



ANTELOPE VALLEY STATION SAFETY PROCEDURE

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Affected Department (s): ALL	Originating Department Safety	Final Approval: /s/ Chad Edwards	Date: 10/19/15
Subject CONFINED SPACE ENTRY			

I. PURPOSE

- A. To establish positive controls to minimize risks associated with entry into confined spaces.
- B. To prevent unexpected exposure to hazardous materials, oxygen deficient and/or toxic atmospheres.
- C. To plan for a timely and effective response to an emergency condition.

II. SCOPE

- A. This procedure represents the minimum requirements and will be followed prior to entering any confined space within the boundary limits of the Antelope Valley Station and related property.

III. DEFINITIONS:

- A. Confined Spaces are:
 1. Areas that are large enough and so configured that a person can bodily enter and perform work, and
 2. Areas that have limited or restricted means of entry and exit, and
 3. Areas that are not intended for continuous human occupancy.
 4. Examples include: tanks, duct work, silos, vessels, mixers, mills, manholes, boilers, pipelines and vaults.
- B. Entry: The action by which a person passes through an opening into a permit-required confined space.
- C. Permit-Required Confined Space: A confined space that has one or more of the following characteristics:
 1. Contains, or has the potential to contain, a hazardous atmosphere;
 2. Contains a material that has the potential for engulfing an entrant;
 3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly-converging walls or by a floor that slopes downward and tapers to a smaller cross-section; or
 4. Contains any other recognized serious safety or health hazard.
- D. Entry Supervisor: An on-duty Antelope Valley Station Supervisor, Contract and Project Coordinators with responsibility for issuing confined space permits. They are capable of identifying existing and predictable hazards in the surroundings or working



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conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

- E. Contractor Supervisor: Contractor representative such as lead person, supervisor, superintendent with responsibility of issuing and/or reviewing of permit prior to commencing work. They are capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.
- F. Authorized Entrant(s): Personnel authorized by the entry supervisor to enter permit-required confined spaces.
- G. Attendant(s): Personnel assigned to be stationed outside a permit space in order to monitor the authorized entrants and perform duties assigned by the confined space entry program.
- H. Non-Permit Confined Space: A confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

IV. RESPONSIBILITIES

A. Entry Supervisor

1. The Entry Supervisor is responsible for:
 - a) Initiating a Confined Space Entry Permit when personnel under their direction are required to perform work inside a confined space.
 - b) Ensuring all sections of the confined space entry permit are filled out prior to authorizing entry.
 - c) Knowing the hazards that may be encountered during entry, including information on the routes of entry, signs or symptoms, and consequences of the exposure.
 - d) Coordinating tagging of the confined space with the operating authority to ensure clearance & tagging requirements have been completed and the space is isolated from potential hazards.
 - e) Ensuring authorized attendants and entrants have signed onto the clearance form and/or crew verification tag (Reference Clearance and Tagging Procedure No. 147).
 - f) Verifying that a means for summoning rescue services through the Main Control Room is readily available and operable (Phone 8210, Gai-Tronics, Radio).
 - g) Ensuring that acceptable atmospheric gas tests have been taken and recorded on the Confined Space Entry Permit before allowing entry.



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- h) Signing the Confined Space Entry Permit when acceptable entry conditions are met.
 - i) Ensuring the Confined Space Entry Permit is maintained at the designated entry point.
 - j) Ensuring authorized attendants and entrants have signed into the Confined Space Entry Log book and hung their Confined Space Entry tag (Attachment 3) at the entry point.
 - k) Periodically checking on the confined space job(s) in progress.
 - l) Immediately directing the removal of individuals who have entered or attempted to enter the confined space without authorization to do so.
 - m) Terminating the entry and ordering the immediate evacuation, whenever conditions arise in or near the confined space that are not allowed for in the Confined Space Entry Permit.
 - n) Maintaining the entry permit consistent with the entry conditions whenever a transfer of operations occurs.
 - o) Interfacing with contract supervision that have personnel that enter AVS confined spaces.
 - p) Verifying all entrants have exited the permit required confined space before closing out/terminating the permit.
2. Following emergency evacuation of a confined space, the entry supervisor will be notified by the attendant or entrant(s). The entry supervisor will determine how the hazardous condition developed and take corrective action to prevent recurrence prior to resuming entry operations.
3. The Entry Supervisor may reclassify permit-required confined spaces that are designated on Attachment 2, provided the space meets the "CERTIFICATION TO RECLASSIFY THE CONFINED SPACE FROM A PERMIT TO NON-PERMIT" requirements.
- a) Upon reclassification, the Confined Space Permit and Certification will be provided to the Operating Authority and stapled to the appropriate clearance form.
- B. Supervisors
3. Supervisors are responsible for training entrants and attendants on their responsibilities. The Safety Coordinator will provide initial as well as periodic confined space training.
- a) Training will be provided:
 - (1) Before the employee is first assigned duties covered by this procedure



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- (2) Before there is a change in assigned duties.
- (3) When there is a change in confined space procedures or when inadequacies in the employee's knowledge have been identified.

C. Authorized Attendants & Entrants

3. Prior to entry, Attendants & Entrants are responsible for:
 - a) Reviewing the confined space entry permit, knowing the hazards that may be encountered during entry, including information on the routes of entry, signs or symptoms, and consequences of the exposure. (Reference Portable Gas Monitors Procedure No. 1000).
 - b) Signing onto the clearance form and/or crew verification tag at the designated location (Reference Clearance and Tagging Procedure No 147).
 - c) Signing into the Confined Space Entry Log book and hanging their Confined Space Entry tag (Attachment 3) at the entry point.
 - d) Performing atmospheric testing prior to entry and every 3-hours thereafter. Gas test results will be recorded on the confined space entry permit. In some cases continuous monitoring may be necessary. When continuous monitoring is performed, the word "Continuous" will be written in the Gas Test Results section of the permit.
 - e) Knowing how to communicate with an attendant or entrant(s). Communication is necessary to ensure the attendant can monitor the entry and inform the entrant(s) to evacuate if necessary. The entrant(s) will alert the attendant if a sign or symptom of exposure or other prohibited condition is detected.
4. Entrants will know how to exit the space if:
 - a) An order is given to evacuate.
 - b) A sign or symptom of exposure is detected.
 - c) A prohibited condition is detected.
 - d) An emergency alarm is sounded.
5. Following evacuation of space the attendants and/or entrants will report the prohibited condition, symptom of exposure or the reason for the evacuation to the entry supervisor.
6. Attendants & Entrant(s) will know how to use:
 - a) Portable gas monitors for testing the atmosphere inside a confined space.
 - b) Ventilation equipment used to obtain acceptable entry conditions.
 - c) Communications equipment for notifying the main control room of an emergency.



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- d) Required protective equipment.
- e) Other equipment needed for safe entry into, or rescue from, a confined space.
- 7. Attendants will:
 - a) Remain outside the permit space and be on hand to assist authorized entrant(s) entering, working or leaving a confined space, until relieved by another knowledgeable attendant.
 - b) Maintain an accounting of and communicate with the entrant(s) inside the space in order to monitor their status and determine the need for evacuation.
 - c) Warn away unauthorized persons that approach or enter and advise the authorized entrants and the Entry Supervisor if unauthorized persons enter the permit required confined space.
 - d) Order the evacuation of the confined space if:
 - (1) A prohibited condition is detected inside or outside the space.
 - (2) Abnormal behavioral effects are detected in the authorized entrants.
 - (3) They detect a situation outside the permit space that could endanger the entrants.
 - (4) Ventilation system stops working.
 - (5) The attendant can no longer effectively and safely perform his duties.
 - e) Notify the Entry Supervisor following the emergency evacuation of the confined space.
 - f) Notify the main control room so DGC rescue services can be summoned when they determine there is an emergency situation and the entrant(s) require assistance escaping the space (Reference Emergency Plan Procedure No. 38).
 - g) Perform non-entry rescues when required. Attendants are prohibited from entering confined spaces to perform rescue operations.
- 8. The attendant's primary duty is to monitor and protect the safety of entrants and will not perform other duties that interfere with this responsibility.
- D. Contract and Project Coordinators:
 - 1. Contract and Project Coordinators will review this procedure with outside contractors needing to work inside confined spaces at the Antelope Valley Station.
 - 2. Contractors will provide trained personnel and follow the requirements of the standard 29 CFR 1926.1200.



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3. Contractors entering confined spaces will sign into/out of the Confined Space Entry Log book each day and hang a Confined Space Entry tag at the entry point.
 - a) When a crew of entrants are working together on the same job, the Contractor Supervisor may sign the crew into the Confined Space Entry Log Book and hang one confined space entry tag that lists each person on the crew or references a contractor's log sheet.
4. Prior to commencing work, Contractor Supervisor must review permit with Entry Supervisor and sign permit. AVS will appraise contractors of confined spaces prior to entry through issuance of a permit. However, AVS cannot account for work conducted by contractors which may change these conditions during the course of a contractor's work. Contractors conducting welding, cutting, painting, coating and alike may change these conditions. This may require additional precautions such as gas testing (continuous monitoring), personal protective equipment, ventilation, and use of rescue equipment. The contractor solely responsible to make this determination and unless otherwise stated furnish all necessary material and equipment.
5. Additional information regarding communication can be found in the AVS contractor safety manual.

E. Safety Coordinator:

1. The Safety Coordinator will evaluate the Station on an ongoing basis to identify confined spaces. Permit-Required Confined Spaces are listed in Appendix 2. Confined spaces that may be reclassified by an Entry Supervisor to a Non-Permit status are designated in Appendix 2.
2. The Safety Coordinator will provide initial as well as periodic confined space training. The Safety Coordinator will provide assistance to supervisors as needed.

V. PERMIT PROCEDURES:

- D. No confined space will be entered unless a Confined Space Entry Permit is properly completed and signed by an Entry Supervisor.
- E. The Entry Supervisor will initiate the Confined Space Entry Permit (Attachment 1) when personnel under his/her direction are required to perform work inside a confined space. See Attachment 2 for a listing of confined spaces at the Station.
- F. The Entry Supervisor will ensure all sections of the confined space entry permit are filled out and coordinate tagging of the confined space with the operating authority. Permit items that are not applicable for a particular entry will be marked as N/A.
- G. Confined spaces will be ventilated for a minimum of 30 minutes prior to entry and will continue for the duration of the entry. Ventilation must be used as follows:
 - a) An employee must not enter the space until the ventilation has eliminated any hazardous atmosphere.



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- b) The ventilation must be so directed as to ventilate the immediate areas where an employee is or will be present within the space and must continue until all employees have left the space.
 - c) The air supply for the ventilation must be from a clean source and must not increase the hazards in the space.
- H. Before authorizing entry, the Entry Supervisor will ensure that:
- 1. AVS operations clearance & tagging procedures have been completed for the confined space.
 - 2. One of the authorized entrants or attendants have signed onto the clearance form, double-checked tagging of listed items and hung their crew verification tag at the designated location (Reference Tagging and Clearance Procedure No 147).
 - 3. Required atmospheric checks have been completed and recorded. Atmospheric checks will be taken each day prior to entry, monitored continuously and recorded every three hours thereafter, during entry into permit-required confined spaces. Atmospheric checks include:
 - a) Oxygen content between 19.5% and 23.5%.
 - b) Flammable gasses and/or vapors less than 10% of the lower explosive limit (LEL).
 - c) Toxic gasses identified by the Entry Supervisor and listed on the confined space entry permit.
 - (1) Carbon Monoxide < 35 PPM
 - (2) Sulfur Dioxide < 2 PPM
 - (3) Hydrogen Sulfide < 5 PPM
 - d) The area has been cleared of all hazards from falling debris (if applicable).
 - e) Pedestrian and/or vehicle barriers, required to protect authorized entrants from external hazards are erected (if applicable).
- I. An attendant is required to be posted for all permit required confined space entries. The Attendant will remain on duty until all authorized entrants have exited the permit required confined space.
- J. Rescue equipment noted on the permit will be brought to the entry point and setup for use as directed by the Entry Supervisor. A full body harness with attached rescue line will be worn by authorized entrants when it can be safely used to aid in a vertical rescue from the confined space.
- K. Each day, prior to entry, entrants will sign into the Confined Space Entry Log book and obtain a Confined Space Entry tag from the operating authority. The Confined Space Entry tag will be filled out by the entrant and hung at the entry point of the confined



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space during entry. Upon completion of the job, or at the end of the work shift, the entrant(s) will return their Confined Space Entry tag to the operating authority and sign out of the Confined Space Entry Log Book.

- L. When work inside a permit space is complete:
 - 1. Attendants and entrants will sign off the crew verification tag.
 - 2. Entrants will return their Confined Space Entry tags to the Shift Supervisor's office and sign out of the Confined Space Entry Log book.
 - 3. In the case of work crews, the Entry Supervisor will account for all crew members before terminating the entry.

VI. RECLASSIFYING PERMIT REQUIRED CONFINED SPACES

- D. The Entry Supervisor may reclassify permit-required confined spaces that are designated on Attachment 2, provided the space meets the "CERTIFICATION TO RECLASSIFY THE CONFINED SPACE FROM A PERMIT TO NON-PERMIT" requirements. The Declassification Checklist must be completed prior to reclassifying the confined space.
- E. Upon completion of the confined space entry permit and recording of acceptable atmospheric gas tests, the entry can be downgraded to a non-permit entry provided:
 - 1. AVS has historical experience through monitoring and inspection data which supports this decision. See attachment 4.
 - 2. AVS can demonstrate that all physical hazards in the space are eliminated or isolated through engineering controls so that the only hazard posed by the space is an actual or potential hazardous atmosphere, which does not exist.
 - 3. The confined space is continuously ventilated with fresh air, and that, in the event the ventilation system stops working, entrants can exit the space safely.
- F. A non-permit-confined space entry will follow the same entry procedures as a permit-required confined space except for:
 - 1. An attendant and rescue equipment is not required.
 - 2. Atmospheric gas testing will be done initially and at the beginning of each shift, provided the job being performed does not create a prohibited condition.
 - a) Additional gas monitoring may be necessary when conducting work which may change air quality. For example although test concludes space is safe to enter; if welding, cutting, or some other source will be introduced which may change the atmosphere after initial test then additional gas testing will be necessary regardless of classification.
 - b) Testing should continue for a period long enough to obtain a representative sample of work being conducted.



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3. AVS employees may elect and will not be denied the use of gas monitors regardless of classification.
- G. A non-confined space status may be requested, where major overhauls and construction activities change the characteristics of a confined space as indicated in definitions section of this procedure. The space may be temporarily reclassified to a non-confined space status:
 1. During this temporary status change confined space entry procedures would not be applicable. All other safety procedures including clearance procedures will still be required.
 2. Entry supervisor making this request will need prior authorization from the safety coordinator and must include a description of when space will be converted back to a confined space.
 3. Employees working on reclassified space must be notified of the temporary change.

VII. RESCUE SERVICES

- D. The Antelope Valley Station utilizes DGC Protection Services to perform rescue and emergency services in the event of a confined space incident (Reference Emergency Plan Procedure No. 38). To familiarize DGC personnel with the facility and emergency needs, onsite tours are periodically given.
- E. DGC will be responsible to appraise AVS in the event they are unable to respond for rescue for example they have an existing emergency. In this event all permit entry will be temporarily postponed.

VIII. RECORDS

- D. Upon completion of work, the completed Confined Space Entry Permit will be sent to the Safety Coordinator. Completed permits will be reviewed and retained for one year. Problems identified and discrepancies noted will be reported to the affected departments and used to revise the program and/or conduct additional confined space training as necessary.

IX. REFERENCES

- D. Clearance And Tagging Procedure No. 147
- E. Portable Gas Monitors Procedure No. 1000
- F. Respiratory Protection Procedure No. 134
- G. Fall Protection Procedure No. 500
- H. Emergency Plan Procedure No. 38



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- I. Welding and Cutting Procedure No. 52
- J. Personal Protective Equipment No. 132
- K. Federal Standards
 - 1. 29 CFR 1910.146 – Permit Required Confined Spaces
 - 2. 29 CFR 1910.269 – Electric Power Generation, Transmission and Distribution
 - 3. 29 CFR 1910.134 – Respiratory Protection Standard
 - 4. 29 CFR 1926.1200 - Confined Spaces in Construction

ATTACHMENT – 1

Antelope Valley Station CONFINED SPACE ENTRY PERMIT	Permit Number
--	---------------

Location/Building:	Clearance Form No.
Name Of Confined Space To Be Entered:	Duration Of Permit
Authorized Entry Point(s):	Date: To
Company Performing the Work:	Time: To

Reason For Entry (Describe Work To Be Done):

POTENTIAL CONFINED SPACE HAZARDS (CHECK ALL THAT APPLY)		
<input type="checkbox"/> Oxygen Hazard (<19.5% or >23.5%)	<input type="checkbox"/> Overhead Hazards, (Ash, Clinkers)	<input type="checkbox"/> Engulfment
<input type="checkbox"/> Flammable Gas/Vapors (>10% LEL)	<input type="checkbox"/> Mechanical Hazards	<input type="checkbox"/> Welding/Cutting
<input type="checkbox"/> Toxic Gases or Vapors: (CO, H2S, CL2,SO2)	<input type="checkbox"/> Electrical Hazards	<input type="checkbox"/> Restricted Self Egress
<input type="checkbox"/> Chemical(s): _____	<input type="checkbox"/> High Temperatures >105 Degrees F	<input type="checkbox"/> Other

Hazard Comments/Notes:

PREPARATION FOR ENTRY (INITIAL AFTER STEPS HAVE BEEN COMPLETED)	
_____ Affected Dept. Notified Of Service Interruption	_____ Clearance & Tagging Complete
_____ Cleaning, Flushing, Rinsing Complete	_____ Type Of Air-Mover/Ventilation Used _____
_____ Air-Mover Location _____	_____ Space Ventilated For _____ Hours (Minimum 30 Min.)
_____ Atmospheric Testing Completed/Recorded	_____ Temperature _____ Degrees F
_____ Communication To Be Used Between Attendants and Entrants (Circle One): Voice – Radio - Signaling System	
_____ Emergency Services Call Main Control Room By (Circle One): Gai-Tronics, Radio Channel ____, Phone 8210	
_____ Pre-Entry Briefing / Review of Clearance Form and Confined Space Entry Permit Completed	
_____ Space To Be Ventilated During Entry ? (Circle One) YES or NO	
How Is Space To Be Ventilated?	

REQUIRED PROTECTIVE EQUIPMENT		
<input type="checkbox"/> Half Mask or Full Face Cartridge Respirator	<input type="checkbox"/> Protective Gloves	<input type="checkbox"/> Face Shield
<input type="checkbox"/> Breathing Air System or Scott Air Pack	<input type="checkbox"/> Rain Suit /Acid Suit	<input type="checkbox"/> Fall Protection
<input type="checkbox"/> Ground Fault Circuit Interrupter (GFCI)	<input type="checkbox"/> Goggles	<input type="checkbox"/> Hearing Protection
<input type="checkbox"/> Full Body Harness & Retrieval Line	<input type="checkbox"/> Rescue Tri-pod & Retrieval Winch	<input type="checkbox"/> Scott Pack on Standby
<input type="checkbox"/> Other (Describe)		

Authorized Attendant(s) and Entrant(s) (List By Name) (Not Required For Non-Permit Entries)

GAS TEST RESULTS

(Required Beginning of Each Shift Prior To Entry And Every 3-Hours There After Unless Downgraded)

Vessel												
Date												
Time												
Initial												
O ₂ % 19.5 – 23.5												
LEL % <10%												
CO PPM <25												
H ₂ S PPM <10												
SO ₂ PPM <2												
Other												

Special Instructions: Each day, prior to entry, Authorized Entrants are required to sign into the Confined Space Entry Log-Book and hang their Confined Space Entry tag at the entry point. Entrants are required to remove their Confined Space Entry tag and sign out of the Confined Space Entry Log-Book at the end of the day.

Entry Supervisor Authorization: The work site has been inspected, all required precautions have been taken, necessary equipment is provided and I believe it is safe to enter the Confined Space.

Entry Supervisor: _____ **Date:** _____ **Time:** _____

Contractor Supervisor: _____ **Date:** _____ **Time:** _____

I have reviewed the Confined Space Entry Permit, signed onto the Clearance Form or Crew Tag and inspected the work site.

Attendant: _____ **Date:** _____ **Time:** _____

(A signature is not required for Non-Permit Confined Spaces)

All employees listed on this permit have exited the space, signed out and are clear of the equipment.

The Work Is Completed The Work Is Not Complete

Entry Supervisor: _____ **Date:** _____ **Time:** _____

(A signature is not required for Non-Permit Confined Spaces)

THIS PERMIT MUST BE POSTED ON JOB SITE – GOOD ONLY ON INDICATED DATES

(Not required for Non-Permit Confined Spaces)

DECLASSIFICATION CHECKLIST

All conditions must be met in order to reclassify the confined space:

- | | | |
|--|---|--|
| <input type="checkbox"/> Oxygen between 19.5% and 23.5% | <input type="checkbox"/> No Overhead Hazards, (Ash, Clinkers) | <input type="checkbox"/> No Engulfment or Entrapment Potential |
| <input type="checkbox"/> Flammable Gas/Vapors <5% LEL | <input type="checkbox"/> No Mechanical Hazards | <input type="checkbox"/> Self Egress Available (ladder, hatch, scaffold) |
| <input type="checkbox"/> No Toxic Gases or Vapors above PEL: (CO, H ₂ S, CL ₂ ,SO ₂) | <input type="checkbox"/> No Electrical Hazards | <input type="checkbox"/> No Asphyxiation Hazard (chutes) |
| <input type="checkbox"/> No other Chemical Hazards | <input type="checkbox"/> Temperature <105 Degrees F | |

CERTIFICATION TO RECLASSIFY THE CONFINED SPACE FROM A PERMIT TO A NON-PERMIT STATUS

I certify that the confined space does not contain a hazardous atmosphere; or material that may engulf an entrant; or has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly-converging walls or by a floor that slopes downward and tapers to a smaller cross-section; and the space does not contain any other recognized serious safety or health hazard. The confined space is not expected to change any of the declassification criteria during the work being performed. Any change in the criteria listed will result in canceling this certification, and necessitate the issuing of a new confined space entry permit. **This space is reclassified for this work.**

Entry Supervisor

Printed Name	Signature	Date	Time
_____	_____	_____	_____

This certification shall be made available to each person entering the space or to that person's authorized representative. No Attendant(s) are required, however, each day, prior to entry, Entrants are required to sign into the Confined Space Entry Log book and hang their Confined Space Entry tag at the confined space entry point. Entrants are required to remove their Confined Space Entry tag and sign out of the Confined Space Entry Log book at the end of the day.

MUST BE ATTACHED TO CONFINED SPACE ENTRY PERMIT

ATTACHMENT – 2

CONFINED SPACES AT AVS

This list is complete as of 7-11-2012 and **may not contain all Confined Spaces on the plant site.**

NAME OF PERMIT REQUIRED CONFINED SPACES

1. ACID AND INHIBITOR TANKS
2. ACID STABILIZATION TANKS
3. ACID TANKS
4. AIR HEATER HOPPER
5. AIR HEATERS
6. ALL CHUTES IN COAL HANDLING SYSTEM
7. ASH WATER PUMP BUILDING SUMP
8. AUXILIARY BLOW DOWN TANK
9. AUXILIARY BOILER DEAREATOR
10. AUXILIARY BOILER FIRE BOX
11. AUXILIARY BOILER LOWER DRUM
12. AUXILIARY BOILER UPPER DRUM
13. BAGHOUSE COMPARTMENT
14. BAGHOUSE HOPPERS AND DUCTING
15. BALL MILL SLAKERS
16. BOILER ASH OVER FLOW TANK
17. BOILER BLOW DOWN TANK
18. BOILER DEAD AIR SPACES
19. BOILER STEAM DRUM
20. BOILER MUD DRUM
21. BOTTOM ASH HOPPERS
22. CARBON FILTERS
23. CATION, ANION VESSELS
24. CAUSTIC TANK
25. CIRCULATING WATER DRAIN VAULT
26. CIRCULATING WATER LINES
27. CIRCULATING WATER PUMP SUCTION WELL
28. CLARIFIERS/SCUs
29. CLEAN OIL TANK (TURBINE)
30. CLEAR WELLS
31. CLOSED COOLING WATER HEAD TANK
32. COAL SILOS
33. CONDENSATE TANKS
34. CONDENSER WATER BOX AUX BFPT's
35. CONDENSER WATER BOX MAIN TURBINE
36. CONSTRUCTION POTABLE SAND ANTHRACITE FILTER
37. CONSTRUCTION POTABLE WATER DEGASSIFIER TANK
38. DEAERATOR HEATERS
39. DEAREATOR STORAGE TANK
40. DEMINERALIZATION VESSELS
41. DEMINERALIZER AND CONDENSATE POLISHER HOT WATER HEATERS
42. DEWATERING BIN SUMPS
43. DEWATERING BIN TRANSFER TANK
44. DEWATERING BINS
45. DIESEL FIRE PUMP SUCTION WELL
46. DIRTY OIL TANK (TURBINE)

NAME OF PERMIT REQUIRED CONFINED SPACES

47. COOLING TOWER SUMP
48. DUST COLLECTORS FOR COAL HANDLING SYSTEM
49. ECON HOLDING TANKS
50. ECONOMIZER HOPPERS
51. ELECTRICAL CABLE VAULTS
52. ELECTRICAL VAULTS
53. ELEVATOR SHAFT SUMP
54. EMERGENCY SPRAY DOWN TANKS
55. FANS FORCED DRAFT
56. FANS INDUCED DRAFT (Supplied Air while Online)
57. FANS PRIMARY AIR
58. FEED WATER HEATERS
59. FILTERED WATER TANK
60. FIRE PROTECTION VAULT
61. FLY ASH SILOS
62. FUEL OIL TANKS
63. GLYCOL EXPANSION TANK
64. GLYCOL HEAT EXCHANGERS
65. GLYCOL STORAGE TANK
66. GLYCOL SUMP/HEATING, VENTILATION, AIR CONDITIONING DUCTS
67. HIGH QUALITY HOLDING POND PUMP SUCTION WELL
68. LIME DAY BINS
69. LIME RECEIVING SUMP
70. LIME UNLOADING BLOW TANKS
71. LOW PRESSURE HEATERS
72. LOWER MUD DRUMs
73. MAIN TURBINE LUBE OIL RESERVOIR
74. MIXED BED VESSELS
75. OIL RESERVOIR FOR BOILER FEED PUMPS
76. PENTHOUSES
77. POLISHER VESSELS
78. POTABLE WATER MANHOLES
79. POTABLE WATER TANK
80. PROCESS WATER TANK
81. PULVERIZERS
82. RAW WATER PIPELINE MANHOLES
83. RAW WATER RESERVOIR PUMP SUCTION WELL
84. RECLAIM SUMPS
85. RECYCLE MATERIAL FEED BIN
86. RECYCLE MIX TANKS
87. SAND ANTHRACITE FILTERS
88. SETTLING/SURGE TANKs
89. SEWAGE TREATMENT LIFT STATIONS AND TREATMENT CELLS
90. SODA ASH DAY BINS
91. SODA ASH SILOS
92. SPRAY DRYER ABSORBERS

NAME OF PERMIT REQUIRED CONFINED SPACES

93. SPRAY DRYER ASH POND PUMP SUCTION WELL
94. STORM SEWERS
95. SUMP HIGH QUALITY
96. SUMPS LOW QUALITY
97. SUMP NEUTRALIZING
98. SUMPS
99. THICKENERS
100. TRANSFER BUILDING SUMPS
101. TREATED WATER MANHOLES
102. TURBINE GENERATOR
103. TURBINE OIL DRAIN SUMPS
104. UNIT 1 BOILER
105. UNIT 2 BOILER
106. UPPER STEAM DRUM
107. WASTE OIL TANK
108. LIME MILK TANKS
109. GRIT SEPERATION TANK
110. Day Bins
111. CW PUMP PACKING AND COUPLING ACCESS
112. LIME TROUGH
113. FEED TANK
114. MIX TANK
115. RECYCLE BIN
116. PROCESS WATER TANK
117. UNIT 1 SCRUBBER DUCTWORK
118. UNIT 2 SCRUBBER DUCT WORK

The Entry Supervisor may reclassify permit-required confined spaces that are designated on Attachment 2, provided the space meets the "CERTIFICATION TO RECLASSIFY THE CONFINED SPACE FROM A PERMIT TO NON-PERMIT" requirements. The Declassification Checklist must be completed prior to reclassifying the confined space.

ATTACHMENT 3



CONFINED SPACE ENTRY TAG

Basin Electric Power Cooperative

No.

Date

Time

Confined
Space

Entrant
Name

BEPC 00047 12/2008

HANDS OFF

**DO NOT CLOSE ENTRY OR
OPERATE UNTIL HOLDER
HAS REMOVED TAG.**

SAFETY FIRST

UNAUTHORIZED REMOVAL OF TAG IS A SAFETY VIOLATION



Antelope Valley Station Representative Gas Sampling

Applicable Procedure: Procedure No. 146	Area Tested:	Tested By:	Date:
Instrument:	Serial #:	Calibration Date:	
<input type="checkbox"/> Welding <input type="checkbox"/> Oxyacetylene Cutting <input type="checkbox"/> Other: _____			
<input type="checkbox"/> Ventilation: _____			
Overall comments (number of occupants, job function, etc.): 			
Concerns: 			

Attached Test

Signature: _____ **Date:** _____