





RADIOLOGIC HEALTH BRANCH  
RADIOLOGICAL ASSESSMENT UNIT

**Date:** December 1, 2016

**To:** Roger Lupo, Chief RAU  
Senior Health Physicist 

**From:** Rajiv Mishra   
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**Subject:** Review of Documents for Mesa Facility for Radiological Issues.

The Radiologic Health Branch has been requested to review documents for the Mesa Facility of San Onofre Nuclear Generating Station (SONGS) and to comment on the radiological assessments prepared as support for the conclusion that the Mesa Facility has been adequately surveyed for radioactive materials that had been inappropriately transferred from SONGS to the Mesa Facility, located at 14300 Mesa Road, San Clemente, CA, 92672.

The Mesa Facility Site is situated on the U.S. Marine Corps Base (MCB), Camp Pendleton property at 14300 Mesa Road near the City of San Clemente, California, and leased from the Department of Navy (DON) by Southern California Edison (SCE) for supporting the operations of the SONGS Main Plant Facility. The Mesa Facility comprises Parcels 5 (2.2 acres), 6 (69 acres), and 7 (49 acres), and were developed with multiple buildings (guard house, laboratories, training facilities, fabrication shops, garages, warehouses, etc.), a fueling facility, vehicle parking areas, a helicopter landing pad, staging/storage yards, a sewage treatment plant (STP), and a recreational vehicle private campground (Camp Mesa).

Several documents were provided to RHB for review which include SONGS Annual Radiological Environmental Operating Reports (AREOR) for years 2011 to 2015 (CD Tabs 1-5), DTSC February 16, 2016 letter to Southern California Edison requesting a radiological assessment of Mesa Lease Parcels 5, 6, and 7 (CD-6), Several memoranda prepared by certified health physicist for Southern California Edison (CD Tabs 7 - 10), Auction Surveys (CD Tab 11), NRC sent (December 1, 2015) letter to Commander Fletcher of the Department of Navy (CD Tab 12) and NRC's Inspection Report (IR) # 50-206/81-02 (CD Tab 13). Material provided for review has a hard copy folder and one digital media-compact disk (CD).

1. SONGS Radiological Environmental Monitoring Program (REMP) generated annual reports, AREOR, which report on the radiological condition to be found in the environs surrounding the SONGS main plant site. Reviews of the supplied reports show no detectable radioactive contamination from SONGS operational plant related activities impacting the Mesa Facility or the surrounding areas.



2. May 28, 2015 Memo to File (amending April 10, 2014 Memo to File)(CD tab -7) is citing “a material release program that lacked the necessary rigor and was not well enough implemented to intercept all contaminated items among the thousands of items moved to the Mesa”. Because of this less rigorous control, radioactive material had been inappropriately transferred from the SONGS site to Mesa Facility over several years until it was discovered in 1980.
3. Several memoranda (assessments) have been prepared by a certified health physicist for SCE to discuss (i) the assessment of the incidents when radiological material was inadvertently transferred to the Mesa Facility area from the SONGS plant site, (ii) how the incidents were addressed and remediated, if needed, and (iii) the steps taken, including additional surveys, to show that no detectable radioactive contamination remained on Parcels 5, 6, and 7 due to such incidents. We are reviewing the assessments without original documents, data or relevant evidences to support the reasoning and the decisions to remediate Mesa Facility as mentioned in the supplied documents.
4. We differ with the statement in the executive summary of the May 28, 2015 Memo to File, “That material was primarily contamination on tools and equipment” as 100 cubic yards of contaminated soil was dumped at site “a” of Mesa Facility. Sampling of the dump site after remediation revealed residual radioactivity in January of 1981, after approximately thirty five years only Cs-137 with a half-life of 30.1 years would be detectable with field instruments but indistinguishable from levels currently found in the background radiation due to atmospheric weapons testing and reactor accidents.
5. Final status plans and survey results have been reviewed for Mesa Facility site locations f, g, h, i, j, k, and l. The survey results for these locations support the stated conclusions that the Mesa Facility is free of contamination from the SONGS operations.

With the exception of the remediated 100 cubic yards of Unit 1 soils placed on the Mesa Facility at site “a”, the radioactive contamination found at the Mesa Facility was fixed in nature (not loose) on tools and equipment and did not pose a contamination transfer potential. The Nuclear Regulatory Commission (NRC) has visited the Mesa site of the Unit 1 soils and surveyed the area after the soils were remediated. The survey is documented in the NRC’s inspection Report (IR) # 50-206/81-02. The NRC inspector performed an independent direct radiation survey, this survey indicated radiation levels with no statistically significant increase in the localized area from where the excavated materials had been removed.

On the basis of the supplied documents it would appear that the Mesa Facility site has been adequately surveyed and remediated to levels that would not pose a significant radiologic health and safety issue to persons using the site in the future.