

# Comanche Peak Moisture Barrier

June 17, 2025

## Moisture Barrier – Code Requirements/ Configuration

- Per Table IWE-2500, Moisture barrier accessible caulking, flashing and sealants are required to be inspected 100% every inspection period.
- The Comanche Peak (CPNPP) moisture barriers for Unit 1 and Unit 2 have an additional silicone elastomer cap covering the moisture barrier making it inaccessible. This protective cap is to prevent damage to the moisture barrier from traffic protection only.

Excerpt from M1-1901-003, Rev CP5

Typical Penetration seal map CB-808-154-44, Rev CP1



# Moisture Barrier Cap- Proposed Inspection Program and Acceptance Criteria

## Inspection Program

- 100% of the accessible Cap each inspection period.

## Acceptance Criteria to be used

- No visible wear, erosion, tear, surface cracks or other defects to the accessible Cap which expose the Moisture Barrier.
  - If moisture barrier damage is identified, further engineering evaluation will be performed.

## Moisture Barrier Cap- As-Found Condition Unit 1

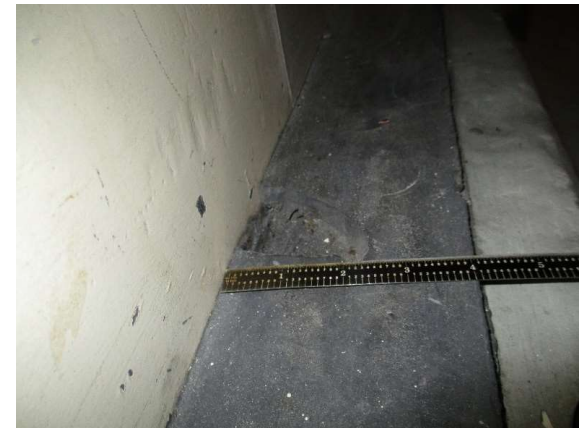
- The moisture barrier was inspected in 1RF24 (Spring 25). The following items were found during the inspection. All the damaged areas were repaired prior to start up. The damage was limited to the protective cap.



Azimuth 35: 2- 1" x 1" triangles



Azimuth 285: 1" x 2"



Azimuth 190: 2" x 2 1/2"  
Moisture barrier not exposed

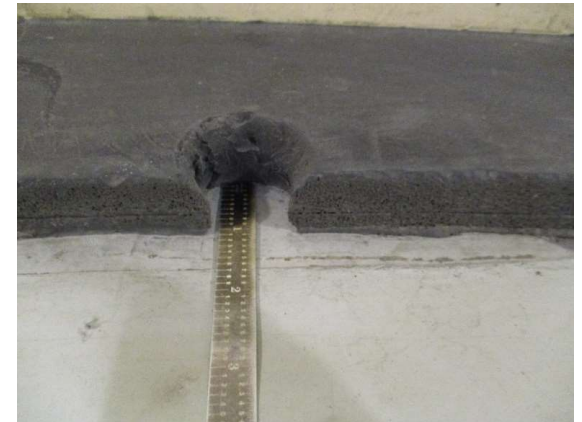
# Moisture Barrier Cap- As-Found Condition Unit 1



Azimuth 135: 3" x 1 ½"  
Moisture barrier not exposed



Azimuth 79: 1" x 12"  
Moisture barrier not exposed



Azimuth 45: 1" x 1"  
Moisture barrier not exposed



# Moisture Barrier Cap- Sample Post Repair pictures Unit 1



## Moisture Barrier Cap- Current Condition Unit 2

- The moisture barrier was inspected in 2RF21 (Fall 24). The following items were found during the inspection. WO 24-583978 was generated to repair the items in 2RF22. The damage was limited to the protective cap.



Azimuth 327: 5"x2.6"



Azimuth 180: 3"x1.8"



Azimuth 215: 3"x 2"  
(Moisture barrier exposed no  
damage seen)



Azimuth 207: 6"x 1.4"



## Moisture Barrier Cap- Degradations of moisture barrier

- There has been no known degradation to the moisture barrier covered by the protective cap.
- The few areas where the moisture barrier has been exposed has not revealed any degradation to the moisture barrier.

## Moisture Barrier Cap- Application of ASME Code, Section XI, Subsection IWE-2500(d)

- In the event that an exposed area of the moisture barrier shows evidence of degradation, the applicable areas of the protective cap will be removed to aid in the engineering evaluation to determine the acceptability of the moisture barrier before repairs, as required by IWE-2500(d).
- Any damage to the protective cap will be repaired within one cycle of discovery.

# Questions?