it is safe. Defective rigging equipment shall be removed from service. Rigging equipment, when not in use, must be limited as to not create a hazard to employees.

Slings shall be padded or protected from sharp edges of their load. Rigging through grating shall only be allowed when:

* Lessee can determine anchorage point will hold load without causing damage.
* All slip/trip hazards have been clearly identified with caution tape or placed out of walkway.

## Forklift, Aerial, Scissor Lift Operation

Only trained and authorized personnel shall be permitted to operate lifts. Operators are responsible for their own safety, other personnel, adjacent property, the lift, and the load. When an operator’s performance is questionable Lessee\contractors may be required to provide additional training documentation to the Lessee Safety Lead or ITC Operations Manager. When operator deficiencies are apparent the Lessee must determine suitable corrective action.

Contractors will be responsible to perform a pre-shift inspection prior to using lifts and shall use their own inspection form as needed for their own equipment.

## Hazard Communication (Right to Know)

Prior to occupying a test site, a meeting shall be held between the Lessee Safety Lead and the ITC Operations Manager to exchange information on chemical/hazardous materials used or stored in areas where the Lessee is assigned to work. Lessees shall maintain SDSs for any chemical or hazardous material they bring on-site.

Lessees will ensure their employees working at the ITC receive training regarding potential exposures to chemical/hazardous materials, to include hazards of the products, and proper handling and disposal requirements.

Periodic inspection will be conducted by the Lessee Safety Lead to ensure that any unused materials and empty containers/scrap have been properly removed and disposed of by the Lessee.

All hazardous materials, chemicals and products in addition to hazardous waste will be taken offsite by the Lessee and must be removed when not in use and by the end of the lease completion date. The ITC will not accept any chemicals without prior consent and proper handling documentation.

Lessee Safety Lead Responsibilities:

* Ensuring that personnel maintain a list of hazardous chemicals/materials and corresponding SDS(s) for products they bring on site.
* Ensuring that personnel are provided with appropriate information regarding chemicals/hazardous materials they may be exposed to, while on site.
* Ensuring that personnel are aware of their responsibilities to comply with provisions of this procedure regarding usage and exposure to chemical/hazardous materials.
* Provide copies of facility Safety Data Sheets upon request.

Labels:

* All containers that contain chemicals/hazardous materials shall be properly labeled.
* Original Containers: Hazardous chemical/hazardous material manufacturers, distributers and importers are required to label “hazardous” chemical containers with the name of the product (which will correspond to the name on the SDS for that product), appropriate hazard warnings for the products (which include information concerning body organs that may be adversely affected by the product) and the name and address of the manufacturer.
* Labels must not be removed or defaced while any of the product remains in the container. When the chemical is completely disposed of or rendered non-hazardous and the container properly cleaned, the label may be removed.

Secondary Containers:

* A secondary container is a pail, flammable liquid can, drum or other container, which is used to store or transport the contents from an “original” container for use in another location. The employee who transfers the contents from an “original” container to a secondary container must properly identify secondary containers. Labels used on secondary containers will include the identity of the chemical/hazardous material and appropriate hazard warnings or alternatively, words, pictures, symbols or combination thereof.
* Labels will be maintained in a clean, readable condition. If a placard or label has been obscured or defaced during use they shall be replaced. Personnel observing containers of unknown substances will correct the condition and/or report it so appropriate action can be taken to identify and appropriately label the chemical/hazardous material.
* Plastic gasoline containers are not permitted on site.

Anhydrous ammonia

Dry Fork Station uses anhydrous ammonia in their emissions control process. A release of anhydrous ammonia is unlikely but possible. An SDS is available for anhydrous ammonia and is located in the ITC office.

**Acceptable**

**Unacceptable**

## Respiratory Protection and Facial Hair

**WEA’s ITC Procedures Mirrors The OSHA Requirements**

**OSHA’s guidance regarding facial hair is expressed in the standard numbered CFR 1910.134(g)(1)(i) which states that the employer shall not permit respirators with tight-fitting face pieces to be worn by employees who have facial hair that comes between the sealing surface of the face piece and the face or that interferes with valve function; or any condition that interferes with the face-to-face piece seal or valve function. Facial stubble exceeding more than one day is considered excessive for most individuals causing interference with a respirator face piece seal.**

**Individuals have from time to time stated that they would be able to pass a fit test even with a beard or goatee. Although this is not an option, experiments have shown that some individuals may be able to pass OSHA’s minimum requirements with a beard.**

***The lowered fit factor experienced when facial hair is present is of such magnitude that no confidence can be placed on the protection factor of the respirator.***

**All respirator users experience variability of fit from time to time. The variability occurs due to changes in strap tension, positioning of the face, and a host of other variables. Facial hair introduces additional variables. Facial hair is a dynamically changing thing in that hair length is constantly changing. Beards also accumulate moisture, natural oils and debris from the workplace.**

**Tests have shown that the presence of facial hair produced leakage that was 50 to 1000 times greater than found with clean-shaven individuals. Leakage generally increased as the facial hair length increased.**

**A person who has hair such as stubble, mustache, sideburns, beard, goatee, long hairline, or bangs with are between the face and the sealing surface of the face piece shall not be permitted to wear a tight-fitting respirator. Facial hair exceeding a single, full day’s growth shall not be permitted. The sketches help to illustrate what is acceptable and what is not regarding facial hair.**

**Don’t Let Facial Hair Compromise Your Safety!**

**Narrow Mustache**

**Clean Shaven**

**Wide Mustache**

**Extended Side Burns**

**Goatee & Narrow Mustache**

**Goatee & Wide Mustache**

**FuManchu Mustache**

**Full Beard**

