Group Q

Group Q Map

Building 4007

Building 4008

Site 4501

Includes Building 4823, Time Clock

17th Street Drainage

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Parking
4358
4354
4402
4607
4616
4310 (71-73)
4714 (87-92)
4704
17 ST
4823 (62&64)
4501 Parking
4735
4007
4008
F ST
4639
4521 Parking
4711
4500
17th Street Drainage Area
4011
4171
4172
4403
4521 Parking
4612
4611
20 ST
Legend
Labeled Features:
(Based on SSFL Documents as of October 2004)
Buildings/Sites: "Current"
Buildings/Sites: "Demolished"
Unlabeled Features:
Leachfield (Removed)
Tree
Rock
Concrete Curb
Gutter
Asphalt/Concrete Berm & Paving
Sidewalk
Dirt Road
Fence
Stream/Pond
Drain
Area IV Boundary
DRAWN BY:
Sapere CONSULTING INC
DATE:
May 2005
N
W
E
S
1 inch equals 125 feet
0 50 100 200 300
Feet
Site Summary Group Q
AREA IV
Santa Susana Field Laboratory, CA

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Site Summary – Building 4007

Site Identification:

Building 4007
Sodium Storage Building

Operational Use/History:

- Constructed in 1958.[1]
- Building 4007 was used for non-radiological hazardous materials storage.[2]
- Demolished in 1996.[3]

Site Description:

- Building 4007 was a 1,500-square-foot concrete structure with a steel roof.[1]

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4007.[4]

Radiological Surveys:

- Radiological surveys specific to Building 4007 have not been conducted.

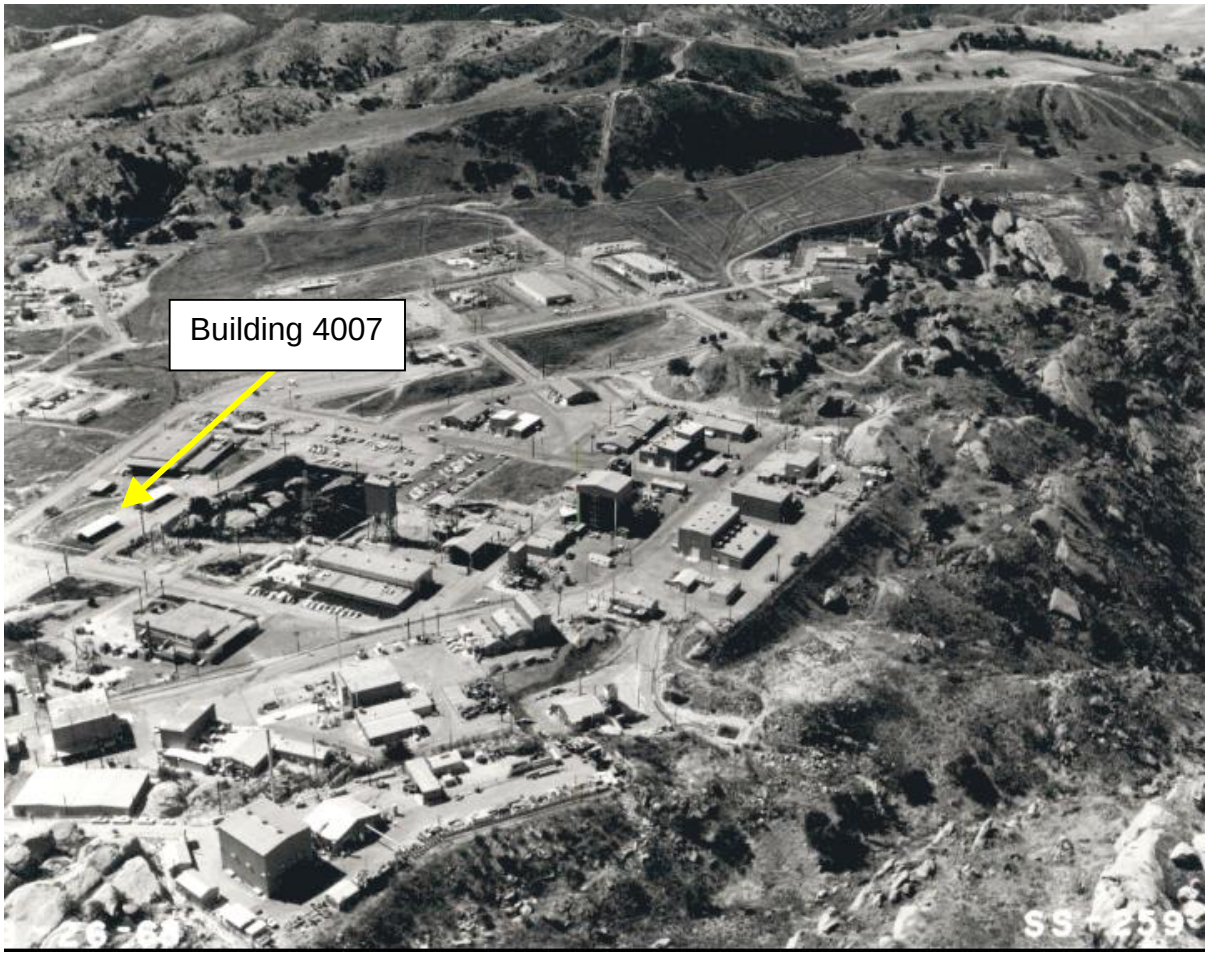
Status:

- Building 4007 was demolished in 1996.[3]

References:

1- DOE Document, N-083E-A02-DV001, Rev. A, "Site Development and Facility Utilization Planning: FY 1984-FY 1989" April 1984.
2- Personnel Interview, Brian Sujata, November 12, 2003.
3- Personnel Interview, Mike Daley, September 22, 2003.
4- Review of Radiation Safety Records Management System, 2003.
5- Historical Site Photographs from Boeing Database.
6- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4007



Site Summary – Building 4008

Site Identification:

Building 4008
Flammable Material Storage Building

Operational Use/History:

- Constructed in 1958.[1]
- Building 4008 was used for storage of non-radiological flammable materials.[2]
- Demolished in 1996.[3]

Site Description:

- Building 4008 was a 1,500-square-foot concrete structure with a steel roof.[1]

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4008.[4]

Radiological Surveys:

- Radiological surveys specific to Building 4008 have not been conducted.

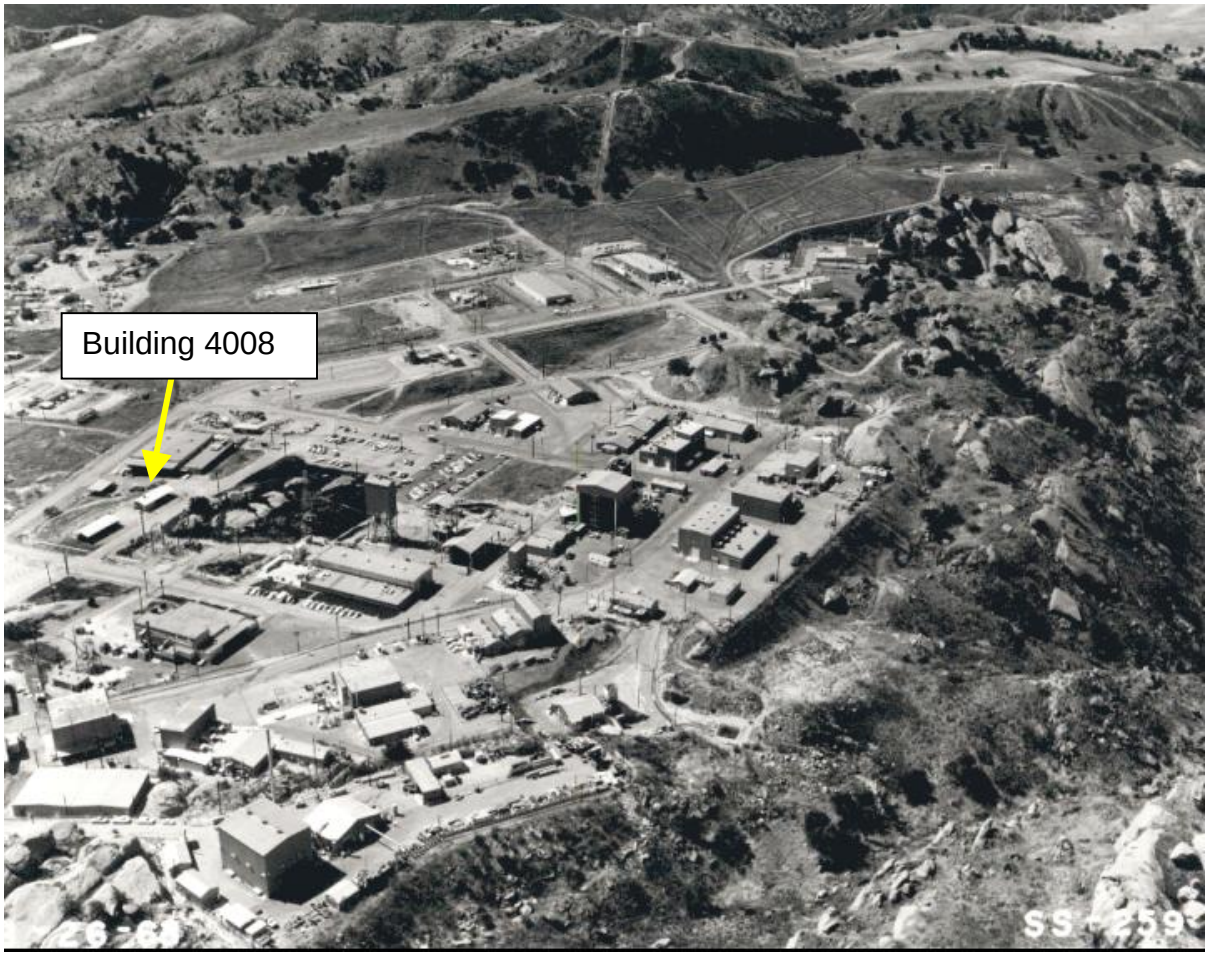
Status:

- Building 4008 was demolished in 1996.

References:

1- DOE Document, N-083E-A02-DV001, Rev. A, "Site Development and Facility Utilization Planning: FY 1984-FY 1989" April 1984.
2- Personnel Interview, Brian Sujata, November 12, 2003.
3- Personnel Interview, Mike Daley, September 22, 2003.
4- Review of Radiation Safety Records Management System, 2003.
5- Historical Site Photographs from Boeing Database.
6- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4008



Site Summary – Site 4501

Site Identification:

Site 4501
Parking Lot
Includes Building 4823, Time Clock

Operational Use/History:

- Constructed prior to 1962.[1]
- Site 4501 was a parking lot at the corner of G Street and 17th Street.
- On the 1987 Industrial Planning Map the site is referred to as "Coil Storage."
- Site 4501 is now used as a storage yard.

Site Description:

- Site 4501 sits on the north corner of 17th Street and G Street. [1]
- Serviced by Time Clock 4823.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4501.[2]

Radiological Surveys:

- Radiological surveys specific to Site 4501 have not been conducted.

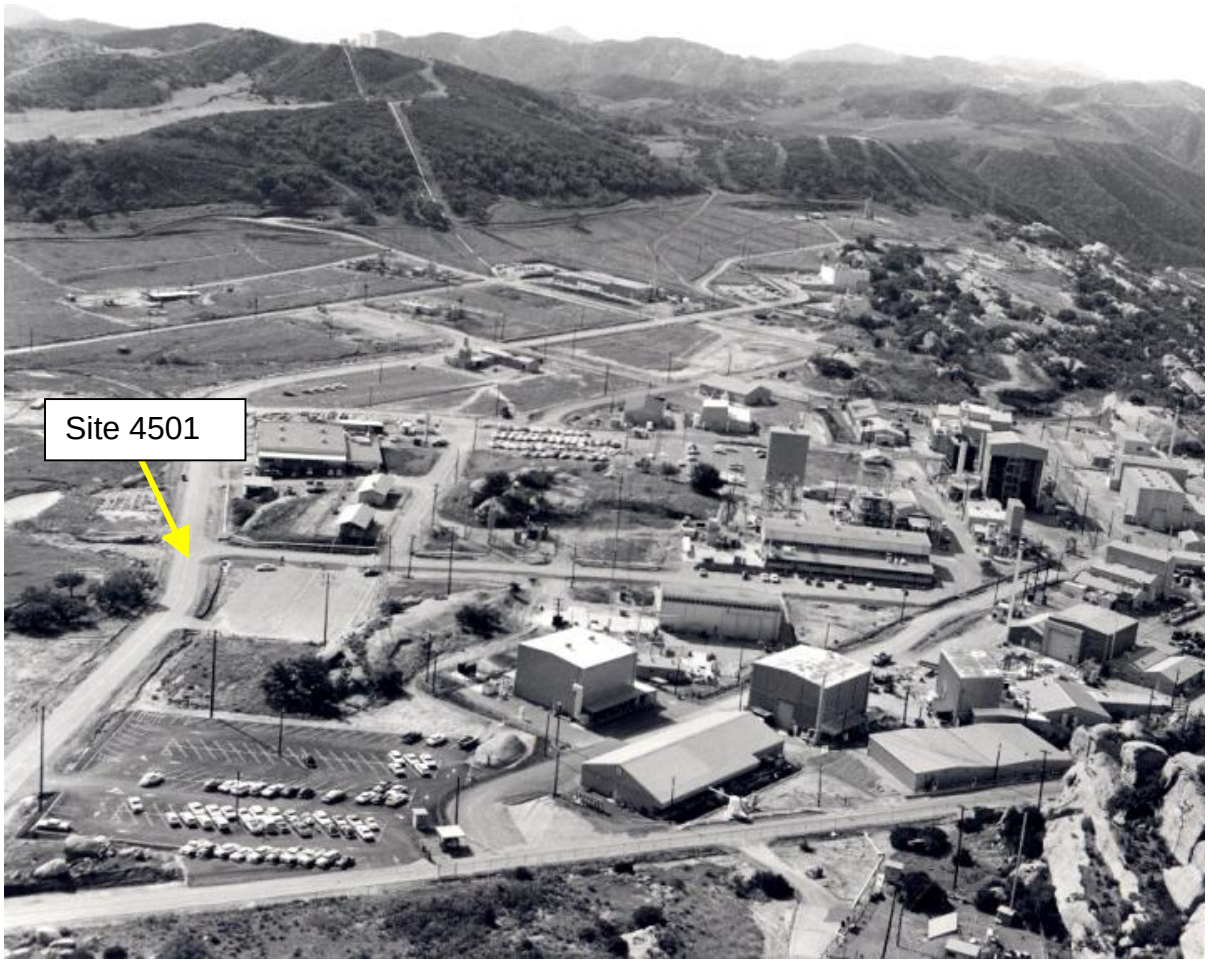
Status:

- Site 4501 is now used as a storage yard.

References:

1- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
2- Review of Radiation Safety Records Management System, 2003.
3- Historical Site Photographs from Boeing Database.

Photograph – Site 4501



Site Summary – 17th Street Drainage

Site Identification:

17th Street Drainage

Operational Use/History:

- The 17th Street Drainage is a natural rainwater channel located south of the intersection of "G" Street and 17th Street. In 1962, a berm was constructed around the channel to provide a 30-foot by 30-foot hold-up pond. The pond cycled through periods of evaporative drying in summer and refilled during the rainy season; this caused the low-lying area to be marshy. Over time, the area became overgrown with shrubs and trees and filled with silt.[1]
- In 1998, the entire drainage channel area was cleared of shrubs and trees.[1]

Site Description:

- The 17th Street Drainage Area is the site of a natural rainwater channel where a berm was constructed in 1962 to permit the area to serve as a hold-up pond. Over time, the area became overgrown with shrubs and trees and filled with silt.[2,3]
- The 17th Street Drainage Area is located south of the intersection of G and 17th Streets in the central portion of Area IV. The former hold-up pond area measures approximately 85 square meters. The entire impacted area measures 2,230 meters.[1]

Relevant Site Information:

- Characterization surveys performed in 1997 and 1998 identified elevated levels of Cs-137. As a result, remediation began during 1998, and a final status survey was performed.[2,3]
- The principle contaminant of concern at the 17th Street Drainage Channel area was Cs-137. No other significant isotopes were found in the environment or soil without the adjoining presence of Cs-137.[2,3]

Radiological Surveys:

- During the 1995 Area IV Radiological Survey, the pond area was inaccessible, so no samples were taken. Soil from the drainage channels to the north and south of the pond area was sampled and no contamination was found.[4]
- In 1997, the pond area was accessible and several soil samples were taken. Two of the samples indicated Cs-137 at levels of 13.5 and 14.5 pCi/g. A radiation survey was then conducted in the areas to identify any locations above limits.[2,3]

- In 1998, the original bermed pond area and all intakes and outlets were mapped and surveyed. Although exposure measurements did not exceed 3.4 µR/hr above the background level of 15 µR/hr at 1 meter, some elevated radiation measurements in localized areas at ground level were observed at a maximum of twice the background levels.[3]
    - All locations exceeding 5 µR/hr above background were identified. Soil samples in areas immediately north and immediately south of the berm indicated elevated levels of radionuclides. Cs-137 was found at 2 pCi/g, which was less than the cleanup standard of 9.2 pCi/g. Th-228 was found at 6 pCi/g, which was close to the cleanup standard limit. Uranium isotopes were found at 4 pCi/g, which was less than the cleanup standard of 30 pCi/g. All uranium samples resulted in ratios of uranium isotopes consistent with naturally occurring uranium.
    - No processed or enriched uranium isotopes from fuel typically used at the Santa Susana Field Laboratory (SSFL) were found in this location. Although Th-228 was discovered at 6 pCi/g, its parent isotope Th-232 was found at background levels of 1 pCi/g. Since this specific thorium isotope was not processed or used at SSFL, the origin of elevated Th-228 is unknown.
    - The majority of the soil samples did not exceed cleanup standards and did not pose a health risk; however, portions of the 17th Street Drainage area were excavated to attain levels as low as reasonably achievable (ALARA).
- On October 27, 1999, the Oak Ridge Institute of Science and Education (ORISE) Environmental Survey and Site Assessment Program (ESSAP) performed a verification survey of the 17th Street Drainage Area. Verification activities included document reviews, surface scans, exposure rate measurements and soil sampling.[5]
    - Cesium-137 ranged from non-detect to 1.6 pCi/g and exposure rate ranged from 15 to 19 µR/hr.
- DHS performed verification sampling in 1999.

Status:

- The 17th Street Drainage is now dry and overgrown with grass and shrubs.
- DHS released the 17th Street Drainage for unrestricted use in 2004.[6]

  On February 1, 2005 DOE provided a letter to Boeing declaring that Boeing and ORISE surveys had confirmed that DOE and DHS approved soil cleanup limits had been met, and that the 17th Street drainage area was suitable for release for unrestricted use.[7]

References:

1- ETEC Document, RS-00005, "17th Street Drainage Area, Final Status Survey Procedure," April 20, 1999.
2- DOE Document, RD00-198, "Draft Docket for the Release of the 17th Street Drainage Area as Part of the ETEC Closure," August 2000.

3- ETEC Document, RS-00009, "17th Street Drainage Area, Final Status Survey," March 16, 2000.
4- Rocketdyne Document, A4CM-ZR-0011, Rev. A, "Area IV Radiological Characterization Survey," August 15, 1996.
5- ORISE Report, Document Number 00-0576, "Verification Survey of the 17th Street Drainage Area, Santa Susana Field Laboratory, The Boeing Company. Ventura County, California," April 2000.
6- DHS/RHB Letter, "In reply to letter 2000RC-2627, Request for release of the 17th Street Drainage Area for unrestricted use," from Edgar D. Bailey (DHS/RHB) to Phil Rutherford, August 16th, 2004.
7- DOE Letter, "Release of the 17th Street Drainage Area," from M. Lopez (DOE) to M. Lee (Boeing), February 1, 2005.
8- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
9- Historical Site Photographs from Boeing Database.

Photograph – 17th Street Drainage