#### Locking Out Fine Powder Packout HVAC System

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| Introduction | This procedure describes how to Lock Tag and Try the Fine Powder Packout HVAC system and how to put it back in service after maintenance work has been performed. |

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| When to Lock Out | The Fine Powder Packout HVAC system will be locked out when:   1. Extensive Maintenance work is to be performed 2. Various types of HVAC troubleshooting |

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| Safety | When locking out systems, the try procedure is always in effect. Refer to Lock Tag Try Form P-176 for general locking points. If any locking point is not required, N/A is to be put in that column. When valving in/out steam manuals, if packing needs tightened, contact shift FLS.  PPE requirements   * Safety shoes * Safety glasses with side shields * Leather gloves * Proper PPE for Class I Electrical activation and deactivation of MCC starter switches. |

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| Special Instructions | Fine Powder Packout operator must notify supervision prior to locking out system.  Before the HVAC system is locked out, the particulate analyzer vacuum pump should be turned off. This is to prevent excessive particle buildup inside of the particle counters while the HVAC system is shut down. The hand switch is located on the North West wall of the warehouse near the door to the change room. |

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| Environmental | None. |

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| Requirements | Before starting this procedure P-176 must be filled out. |

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| Quality | None. |

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Locking out Fine Powder Packout HVAC System, Continued

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| Follow the Steps in the Table Below to Lock Tag and Try HVAC System |

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| Step | Action |
| 1 | Go to Dry Screens Room. Turn off the room recirc fans by hitting the red buttons labeled CRPP-1PB. CRPP-2PB, and CRPP-3PB. (If work on the recirc fans is planned, the recirc fans must be locked out at the power panel to the right of the red push buttons.)  If recirc fans are not turned off, the room will heat up faster over time. It will take longer to bring the room back into SOC following the lock out. |
| 2 | Shut HVAC blower manual ON/OFF switch, and lock. |
| 3 | Shut off HVAC blower field disconnect, and lock. |
| 4. | Turn FPPO condenser Start/Stop switch located on the south west corner of the condenser to OFF. This switch will shut the condenser down in a controlled manner.  C:\Users\ppm716\Pictures\2017-02-02\240.JPG  Wait for compressors to shutdown (typically < 30 seconds).  NOTE: Failure to shut down the unit first at this switch could result in equipment damage over time. |
| 5 | Throw the field disconnect switch for the HVAC condenser and lock.  If the condenser is not turned off with the air handler, the condenser may freeze up over time. |
| 6 | Go to ECR 1 (This is a Monomer ECR.), don proper PPE.  Throw switch and lock out MCC-6E (HVAC air handler) and MCC 6A (HVAC condenser). |
| 7 | Complete try step.  Go back to HVAC blower manual ON/OFF switch, unlock and try to power up, then push try button at condenser. |

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Locking out Fine Powder Packout HVAC System, Continued

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| Follow the Steps in the Table Below to Lock Tag and Try HVAC System (Continued) |

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| Step | Action |
| 8 | If HVAC blower does start, (or if light does light up), put back in the OFF position and re-check the lock out. |
| 9 | Close steam supply manual valve. |
| 10 | Close steam return manual valve and the steam return from the steam supply to humidifier coil valve. |
| 11 | Open and drain steam condensate via drain valve at North side of air handler. |
| 12 | Verify that lock out checklist is complete. |
| 13 | Contact FLS to let him know system is ready for maintenance.  (Monitor maintenance activity and give brief updates to FLS) |

End of topic

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Follow Steps in Table Below to Unlock HVAC system.

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| Step | Action |
| 1 | When system has been deemed “ready to start” by FLS, go to the Dry Screens Room. Unlock the recirc fans if necessary then hit the green start buttons for the room recirc fans CRPP-1PB. CRPP-2PB, and CRPP-3PB (from left to right).   * Turn recirc fans on first before the air handler; otherwise, the fans may turn backwards causing powder to blow in the room. (The recirc fans sometimes cannot overcome the force of the air handler blower.) |
| 2 | Go to the air handler, close the condensate drain manual valves, unlock the steam manuals and open slowly (returns first then supply). |
| 3 | Go to ECR 1, don proper PPE, put the levers to the “On” position for MCC 6E and 6A. |
| 4 | Unlock the HVAC blower field switch, and put in the “on” position. |
| 5 | Unlock the HVAC blower manual ON/OFF switch and turn HVAC blower to on. |
| 6 | Unlock the condenser field disconnect and turn to the “on” position. Turn FPPO start/stop switch to ON. |
| 7 | HVAC system should now be running. It typically takes ½ hour to 1 hour for the room to get back in SOC. If HVAC does not start or the room does not come back into spec after a reasonable amount of time, contact shift FLS. |

End of topic.