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1.0 PURPOSE / SCOPE

- 1.1 The purpose of this program is to establish the principles of a uniform operations controlled protective system that will provide maximum protection for personnel working on or near dangerous equipment, both mechanical and electrical, with minimum interruption of service and minimum delay to necessary work. Additional safeguards necessary to complete the work safely may be added by supervision at any time.
- 1.2 It shall consist of energy control procedures, employee training and periodic inspections to ensure that before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, start up or release of stored energy could occur and cause injury, the machine or equipment shall be isolated from the energy source and rendered inoperative. [1910.147 (c)(1)]

2.0 <u>DEFINITIONS OF TERMS</u>

- 2.1 <u>Blue Lock:</u> used primarily for the protection of personnel. The blue lock will be put on energy sources associated with the piece of equipment that has been locked and tagged out.
- 2.2 Clearance: means lockout/tagout.
- 2.3 <u>Clearance ID badge:</u> an identification badge with the Qualified Employees name and picture that is used in conjunction with a personal lock (Red Lock). See Attachment 3
- 2.4 <u>Clearance Record:</u> the Clearance Record is the documenting form and binding contract for the protection transaction.
- 2.5 <u>Competent Person:</u> a person who is to be contacted whenever an employee does not understand any point of the company's program or procedure(s). The Supervisory Authority, Operating Authority, Safety Coordinator and Qualified Operator are Competent Person(s).
- 2.6 <u>Electronic Clearance:</u> the computerized system that manages clearances, known as NISOFT.
- 2.7 Energized: Connected to an energy source device or containing residual or stored energy.
- 2.8 <u>Energy Source:</u> Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy.
- 2.9 <u>Green Special Instructions Clearance Tag</u>: (white tag with a *green* border) are standard printed tags, which are attached to energy sources and other operating devices to denote that the device shall not be operated by anyone other than the person given exclusive operating control of that piece of equipment by the Operating Authority. Also known as a Green Tag Clearance. See Attachment 2



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- 2.10 <u>Green Tag User:</u> is a qualified employee signed onto a green tag clearance and is responsible for placing lockout devices appropriate for the equipment to be worked on, verifying isolation and deenergization prior to commencing work, controlling the energy source during work, placing equipment back into service and removing tags when work is complete.
- 2.11 <u>Group Representative:</u> is a Qualified Employee authorized to sign onto a Clearance with a group of Qualified Employees working under their control.
- 2.12 <u>Lock Box:</u> a blue box used in the lockout/tagout process. The lock box will contain blue locks that are keyed alike. Each box will be numbered and the locks will have the same number as the box. See Attachment 4
- 2.13 <u>Locking Center:</u> the Shift Supervisors office next to the Control Room. This is where the paperwork and the lock boxes will be kept during a clearance.
- 2.14 <u>Lockout:</u> the placement of a lockout device and lock on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.
- 2.15 Operating Authority: the Supervisory Staff in the Operation Section is the "Operating Authority" in the power plant and the administrator of this Clearance Program. Operating Authority duties may also be assigned to the Lead Station Operator if necessary.
- 2.16 <u>Protection Boundary:</u> includes all isolation points within a clearance.
- 2.17 Qualified Employee: an individual who is authorized to request a clearance to work on a job and, when applicable, receives protection for that job. Qualified employees may be working alone or have a number of individuals or groups of individuals working under their protection. Qualified employees are responsible for their own safety and the safety of all people working under the protection of their lockout/ tagout.
- 2.18 Qualified Operator: a Qualified Operator is an individual that has been trained on the equipment or system(s) needing a clearance and authorized by the Operating Authority to isolate equipment or system(s) by installing and removing locks and tags.
- 2.19 Red Clearance Tag Danger Do Not Operate: (white tag with a *red* border) are issued to permit work on electrical and mechanical equipment which has been de-energized or rendered inoperative by means of operation being blocked. See Attachment 1
- 2.20 Red Lock: are used as a personal lock or for a green tag clearance for qualified employees. The red lock will be put on the blue lock boxes that are associated with the piece of equipment that has been locked and tagged out. (See Attachment 5) When utilized with a green tag clearance, the red lock will be placed in the field in conjunction with a clearance ID badge.



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- 2.21 <u>Tagout:</u> the placement of a tagout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the tagout device is removed.
- 2.22 Test: an energization process performed to determine equipment functionality.
- 2.23 <u>Supervisory Authority:</u> the Plant Manager is the "Supervisory Authority" of the Clearance Program and administers manning the installation, maintenance, and the operations of the program. This person may designate this authority if necessary.
- 2.24 <u>Unqualified Individual:</u> an individual that not been trained and/or instructed in the purpose of the Clearance Program. This individual does not have authority to request a clearance and cannot isolate equipment by installing or removing locks and tags.
- 2.25 <u>Work Group:</u> a group of Qualified Employees authorized to work under a clearance with a Group Representative being the only one signed on the Clearance Sign-On sheet.
- 2.26 <u>Yellow Lock:</u> is the Operating Authority's lock and is only used to secure the blue lock box. The Operating Authority orders the installation or removal of this lock. Example: The #1 yellow lock will secure the #1 blue box. The Operating Authority will keep the #1 key to the #1 lock in the secured key box. See Attachment 5

3.0 <u>APPLICABILITY/RESPONSIBILITY</u>

- 3.1 Applicability
 - 3.1.1 This procedure shall apply to all work done at Dry Fork Station and may include activities such as, but not limited to: erecting, installing, constructing, repairing, adjusting, inspecting, cleaning, testing, operating and/or maintaining equipment.
 - 3.1.2 Administration of the clearance system is in every case vested in the Operating Authority.
- 3.2 Responsibility
 - 3.2.1 Safety Coordinator is responsible for:
 - 3.2.1.1 Conducting periodic clearance inspections.
 - 3.2.1.2 Providing initial and annual training in these procedures.
 - 3.2.1.3 Maintaining all training records.
 - 3.2.1.4 Maintaining clearance records.
 - 3.2.1.5 Reviewing the Clearance Program annually.



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- 3.2.2 Supervisory Authority is responsible for:
 - 3.2.2.1 The safe administration of this program.
 - 3.2.2.2 Enforcing the program and disciplinary action regarding violations of this program.
- 3.2.3 Operating Authority is responsible for:
 - 3.2.3.1 Ensuring adequate protection has been provided.
 - 3.2.3.2 Informing the Qualified Employee requesting a clearance of the protection boundaries and whether or not the equipment is safe to commence work.
 - 3.2.3.3 Ensuring the electronic clearance program has been properly completed.
 - 3.2.3.4 Providing the clearance to Qualified Employees.
 - 3.2.3.5 Maintaining the clearance and boundaries.
 - 3.2.3.6 Maintaining the locks, tags and clearance records.
 - 3.2.3.7 Issuing clearances.
 - 3.2.3.8 Resolving any disputes concerning the adequacy of the clearance provided.
 - 3.2.3.9 Releasing clearances and accepting the equipment for operation.
 - 3.2.3.10 Checking the competent persons report to verify that contractors have been trained on the DFS Clearance Program and are authorized to sign on a clearance.
- 3.2.4 Supervisors are responsible for:
 - 3.2.4.1 Ensuring employees obtain adequate clearances to perform the described work safely.
 - 3.2.4.2 Enforcing the program and disciplinary action regarding violations of this program.
 - 3.2.4.3 Assigning Qualified Employees to complete the work.
 - 3.2.4.4 Ensuring training is complete.
- 3.2.5 Qualified Operators are responsible for:



3.2.6

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3.2.5.1	Isolating the equipment and/or system by following the equipment isolation list.		
3.2.5.2	Installing lockout/tagout devices on isolation points.		
3.2.5.3	Verifying that the equipment has been isolated.		
3.2.5.4	Properly filling out the electronic clearance.		
3.2.5.5	Removing tags and locks when required to do so by the Operating Authority.		
3.2.5.6	Returning all locks and tags to the Operating Authority.		
3.2.5.7	Following the clearance guidelines and procedures.		
Qualified Employees are responsible for:			
3.2.6.1	Ensuring their safety and the safety of all individuals working under the protection of the clearance.		
3.2.6.2	Following the clearance guidelines and procedures.		
3.2.6.3	Requesting clearances for the work described.		
3.2.6.4	Properly filling out the electronic clearance sign on.		
3.2.6.5	Following the DFS Energy Verification and Control Program.		
3.2.6.6	Placing their Clearance ID badge with their red personal lock with a green tag clearance and at their discretion with a red tag clearance.		
3.2.6.7	Returning locks and tags to the control room when employees use a green tag clearance.		
3.2.6.8	Signing off the clearance and removing lock (when applicable) when work is complete.		
Group Representatives are responsible for:			
3.2.7.1	Ensuring their safety and the safety of all individuals working under the		

3.2.7

- protection of their clearance.
- Following the clearance guidelines and procedures. 3.2.7.2
- 3.2.7.3 Representing the work group when signing on to a clearance.



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	3.2.7.4	Properly filling out the electronic clearance sign on.	
	3.2.7.5	Controlling the energy source with a Green Tag Clearance.	
	3.2.7.6	Placing a red personal lock and Clearance ID badge on the lock box for a red tag clearance.	
	3.2.7.7	Placing a Clearance ID badge and red lock with the Green Clearance Tags	
	3.2.7.8	Signing off the clearance and removing lock from the lock box after ensuring all other employees in work group are clear of equipment.	
	3.2.7.9	Returning locks and tags to the control room for a green tag clearance.	
3.2.8	.8 Green Tag User is responsible for:		
	3.2.8.1	Being the only Qualified Employee signed on a Green Tag Clearance.	
	3.2.8.2	Controlling the energy source with a Green Tag Clearance (exclusively).	
	3.2.8.3	Placing a Clearance ID badge with the Green Clearance Tags and red lock on isolated equipment.	
	3.2.8.4	Following the DFS Energy Verification and Control Program when verifying equipment isolation.	
	3.2.8.5	Placing lockout devices appropriate for the equipment to be worked on.	
	3.2.8.6	Placing equipment back into service and removing locks/tags when work is complete.	
	3.2.8.7	Returning locks and tags to the control room when work is complete.	
3.2.9	Contracto	rs are responsible for:	
	3.2.9.1	Being knowledgeable in the equipment being worked on and the associated system.	
	3.2.9.2	Following and understanding the DFS Clearance Program.	
	3.2.9.3	Providing a list of trained contractor personnel for whom a Clearance may be provided.	

3.2.9.3.1 This list must be authorized by the Operating Authority.



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- 3.2.9.3.2 Only the people on this list will be authorized to be a Qualified Employee.
- 3.2.9.4 Providing DFS with a Group Representative for their company.
- 3.2.9.5 Properly filling out the electronic clearance sign on.
- 3.2.9.6 Using a personal lock (red) in conjunction with a Clearance ID Badge that contains the name and company information for that individual.
- 3.2.9.7 Ensuring the safety of contract employees working under the group representative.
- 3.2.9.8 Verifying isolations as required by the DFS Energy Verification and Control Program.
- 3.2.9.9 Signing off the clearance and removing lock from the lock box when work is complete.

3.2.10 Work Groups

- 3.2.10.1 Each Work Group performing work on a piece of equipment or system must have a Qualified Employee (Group Representative) signed on the clearance.
- 3.2.10.2 The Clearance must be verified and ensured safe before work begins on the equipment.
- 3.2.10.3 That individual signing on as the Group Representative must verify by walking the Clearance boundaries and making sure the equipment/system has been isolated, initial the tags, place a personal lock and Clearance ID badge on the lock box and sign on the clearance. See Attachment 4
- 3.2.10.4 Everyone in the Work Group will be authorized to perform work under that Group Representative, once work is complete, the Group Representative will sign off the Clearance.

4.0 PROCEDURE / GUIDELINES

4.1 Guidelines

4.1.1 Employees must understand the system and isolation boundaries of the equipment they are working on when requesting a clearance. Employees should use manuals, drawings, P&ID's, one-lines to accomplish this task or ask operations for assistance. This information should be reviewed with the Operating Authority prior to the clearance being created.



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- 4.1.2 All clearances shall be routed through a Lead Station Operator (LSO) or a qualified operator for a double check.
- 4.1.3 A blue or red lock on a piece of equipment is an order to everyone NOT to operate that equipment.
- 4.1.4 A red personal lock must have a Clearance ID badge attached.
- 4.1.5 Installing and removing blue or red locks must rigidly follow the rules as specified in this program.
- 4.1.6 Anyone trying to operate a piece of equipment with a blue lock on it or removing a blue lock without proper authorization will be subject to disciplinary action and possible termination.
- 4.1.7 Locks shall be affixed where a lock would normally be placed. If a lock placement device is not present, the Operating Authority is to be contacted for further instructions.
- 4.1.8 If a lock can in NO WAY be placed to isolate equipment, then a tag shall be used and affixed as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.
- 4.1.9 Clearance tags are used ONLY for the protection of persons working on or near electrical or mechanical equipment, which has been de-energized or rendered inoperative.
- 4.1.10 Red Clearance tags must be properly filled out, isolation verified and all tags initialed by a Qualified Employee before signing on the clearance.
- 4.1.11 Electrical or mechanical equipment which is locked and tagged with red clearance tags shall not be operated under any circumstance or for any reason.
- 4.1.12 Clearances are not required if the ONLY isolation point is the electrical energy isolating device of an electric plug (i.e. power tool) under the exclusive control and view of the qualified employee performing the servicing or maintenance. If the electrical device is also connected to any liquid, gas or solid material connections and has multiple isolation points then a clearance is required.
- 4.1.13 Green Special Instruction Clearance Tags (Attachment 2)
 - 4.1.13.1 Green Special Instruction Clearances shall be identified by the use of a Green Special Instruction Tag, a red lock and Clearance ID badge of the Green Tag User. Green Tags are used when equipment such as air heaters, manlifts, overhead doors, cranes and traveling screens, etc. must be energized during maintenance activities. When a Green Tag Clearance



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is issued by the Operating Authority, operations gives exclusive control of that piece of equipment to a specific individual.

- 4.1.13.2 The following restrictions apply for the use of Green Special Instruction Clearances:
 - 4.1.13.2.1 A defined work scope, hazard assessment and an isolation list must be developed and used for specific pieces of equipment if a Green Special Instruction Clearance is utilized.
 - 4.1.13.2.2 If used within a confined space, the confined space must be permit required.
 - 4.1.13.2.3 Green Tag Clearances will be issued at the discretion of the, Qualified Employee, Green Tag User and the Operating Authority.
 - 4.1.13.2.4 Green Tag Clearances are only assigned to ONE Qualified Employee at a time and for a specific piece of equipment or system. That employee becomes the Green Tag User and Group Representative and may have individuals working under his/her protection.
 - 4.1.13.2.5 The Green Tag User is the ONLY authorized person to control the energy source and will place the green tags as appropriate for the work being completed, verifying isolation/deenergization per the DFS Energy Verification and Control Program (this includes 48v and higher cabinets where an E&I is required) and remove them by the end of their shift or completion of work. If that individual does not understand the system or needs help locating equipment, a Qualified Operator may assist.
 - 4.1.13.2.6 The Green Tag User must Sign-on and off the Green Tag Clearance on the same shift. If the work is not complete than a red clearance needs to be created or a new Green Tag User must Sign-on.
 - 4.1.13.2.7 When the green tag clearance is complete, the green tag user must return all locks and tags to the control room and electrically sign off the clearance.
- 4.1.14 Red and Green Clearance tags will NEVER be used on a piece of equipment simultaneously.



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- 4.1.15 Protective measures shall guard against the hazard of adjacent equipment that is impractical to shut down. This may require the use of rope barriers to prevent accidental contact with operating machinery.
- 4.1.16 Grounding and Tagging Procedures
 - 4.1.16.1 Grounds shall be placed and removed according to the DFS Personal Protective Grounding Procedure.
 - 4.1.16.2 Operating Authority shall be notified of the location, quantity and status of grounds.
 - 4.1.16.3 The Qualified Employee responsible for installing grounds shall put the clearance in a work group HOLD for their department.
 - 4.1.16.4 The purpose section shall state that grounds were installed and the location.
 - 4.1.16.5 Once work is complete, a Qualified Employee from the work group shall remove the grounds and sign off the HOLD.

4.2 Procedure

- 4.2.1 All work requiring a Clearance shall have the clearance established before any work is started.
- 4.2.2 Creating and Issuing a Clearance
 - 4.2.2.1 Only the Operating Authority or their designee will be authorized to create and issue a Clearance.
 - 4.2.2.2 A Clearance will be required for each specific piece of equipment or system.
 - 4.2.2.3 Qualified Employees must request a clearance from the Operating Authority. During this request, the exact need for the clearance shall be discussed.
 - 4.2.2.4 All clearances shall have 'Requested By' and 'Description of Work' filled out.
 - 4.2.2.5 A Qualified Operator will receive the Isolation List, isolate the equipment and/or system by following the Position section on the Isolation List, making it inoperative and place the tags and locks on each component necessary.



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Once back in the control room, the Qualified Operator will sign in the electronic clearance and indicate that tags have been hung correctly.

- 4.2.2.6 Following the application of LOTO devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained and otherwise rendered safe. [1910.147(d)(5)(i)]
- 4.2.2.7 Verification of Isolation: prior to starting work on machines or equipment that have been LOTO, the Qualified Operator shall verify that isolation and deenergization of the machine or equipment have been accomplished by following the DFS Energy Verification and Control Program.
- 4.2.2.8 The Qualified Operator must verify that the equipment/system has been correctly isolated and 'Verify' in the electronic clearance program.
- 4.2.2.9 Any electrical cabinet above 48V, with exposed wires, will require an E&I Tech to be present when the clearance is being placed and verified. This applies when any cabinet has to be opened to hang and/or verify a lock/tag. The lock shall be placed in the cabinet and the tag secured to the outside of the cabinet for employees to initial.
- 4.2.2.10 E&I Techs will follow the Energy Verification and Control Program along with NFPA 70E requirements for PPE and boundaries when opening electrical cabinets and verifying if they have been properly isolated. Once a live dead live test has proven the equipment is safe to work on, E&I Techs will initial the tag with blue ink in the upper right hand corner of the clearance tag and document the verification within the electronic clearance system.
- 4.2.2.11 No unqualified employee is allowed to open or enter cabinets above 48V. Qualified Employees are designated by the Energy Verification and Control Program.
- 4.2.2.12 Once the Operating Authority has confirmation that the clearance has been verified, they will 'Issue' the clearance.
- 4.2.2.13 Once the clearance is issued, the Qualified Employee(s) must receive an isolation list, walk down the clearance and verify the correct equipment and/or system has been isolated.
 - 4.2.2.13.1 If there is a possibility of re-accumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing of maintenance is completed, or until the possibility of such accumulation no longer exists. [1910.147(d)(5)(ii)]



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- 4.2.2.13.2 Verification of Isolation: prior to starting work on machines or equipment that have been LOTO, the Qualified Employee shall verify that isolation and deenergization of the machine or equipment have been accomplished by following the DFS Energy Verification and Control Program.
- 4.2.2.14 Lock/Tag Verification should be completed by verifying that the Clearance Tag Isolation Point matches the equipment tag number, the description can be used for more clarification. Reference the DFS Energy Verification and Control Program.
 - 4.2.2.14.1 Some pieces of equipment will have the same tag number, so the description will be necessary to verify it correctly.
 - 4.2.2.14.2 Example: 1CD-MOV001A is used for the Condensate Pump 1A Discharge MOV breaker and Handwheel. See Attachment 7
 - 4.2.2.14.3 If there is no equipment number then use the description. If concerned, contact a Qualified Operator or the Operating Authority.
- 4.2.2.15 Once verification is complete, the Qualified Employee has initialed the tags, the Qualified Employee may electronically sign on the clearance.

NOTE: The purpose must contain a description of the work to be completed.

4.2.2.16 A clearance is considered issued until the Operating Authority has released the clearance.

NOTE: Final protection will not be released until all personnel have been signed off the clearance.

- 4.2.3 TEST (Partial Protection Release)
 - 4.2.3.1 The Operating Authority and all Qualified Employees signed onto the clearance will be notified and must agree that the change in boundaries will in no way interfere with the safety of all involved and everyone must Sign Off of the clearance, remove any personal locks if required and witness the Operating Authority unlocking the box and removing the key.
 - 4.2.3.2 NOTE: If an absent Qualified Employee is preventing the conducting of a release only the individual's immediate Supervisor, after precautionary measures and assurance of notification to the employee have been taken, can authorize that the Qualified Employee can be signed off the clearance by the



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Operating Authority. An Off-Duty Clearance Release Form must be completed at this time.

- 4.2.3.3 The equipment and/or system must be clear of tools and materials before it can be tested.
- 4.2.3.4 The Operating Authority will electronically place the clearance in "Suspend" and select "Test." A test de-isolation will be printed and given to the Qualified Operator along with the key.
- 4.2.3.5 The Qualified Operator will remove the tag and lock from the isolation point(s) and the tag(s) and lock(s) will be brought back to the Operating Authority until the Test has been completed.
- 4.2.3.6 If the Clearance is Re-Issued, then a Qualified Operator will go place the lock and tag back on the isolation point and verify that it has been isolated and inform the Operating Authority that the isolation points have been verified.
- 4.2.3.7 Once the clearance has been verified the Operating Authority can electronically reissue the clearance.
- 4.2.3.8 Any Qualified Employee may sign back on the Clearance after the TEST is complete. They must verify that the TEST isolation point(s) have been isolated, the Lock and Tag have been placed back on the point(s) and sign on the Clearance. The yellow lock is placed back on the lock box and a personal lock and clearance ID may be placed on the lock box at this time.
- 4.2.4 AMEND (Adding or Removing Isolation Points)
 - 4.2.4.1 Adding Isolation Points
 - 4.2.4.1.1 Additions to the Clearance will be allowed as long as the addition does not affect the protection boundary of any Qualified Employee listed on the Clearance Sign-On page.
 - 4.2.4.1.2 The Operating Authority will notify all persons listed in the existing clearance of the extended boundaries.
 - 4.2.4.1.3 Those individuals on the Clearance will be required to meet with the Operating Authority to discuss the additional points, sign off the clearance, remove their personal lock (if required) and witness the Operating Authority unlocking the box and removing additional locks.



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- 4.2.4.1.4 Qualified Employees listed on the original Clearance need not initial the tags involved in the extended boundaries, unless they were the requester of the amendment.
- 4.2.4.1.5 The Qualified Operator will place the additional locks and tags on the added isolation points and verify that correct isolation has been obtained and the Qualified Operator and Qualified Employee(s) have verified placement.
- 4.2.4.1.6 The Operating Authority will reissue the clearance.
- 4.2.4.1.7 The yellow lock and any personal locks and badges may be placed back on the box and the Qualified Employee(s) will sign back on the clearance.

4.2.4.2 Removing Isolation Points

- 4.2.4.2.1 Removal of isolation points will be allowed as long as it does not interfere with the safety of all involved.
- 4.2.4.2.2 The Operating Authority will notify all persons listed on the existing clearance of the requested removal of boundaries.
- 4.2.4.2.3 Those individuals on the Clearance will be required to meet with the Operating Authority to discuss the removal of points, sign off the clearance, remove their personal lock (if required) and witness the Operating Authority unlocking the box and removing the key.
- 4.2.4.2.4 A Qualified Operator will remove the lock and tag from the isolation point(s) and return them to the Operating Authority.
- 4.2.4.2.5 Once the removed locks and tags have been returned to the Operating Authority, the key will be returned to the lock box and the yellow lock will be installed on the lock box.
- 4.2.4.2.6 The Operating Authority will reissue the clearance.
- 4.2.4.2.7 The Qualified Employee(s) will verify isolation points and place a personal lock (if applicable) back on the lock box and electronically sign on the clearance.

4.2.5 Releasing Protection

4.2.5.1 A Clearance will not be released until everyone that is signed on that Clearance has signed off.



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- 4.2.5.2 The Operating Authority is the only person authorized to Release a Clearance.
- 4.2.5.3 If an absent Qualified Employee is preventing the conducting of a RELEASE only the individual's immediate Supervisor, after precautionary measures and assurance of notification to the employee have been taken, can authorize that the Qualified Employee can be signed off the clearance by the Operating Authority.
- 4.2.5.4 The Operating Authority will electronically select 'Override Sign Off' and sign the employee off the clearance.
- 4.2.5.5 The individual's immediate Supervisor will personally contact him/her before releasing the Clearance. If the individual cannot be contacted before releasing the Clearance, the Supervisor must notify that individual as soon as he/she can be contacted. The employee must be notified at the beginning of their next scheduled workday.
- 4.2.5.6 An Off-Duty Release Form must be completed.
- 4.2.5.7 The Off-Duty Release Form will then be submitted to the individuals immediate supervisor for notification to the employee on their next scheduled work day.
- 4.2.5.8 The signed, Off Duty Release form must be completed and then routed to the Safety Coordinator.
- 4.2.5.9 The Operating Authority will electronically release the clearance.

4.2.6 Completed Clearance

- 4.2.6.1 Operating Authority or Qualified Operator shall make a complete inspection of all locked/tagged equipment to assure that it is ready for service. He or she will also assure that all conditions are safe and employees are safely positioned or removed before restoring equipment to service.
- 4.2.6.2 A De-Isolation List will be printed and given to the Qualified Operator to insure that proper de-isolation in obtained.
- 4.2.6.3 All used locks/tags will be removed by a Qualified Operator designated by the Operating Authority and the equipment lined up for service. The locks/tags will be returned to the Operating Authority.
- 4.2.6.4 Operating Authority will inventory and assure that all locks and tags have been returned.
- 4.2.6.5 The Qualified Operator will electronically 'Complete' the clearance and fill out the completion comments.



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4.2.6.6 Tags may not be reused. All used tags will be destroyed by Operating Authority.

4.2.7 Holds, Shift or Personnel Changes

- 4.2.7.1 Boundary Review: if work goes beyond the end of the employee's shift and the piece of equipment needs to remain "locked out". Before work is resumed on that equipment, a review of the boundaries will be made by the employee to ensure the clearance is active and properly issued.
- 4.2.7.2 The Qualified Employees that are signed on the Clearance must give a status update to the Operating Authority at the end of their shift and decide whether to sign off the Clearance if work is complete, place it in HOLD or remain signed on.
- 4.2.7.3 In case a Qualified Employee must release his protection before the job is finished and no other Qualified Employee is available to sign on, the Qualified Employee must sign on the Clearance with a HOLD for their work group. The HOLD will remain in effect until the next Qualified Employee from that work group has followed the above procedures to sign on the Clearance and release the work group HOLD.
- 4.2.7.4 A HOLD does not allow employees to work on the equipment or system without signing on the clearance. If an individual needs to work on the system or equipment, they must be signed on the clearance.

4.2.8 Inspection

- 4.2.8.1 An inspection shall be conducted at least annually on the Clearance Program by the Safety Coordinator, Operating Authority and/or Supervisory Authority.
- 4.2.8.2 Inspections shall be performed by employees other than the ones utilizing the clearance program or facility procedure at the time of the inspection.
- 4.2.8.3 Inspections are conducted to correct any deviations or inadequacies identified.

4.2.9 Training

- 4.2.9.1 Training will be provided to all employees whose work may be regulated by these procedures. Understanding the responsibilities and procedures outlined above will be the primary objective of the training.
- 4.2.9.2 Training may include but is not limited to potential hazards, clearance procedures, responsibilities and inspections.



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- 4.2.9.3 Training will be provided:
 - 4.2.9.3.1 Before the employee is first assigned duties covered by this procedure.
 - 4.2.9.3.2 Before there is a change in assigned duties.
 - 4.2.9.3.3 Whenever there is a change in Clearance operations that presents a hazard about which the employee has not previously been trained.
 - 4.2.9.3.4 Whenever there is a deviation from the work scope or there are inadequacies in the employee's knowledge.
- 4.2.9.4 The training will establish employee proficiency in the duties required by these procedures and will introduce new or revised procedures as necessary for compliance with these procedures.
- 4.2.9.5 Refresher training in these procedures will be conducted on an annual basis.
- 4.2.9.6 Training documentation will include at least the employee's name, employee number and the date of the training.

4.2.10 Record Retention

- 4.2.10.1 Clearance Records will be retained electronically for three (3) years.
- 4.2.10.2 Clearance Inspection Records will be retained for one year.
- 4.2.10.3 Employee training records will be retained for the duration of employment plus 5 years.

5.0 ATTACHMENTS

- 5.1 Attachment 1: Red Clearance Tag
- 5.2 Attachment 2: Green Restricted Use Clearance Tag
- 5.3 Attachment 3: Clearance ID Badge
- 5.4 Attachment 4: Lock Box
- 5.5 Attachment 5: Locks
- 5.6 Attachment 6: Verification Example



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- 5.7 Attachment 7 : Off-Duty Clearance Release Form http://hdq1139.bepc.net/adm/doc.aspx?id=Library.1F846744-6E54-4D40-BEE8-953D8C191EE6
- 5.8 Attachment 8: Clearance Inspection Audit Form http://hdq1139.bepc.net/adm/doc.aspx?id=Library.79352DC4-C019-4FA1-A32C-7518B4A80018
- 5.9 Attachment 9: Clearance Authorization Form http://hdq1139.bepc.net/adm/doc.aspx?id=Library.EB4C3AD0-343B-4572-866D-BCF4EFD83F6F

6.0 REFERENCES

- 6.1 OSHA 1910.147, The Control of Hazardous Energy (lockout/tagout)
- 6.2 OSHA 1910.269(d), Hazardous Energy Control (lockout/tagout) Procedures
- 6.3 DFS Confined Space Program 00-SP-002
- 6.4 DFS Energy Verification and Control Program 00-SP-027
- 6.5 DFS Personal Protective Grounding Procedure 00-SP-029



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Attachment 1

RED CLEARANCE TAG







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Attachment 2

GREEN RESTRICTED USE CLEARANCE TAG

SPECIAL INSTRUCTIONS TAG

Date: 08/09/2018

Clearance # CLR2018/00002

Lockset #

Tag #2

Unit Common Area

CH (COAL HANDLING)

Equipment Name

0CH-CONV B CONVEYOR B

Energy Source

1AP-SWGR0002D - SST 1D (4160V) BREAKER M1D7

Position

GREEN TAG HOLDER HAS CONTROL OF THE BKR

Location

AQCS/CH BLDG EE ROOM.

Isolation Point

0CH-MTR5054 CONVEYOR #B DRIVE MOTOR - 700HP





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Attachment 3

CLEARANCE ID BADGE





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Attachment 4

LOCK BOX







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Attachment 5

Locks



Blue Lock – Energy Source



Yellow Lock - Operating Authority



Red Lock – Personal/Green Tag User



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Attachment 6

VERIFICATION EXAMPLE



BASIN ELECTRIC OWER COOPERATIVE

DRY FORK

05/24/2011

Clearance # 2011/00649CL

TAG# 1

UNIT 1 Unit

Area

CD (CONDENDSATE)

Isolation 1CD-MOV0001A CONDENSATE PUMP 1A DISCHARGE MOV

Point

Position LOCK BREAKER OPEN

AF





DRY FORK

05/24/2011

TAG# 2

Clearance # 2011/00649CL

UNIT 1 Unit

CD (CONDENDSATE) Area

Isolation 1CD-MOV0001A-.HANDWHEEL- CONDENSATE PUMP 1A

DISCHARGE MOV Point

Position CLOSED & LOCKED

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Final Audit Report 2022-11-22

Created: 2022-11-22

By: Jean Mortson (JMortson@bepc.com)

Status: Signed

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