

Group V

Group V Map

Building 4038

Includes 4757, Substation

Building 4039

4056 Landfill

Building 4057



Includes 4757, Substation

Building 4626











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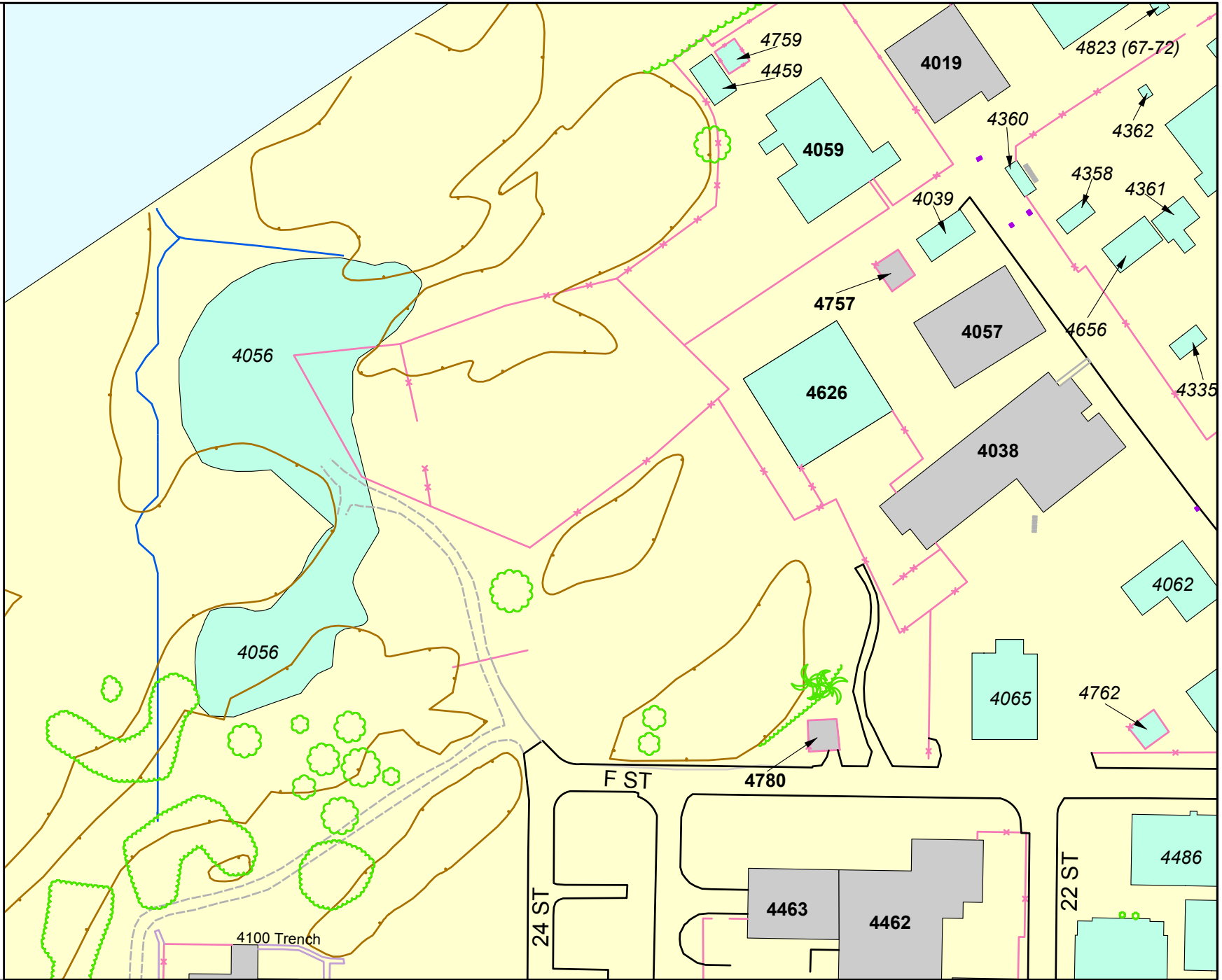
Legend

Labeled Features:
(Based on SSFL Documents as of October 2004)

-  Buildings/Sites: "Current"
-  Buildings/Sites: "Demolished"

Unlabeled Features:

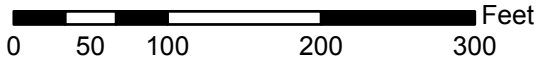
-  Leachfield (Removed)
-  Tree
-  Rock
-  Concrete Curb
-  Gutter
-  Asphalt/Concrete Berm & Paving
-  Sidewalk
-  Dirt Road
-  Fence
-  Stream/Pond
-  Drain
-  Area IV Boundary



DRAWN BY:



1 inch equals 125 feet



DATE:

May 2005

Site Summary Group V
AREA IV
Santa Susana Field Laboratory, CA

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Site Summary – Building 4038

Site Identification:

Building 4038
Systems for Nuclear Auxiliary Power (SNAP) Office Building No. 2
Liquid Metal Engineering Center (LMEC) Administration and Information
Energy Technology Engineering Center (ETEC) Administration
ETEC Headquarters/ DOE Site Office
Includes 4757, Substation

Operational Use/History:

- Constructed in 1962.
- Building 4038 serves as an office building.
- Currently in use.

Site Description:

- Building 4038 is 15,297 square feet and is constructed of a steel frame, roof and siding, anchored to a concrete floor.¹
- Serviced by Substation 4757.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4038.²

Radiological Surveys:

- Occasional radiation surveys have been conducted in Building 4038 to establish a building interior background dataset. No elevated radiation levels have been detected. Beginning in December 2002 and continuing to the present, weekly entrance/exit radiation surveys are performed.³

Status:

- Building 4038 is currently in use.

References:

- 1- ERDA Document, LR-03026, Part 1, "Site Development Plan: 1977-1981," June 1975.
- 2- Review of Radiation Safety Records Management System, 2003.
- 3- Personnel Interview, Phil Rutherford, June 16, 2004.
- 4- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

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Site Summary – Building 4039

Site Identification:

Building 4039
SNAP Administration Building
SNAP Office Building Number 4
Office Building-LMEC

Operational Use/History:

- Building 4039 was constructed in 1964.
- Building 4039 was an office building.¹
- In 2000, Building 4039 became a health physics counting laboratory, using sealed check sources and a laboratory low-background alpha/beta counting system to analyze air and wipe samples.²
- Demolished July 2003.³

Site Description:

- Building 4039 was a single-story structure constructed of galvanized steel walls and roof that were anchored to a concrete slab floor. Various types of internal walls and partitions were used.¹

Relevant Site Information:

- Sealed radioactive sources, which were checked annually to ensure no leakage occurred, were stored at this location.⁴
- While used as a health physics counting laboratory, the operations were conducted under Use Authorization 160.⁵
- There are no Incident Reports associated with Building 4039.⁵

Radiological Surveys:

- After Building 4039 became a counting laboratory, radiological surveys were performed weekly from April 14, 2000 through April 11, 2001. All wipe measurements were less than the minimum detectable activity (MDA). Alpha MDA ranged from 8-12 dpm/100cm², beta MDA ranged from 15-20 dpm/100cm².
- Prior to demolition in April 2003, the building was again surveyed using wipe samples, beta detectors and gamma exposure instruments. All wipe samples were less than the MDA, and all instrument readings were non-detect.⁶

Status:

- Building 4039 was demolished in 2003.

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References:

- 1- Rocketdyne Internal Document, no document number, "Assessment of Department of Energy Buildings within the SSFL," September 30, 1996.
- 2- Personnel Interview, Phil Rutherford, September 4, 2003.
- 3- Boeing Internal Document, "Demolition Binder: Building 4039," 2003.
- 4- Personnel Interview, Brian Sujata, September 3, 2003.
- 5- Review of Radiation Safety Records Management System, 2003.
- 6- Boeing Internal Document, no document number, "Radiation Survey Report, Building T039," April 15, 2003.
- 7- Historical Site Photographs from Boeing Database.
- 8- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4039



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Site Summary – Building 4057

Site Identification:

Building 4057
Launch Handling & Mobile Equipment Development
LMEC Laboratory
Static Sodium Test Facility
ETEC General Test
Includes 4757, Substation

Operational Use/History:

- Constructed in 1961.¹
- Building 4057 housed two sodium test rigs. Each rig achieved a maximum temperature of 1,300 degrees F with a capacity of 42 gallons.²
- Building 4057 was decommissioned for laboratory use in 1998 at which point it became a records room.³
- Currently in use.

Site Description:

- Building 4057 was constructed of a steel frame, siding and roof anchored to a concrete slab. The building had both 5-ton and 20-ton cranes. The ceiling height is 23 feet and 20 feet 6 inches at the two respective levels.¹
- Serviced by Substation 4757.

Relevant Site Information:

- There are no Use Authorizations associated with Building 4057.⁴
- In 2003, air sample media (filter papers) was discovered in a folder of records. Some of these filters had low levels of residual contamination; however, surveys of the drawer contents provided that none of the contamination had escaped from the envelope containing the filters (see survey information below).⁵

Radiological Surveys:

- In response to the incident in Building 4057 described above, all remaining Radiation Safety file cabinets were searched.³
 - Cabinet drawers searched: 608
 - Number of folders containing air/wipe samples: 16
 - Number of sets of clean samples: 10
 - Number of sets of contaminated samples: 6

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- All contaminated samples were inside protective envelopes. Each envelope exterior and each folder contents were surveyed clean, demonstrating no spread of contamination. The majority of contaminated samples measured less than the Nuclear Regulatory Commission (NRC) Regulatory Guide 1.86 release limit of 1,000 dpm/100 cm² for removable contamination. Based on survey results, the incident was deemed to be an insignificant hazard.

Status:

- Building 4057 currently serves as a records room.

References:

- 1- ERDA Document, LR-03026, Part 1, "Site Development Plan: 1977-1981," June 1975.
- 2- US Energy Research and Development Administration Document, ERDA-68, "Liquid Metal Fast Breeder Reactor Program, Facility Profile."
- 3- Personnel Interview, Dan Trippeda, September 22, 2003.
- 4- Review of Radiation Safety Records Management System, 2003.
- 5- Rocketdyne Online Incident Reporting System (internal), "Incident Report 01684," February 26, 2003.
- 6- Historical Site Photographs from Boeing Database.
- 7- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Photograph – Building 4057



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Site Summary – Building 4626

Site Identification:

Building 4626
Equipment Storage Building
LMEC Inventory Storage
ETEC Inventory Storage
SNAP Storage Building

Operational Use/History:

- Constructed in 1963.
- Building 4626 was used for equipment storage.
- Demolition is scheduled for 2003-2004.

Site Description:

- Building 4626 has a roof height ranging from 15 to 25 feet with a steel frame, siding and roof anchored to a concrete slab. It was equipped with a 2-ton bridge.¹

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4626.⁶
- Building 4626 was not used to store nuclear fuel or radioactive materials. A storage yard west of Building 4626 has been used to store barrels of activated sand from Building 4059 containing Eu and Co-60.³

Radiological Surveys:

- A radiological survey of the storage yard west of Building 4626 was conducted because it had been used for storage of radioactive materials.^{4,3}
 - Mean Gamma: 11.2 μ R/hr.
 - The accepted limit for the survey was 5 μ R/hr above background.
 - Survey results were below the acceptable limits.

Status:

- Building 4626 is scheduled for demolition in 2003-2004.

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References:

- 1- ERDA Document, LR-03026, Part 1, "Site Development Plan: 1977-1981," June 1975.
- 2- Review of Radiation Safety Records Management System, 2003.
- 3- ETEC Document, GEN-ZR-0010, "Radiological Survey of Buildings T019 and T013; and Area Northwest of T059, T019, T013 and T012; and a Storage Yard West of Buildings T626 and T038," 1988.
- 4- Rockwell Document, N001ER000017, "Nuclear Operations at Rockwell's Santa Susana Field Laboratory- A Factual Perspective," September 6, 1991.
- 5- Historical Site Photographs from Boeing Database.
- 6- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.

Site Summary – 4056 Landfill

Site Identification:

4056 Landfill

Operational Use/History:

- The 4056 Landfill was constructed prior to 1962 to serve as a landfill for construction and excavation materials from Building 4056; however, Building 4056 was never constructed.^{1,2}
- Soil that was removed from the proposed site of Building 4056 was placed in the 4056 Landfill.³
- The 4056 Landfill was later used as a disposal area for non-radiological facilities.³

Site Description:

- The 4056 Landfill is a 160,000-square-foot fenced area directly north of Building 4100.²

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with the 4056 Landfill.⁴

Radiological Surveys:

- In 1988, Rockwell International conducted a survey of the 4056 Landfill.⁵
 - Mean ambient gamma: 14.9 μ R/hr.
 - Background: 14 – 16.2 μ R/hr.
 - Acceptable limit: 5 μ R/hr above background.
 - Survey results were below the acceptable limits.
- During the 1996 Area IV Radiological Characterization Survey, soil samples were taken at two different locations in the vicinity of Building 4056. None of the measurements were distinguishable from background and all the measurements were below the acceptable concentration levels established by Boeing and presented in document N001SRR140131.⁶
- In conjunction with the Resource Conservation and Recovery Act (RCRA) investigation of Landfill 4056 in 2003, a Global Positioning System (GPS) radiation scanning cart was used to map radiation levels at the site. No elevated radiation was observed. Soil samples were taken in several areas with the highest radiation levels. Only naturally occurring radioisotopes were detected. During the subsequent RCRA trenching, all excavated debris was monitored with radiation instruments and wipe tests. No contamination was detected.⁷

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Status:

- Landfill 4056 is no longer in use.³

References:

- 1- Personnel Interview, Bob Bass, September 19, 2003.
- 2- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
- 3- Personnel Interview, Phil Rutherford, January 8, 2004.
- 4- Review of Radiation Safety Records Management System, 2003.
- 5- ETEC Document, GEN-ZR-0011, "Radiological Survey of the T56 Landfill; Area from 23rd Street to Building T100; And Area Across From Building T011," August 26, 1988.
- 6- Rocketdyne Report, A4CM-ZR-0011, "Area IV Radiological Characterization Survey Final Report," August 15, 1996.
- 7- Personnel Interview, Phil Rutherford, October 4, 2004.