

Site: Hanford Site**Subject:** Office of Enforcement and Oversight's Office of Safety and Emergency Management Evaluations Activity Report for the Review of the Hanford Site K-West Annex Facility Layup Program for Construction Suspension/Delay**Dates of Activity :** June 10, 2013**Report Preparer:** Joseph Lenahan**Activity Description/Purpose:**

1. Perform an inspection of the project site to examine the contractor's actions to protect completed work from deteriorating during the current suspension of construction work activities.
2. Inspect storage areas to determine if construction materials are stored in a manner that will prevent deterioration during possible long-term storage while construction work is suspended.
3. Review the report (Reference 1) developed by the project staff that documents activities performed to prepare for the suspension of construction and layup of the project site.

Result:

Construction on the modified K-West Annex Facility was suspended by the Department of Energy in April 2013 due to budget cuts mandated by congressional budget sequestration. After construction was suspended, the Richland Operations Project Office directed the contractor to place the project in a safe, stable configuration to preserve the completed work, and to document completed work activities to support construction restart. In May 2013, the contractor completed the efforts necessary to protect and preserve the completed work at the project site. This effort included storing the construction materials that had been received on site in the appropriate storage areas so that the materials would not deteriorate pending construction restart. A detailed report (Reference 1) was prepared to document the work completed to date and the steps taken to support construction restart. Independent Oversight reviewed the report and performed an inspection at the site to examine storage of construction materials and the condition of the completed work. Details of the inspection are described below.

1. Independent Oversight toured the construction site and inspected the condition of the work completed prior to suspension of construction. Housekeeping in the construction area was good. The site had been cleaned, and all debris (such as scrap lumber, empty containers) resulting from construction activities had been removed from the site. Concrete surfaces (such as tops of footings and the slab in the truck bay) had been swept clean. Exposed ends of electrical conduit and piping were covered with pipe caps to maintain internal cleanliness and prevent intrusion of rodents and/or debris. Pipes were wrapped with protective materials to protect them from environmental conditions. The site was graded, so rainfall runoff is able to drain away from the construction site.
2. Independent Oversight examined two storage areas where concrete reinforcing steel (rebar) and structural steel is stored. One area was located between the construction site and office trailers, while the other is in an area known as the QUEUE area, which is approximately 250 yards east of the construction site. Both areas were fenced and locked to control access to the materials and prevent uncontrolled placement of materials into the storage areas that may not comply with project quality requirements. The rebar and structural steel were stored on timber cribbing on gravel covered pads. The cribbing prevents contact of the materials in storage with the ground and permits circulation of air. The gravel is free draining and sloped so that rain water will not accumulate and the materials in the storage areas will not become submerged in water. The storage areas meet the requirements specified in the American Society of Mechanical Engineers Nuclear Quality Assurance program NQA-1 for Level D storage, the level of storage recommended for rebar and structural steel. Some prefabricated plates that will be installed in concrete walls for attaching supports and hardware were also stored in the QUEUE area on cribbing under plastic tarpaulins. The materials in the storage areas are identified through the use of tags and labels affixed to individual pieces or in the case of rebar, bundles. The tags and labels are weather resistant so traceability can be maintained. The labels on the majority of the rebar bundles are enclosed in weather proof containers.
3. Independent Oversight reviewed a desktop instruction prepared to provide direction for conducting weekly storage and surveillance inspections at the K-West Annex Facility and the inspection checklist used to record the results of the weekly inspections. The desktop instruction was based on requirements specified in Procedure PRC-PRAC-CN-30370, Rev. 0, Change 1, *Shipping, Handling, Storage, and Installation of Materials, Equipment and Assemblies*. The weekly inspection activities include the outside storage areas, inside storage areas (warehouses where electrical components and electrical wire are stored), and the construction site. Inspection details for material storage areas

include verification that access to storage areas is controlled (areas secured and locked), materials stored in outdoor (Level D) areas are supported on cribbing so that there is adequate space for ventilation and air circulation, storage pads and areas are well drained, materials in storage areas are clearly identified, ends of pipes are covered, and tarpaulins covering materials are secured and not torn or damaged. Areas at the construction site are inspected to verify that no erosion has occurred, pipe and conduit ends are capped/covered, and debris is not accumulating. Independent Oversight reviewed the completed inspection checklists documenting site and storage area inspections performed on May 9, 13, 22, and 28, and June 5, 2013. A few minor deficiencies were identified during the initial inspections that were promptly corrected. Corrective actions were documented on the inspection checklist.

4. The K West Modified Annex Layup Report (Reference 1) was reviewed. This report describes the status of construction at the time of work suspension. The report provides details of completed work, documents nonconforming conditions that were not corrected prior to work suspension, and describes temporary work activities taken to protect and preserve the completed work. Examples of temporary work included placing temporary backfill in areas to prevent erosion and installation of pipe caps and pipe wraps to protect installed piping and conduits. The report also includes a discussion of inspections required prior to construction restart and a series of photographs that provide a pictorial record of steps taken to layup the project.
5. Independent Oversight concluded that the program undertaken to preserve completed work and protect materials in storage from deteriorating after suspension of construction work at the K-West Annex Facility was adequate.

HSS Participants	References
1(lead). Robert Farrell	Reference 1- Document Number PRC-STP-00802, Rev. 0, 105-K West Modified Annex Layup Report, dated June 14, 2013
2. Joseph Lenahan	

Were there any items for HSS follow up? Yes No (X)

HSS Follow Up Items
<ul style="list-style-type: none"> • None