Group A

Group A Map

Building 4114

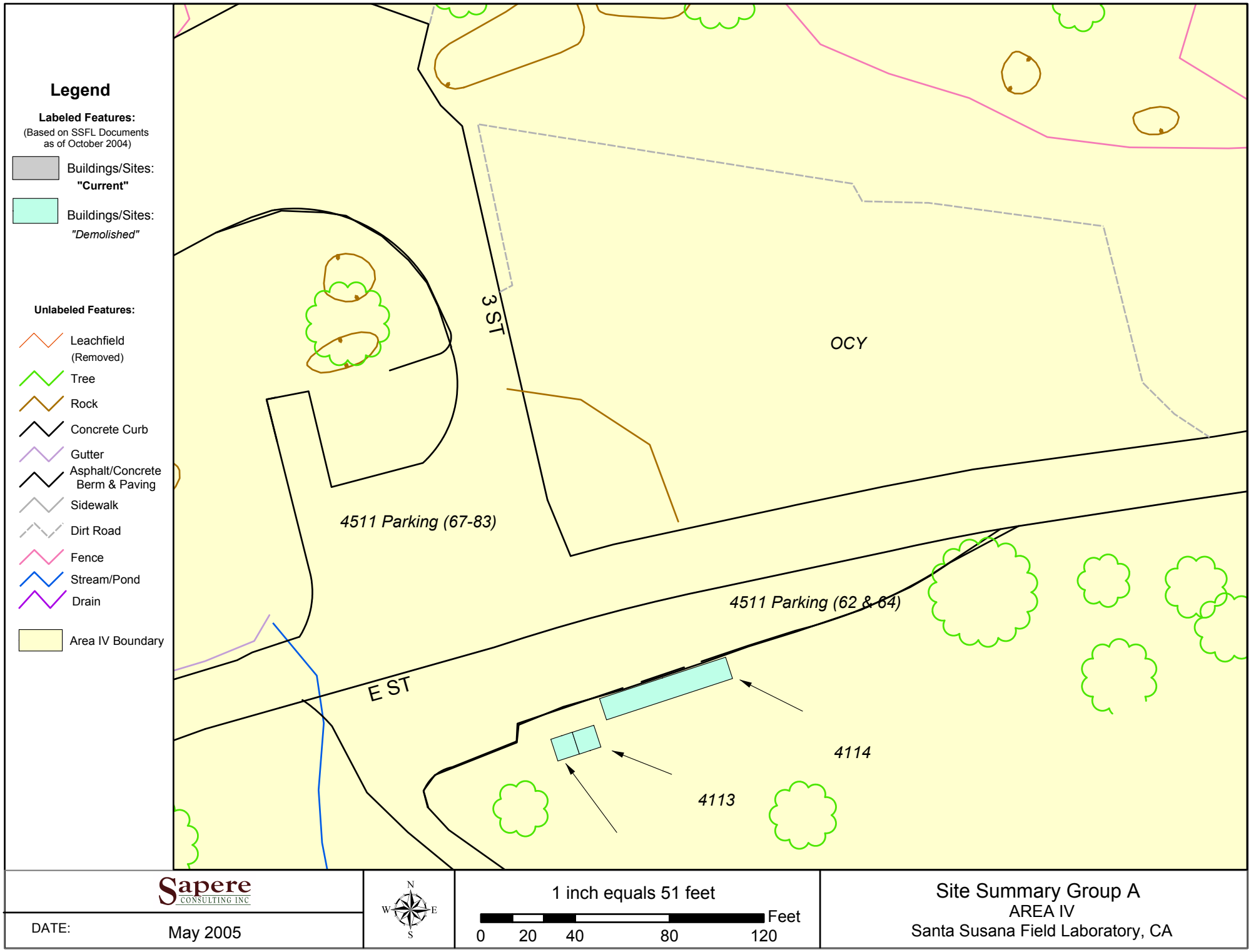
Parking Lot 4511

Includes Building 4113, Guard Shack
Includes Building 4623, Guard Shack

Old Conservation Yard

Includes Building 4313, Conservation Shack

This page intentionally left blank.


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
3 ST
OCY
4511 Parking (67-83)
4511 Parking (62 & 64)
E ST
4114
4113
Sapere CONSULTING INC
DATE:
May 2005
N
W
E
S
1 inch equals 51 feet
0 20 40 80 120 Feet
Site Summary Group A
AREA IV
Santa Susana Field Laboratory, CA

This page intentionally left blank.

Site Summary – Building 4114

Site Identification:

Building 4114
Decontamination Trailer

Operational Use/History:

- Constructed in approximately 1981.[1]
- Building 4114 was designed as a radiological decontamination station for personnel involved in accidents; however, the decontamination trailer was never used for this purpose.[2,3,4]
- Demolished in approximately 1992.[5]

Site Description:

- Building 4114 was a trailer located on the 4511 Parking Lot.[1]

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Building 4114.[3]

Radiological Surveys:

- Radiological surveys specific to Building 4114 have not been conducted.
- This site was included in the Area IV Radiological Characterization Survey, conducted in 1994 through 1995.[6]
    - Scope/Purpose: Designed to locate and characterize any previously unknown areas of elevated radioactivity in Area IV.
    - Background: 15.6 µR/hr.
    - Acceptable Limit: Less than 5 µR/hr above background.
    - The survey found the area to be below acceptable limits.

Status:

- Building 4114 was demolished in approximately 1992.[2]

References:

1- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
2- Personnel Interview, Dan Trippeda, September 10, 2003.
3- Review of Radiation Safety Records Management System, 2003.
4- Personnel Interview, Bob Tuttle, December 12, 2003.
5- Personnel Interview, Phil Rutherford, November 12, 2003.
6- Rocketdyne Document, A4CM-ZR-0011, Rev. A, "Area IV Radiological Characterization Survey," August 15, 1996.
7- Historical Site Photographs from Boeing Database.

Site Summary – Parking Lot 4511

Site Identification:

Site 4511
Parking Lot At Main Gate
Includes Building 4113, Guard Shack
Includes Building 4623, Guard Shack

Operational Use/History:

- Constructed prior to 1962.[1]
- Site 4511 served as a parking lot for personnel working in the Old Conservation Yard (OCY) and adjacent areas.
- The parking lot is no longer in use.

Site Description:

- Parking Lot 4511 was an asphalt pad that was located between the OCY and Site 4583.
- Serviced by Guard Shack 4113.
- Serviced by Guard Shack 4623.

Relevant Site Information:

- There are no Use Authorizations and no Incident Reports associated with Parking Lot 4511.[2]

Radiological Surveys:

- A radiological survey of the Old Energy Systems Group (ESG) Salvage Yard (Old), Rocketdyne Barrel Storage/Conservation Yard and New Salvage Yard was conducted in 1988.[3]
    - Scope/ Purpose: In 1988, the ESG Salvage Yard (also known as the OCY), Barrel Storage/Conservation Yard and former location of 4113 were surveyed for fixed and removable alpha/beta contamination. Ambient gamma exposure rate measurements were taken in the Storage Yards. Soil samples were collected because radioactivity was indicated by exposure rate measurements in the southwest corner of the Barrel Storage/Conservation Yard.
    - Background: 15 µR/hr.
    - Acceptable Limit: Less than 5 µR/hr above background.
    - Average Ambient Gamma: 14.3 µR/hr.
    - Survey results were below the acceptable limits.

Status:

- Parking Lot 4511 is no longer in use.

References:

1- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
2- Review of Radiation Safety Records Management System, 2003.
3- ETEC Document, GEN-ZR-008, "Radiological Survey of the ESG Salvage Yard (Old), Rocketdyne Barrel Storage Yard, and New Salvage Yard (T583)," August 22, 1988.
4- Historical Site Photographs from Boeing Database.

Photograph – Site 4511

This page intentionally left blank.

Site Summary – Old Conservation Yard

Site Identification:

OCY
Rocketdyne Barrel Storage/Conservation Yard
Includes Building 4313, Conservation Shack

Operational Use/History:

- This area has been used to support research and development work at the Santa Susana Field Laboratory (SSFL) since the 1950s.[1]
- During the 1960s to late 1970s, the OCY was used extensively in support of predominately nuclear-related work.[1]
- When the nuclear-related projects came to an end in approximately 1977, the OCY was cleaned, and all salvageable, non-radioactive materials were moved to the New Salvage Yard (Site 4583). [1]
- In late 1969, the OCY was converted to a material storage yard for the Plant Services Department.[1]
- In 1986, the OCY was converted to a parking area for trailers and other vehicles. [1]

Site Description:

- The OCY is a natural terrain yard, and did not have a fenced boundary. It is located on an irregular plateau in a mountainous area and is approximately three acres.[2]
- The Barrel Storage Yard was partially paved, gravel and dirt and is approximately one acre.[1]
- Serviced by Conservation Shack 4313.

Relevant Site Information:

- The OCY was used to store salvageable materials from nuclear-related facilities at SSFL from the late 1960s to the late 1970s.[1]
- Controls were instituted to prevent storage of radioactively contaminated material in the OCY. Radioactive materials were not deliberately dumped or placed in this area. However, some contamination is known to have occurred.[1]
    - On January 15, 1976, a radioactive spill was detected in the OCY. Investigation revealed that a number of barrels (with measurements ranging from 2 mR/hr gamma to 6 mR/hr) were stored on pallets. One particularly rusty barrel was thought to have been the source of the contamination in the area. Despite best efforts, it was never determined where the barrel had come from or exactly what it had contained. All contaminated soil, asphalt, barrels and pallets were removed from the OCY and dispositioned appropriately (A0288).

- When the nuclear-related projects came to an end in approximately 1977, the OCY was cleaned and surveyed.
- It is believed that the Barrel Storage Yard was contaminated by a mixed fission product spill.[1]
- In 1989, the site was remediated to remove contamination identified during the 1988 radiological survey.[2]

Radiological Surveys:

- In 1988, Rocketdyne conducted a radiological Survey of the ESG Salvage Yard (Old), the Rocketdyne Barrel Storage Yard, and the New Salvage Yard (4583).[1]
    - Scope/ Purpose: The ESG Salvage Yard, OCY and New Salvage Yard were surveyed to determine if any residual radioactive contamination remained as a result of storage operations to confirm that further surveying or decontamination was necessary. The area was surveyed for fixed and removable alpha/beta contamination. Ambient gamma exposure rate measurements were taken in the Storage Yards. Soil samples were collected, because radioactivity was indicated by exposure rate measurements in the southwest corner of the Barrel Storage/Conservation Yard.[2]
    - During this survey, ambient gamma exposure measurements within the fenced storage yard indicated a contaminated mud puddle in the southwest corner of the Barrel Storage/Conservation Yard. The value was approximately three times ambient background, above the acceptable limits (5 µR/hr above ambient background). Additional soil samples were collected in this area.
    - All other areas of the site were below Derived Concentration Guideline Levels for ambient gamma exposure rates.
    - Soil sampling in the area found the average Cs-137 concentration at 81 pCi/g, which was above the DCGL of 60.4 pCi/g.
- The site was remediated in 1989 to remove contamination found during the 1988 radiological survey. The top four inches of soil were removed from a 20-foot by 20-foot area in the Barrel Storage/Conservation Yard. Confirmation samples were collected. [2]
    - Ambient gamma: 2.1 µR/hr above background.
    - Limit: 5 µR/hr above background.
    - Average Cs-137 concentration in soil was 13.1 pCi/g.
- In 1993, the Oak Ridge Institute for Science and Education (ORISE) conducted a final verification survey of the area. The verification survey included gamma surface scans and soil sampling: [3]
    - Acceptable limit: 5 µR/hr above background (background is 14 µR/hr).
    - A composite soil sample indicated 0.6 pCi/g for Cs-137, non-detect for Sr-90 and 1.4 pCi/g for U-238.
    - Acceptable limit: 60.4 pCi/g.

- The California Department of Health Services (DHS) performed verification sampling on September 14, 1995, and found no residual contamination in excess of current limits.[4]
- In March 2000, metal debris was discovered in the hillside of the OCY to the northeast of the remediated area discussed above. The debris was surveyed using beta and alpha instruments and wipes. No radioactive contamination was detected at the debris. Four surface soil samples were taken from the debris field and analyzed for gamma emitting radionuclides.
    - Uranium and thorium daughters were at background levels of 1 pCi/g or less. Cs-137 was detected at 0.14, 0.097, 0.18, and 0.071 pCi/g. All samples were within the range of background.
    - The surrounding 80,000 ft^2 (grid blocks V28 and V29) were surface scanned for radiation exposure. No elevated areas were detected.[5]
- Twenty-seven soil samples taken at the OCY in April 2002 ranged from non-detect to 2.7 pCi/g (gross Cs-137). All were less than the Cs-137 DCGL of 9.2 pCi/g.[6]

Status:

- DHS concurred with the radiological release of the site in 1995.[4]
- The site is currently undergoing RCRA cleanup.

References:

1- ETEC Document, GEN-ZR-008, "Radiological Survey of the ESG Salvage Yard (Old), Rocketdyne Barrel Storage Yard, and New Salvage Yard (T583)," August 22, 1988.
2- Rocketdyne Report, N704SRR990030, "Final Report, Decontamination and Radiological Survey of the Old Conservation Yard," August 16, 1990.
3- ORISE Document, 93/J-107, "Verification Survey of the OCY, Building T064 Side Yard and Building T028, SSFL, Rockwell International, Ventura County, California," Tim Vitkus, October 1993.
4- DHS/RHB Letter, "Rocketdyne's letter dated July 6, 1995 with attachments concerning the release of Buildings T029, T028, and OCY," from Gerard Wong (DHS/RHB) to Phil Rutherford, December 21, 1995.
5- Boeing Letter from Majelle Lee to Roger Lupo, "Old Conservation Yard Debris Field," May 12, 2000.
6- Personnel Interview, Phil Rutherford, January 30, 2005 (Area IV Database for Onsite and Offsite Surveys).
7- SSFL Area IV, ETEC Industrial Planning Maps, 1962-1992.
8- Historical Site Photographs from Boeing Database.

Photograph – Old Conservation Yard (OCY)