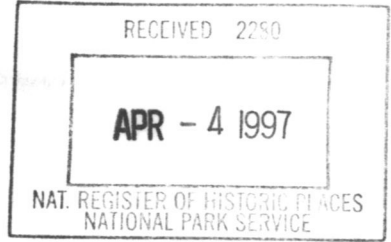


United States Department of the Interior
National Park Service



National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determination for individual properties and districts. See instruction in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Rocky Flats Plant
other names/site number Rocky Flats Environmental Technology Site; 5JF1014

2. Location

street & number Highway 93 [N/A] not for publication
city or town Golden [X] vicinity
state Colorado code CO county Jefferson code 059 zip code 80402

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this
[X] nomination [] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [X] nationally [] statewide [] locally.
(See continuation sheet for additional comments [].)

Fais m. Thompson March 25 1997
Signature of certifying official/Title Date
Federal Preservation Officer, U.S. Department of Energy
State or Federal agency and bureau

In my opinion, the property [X] meets [] does not meet the National Register criteria.
(See continuation sheet for additional comments [].)

Ames Edward Hartman December 13, 1996
Signature of certifying official/Title Date
State Historic Preservation Office, Colorado Historical Society
State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

<input checked="" type="checkbox"/> entered in the National Register See continuation sheet [].	Signature of the Keeper <u>Bob Boland</u>	Date <u>5/19/97</u>
<input type="checkbox"/> determined eligible for the National Register See continuation sheet [].	_____	_____
<input type="checkbox"/> determined not eligible for the National Register.	_____	_____
<input type="checkbox"/> removed from the National Register	_____	_____
<input type="checkbox"/> other, explain See continuation sheet [].	_____	_____

Name of Property

County/State

5. Classification

Ownership of Property (Check as many boxes as apply)

Category of Property (Check only one box)

Number of Resources within Property (Do not count previously listed resources.)

- [] private
[] public-local
[] public-State
[X] public-Federal

- [] building(s)
[X] district
[] site
[] structure
[] object

Table with 2 columns: Contributing, Noncontributing. Rows for buildings (60, 62), sites (0, 0), structures (1, 0), objects (0, 0), and Total (61, 62).

Name of related multiple property listing.

(Enter "N/A" if property is not part of a multiple property listing.)

Number of contributing resources previously listed in the National Register.

0

N/A

6. Function or Use

Historic Function

(Enter categories from instructions)

- Processing: processing site
Processing: manufacturing facility
Education: research facility

Current Functions

(Enter categories from instructions)

- Work in Process

7. Description

Architectural Classification

(Enter categories from instructions)

- No style

Materials

(Enter categories from instructions)

- foundation concrete
walls concrete
metal
roof concrete
asphalt
other steel

Narrative Description Attached

(Describe the historic and current condition of the property on one or more continuation sheets.) Attached

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Rocky Flats Plant
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Narrative Description of Plant Historic District

Summary

The Rocky Flats Plant (Plant) historic district consists of 61 contributing resources dating from 1951 to 1989 within the industrial area of the nuclear weapons production plant. The industrial buildings housing equipment to manufacture triggers for use in nuclear weapons and to purify plutonium recovered from retired weapons, are largely constructed of concrete or corrugated metal. Although surrounded by numerous recent temporary facilities, the core of the Plant containing the district retains integrity of location, setting, materials, and association.

General Overview

The Plant formerly processed nuclear and non-nuclear materials for weapons production and materials recovery. The total plant site today consists of a 6,266-acre area in northern Jefferson County, Colorado, about 16 miles northwest of Denver and 12 miles from Boulder and Golden. It is sited on a plateau at the eastern edge of the Front Range of the Rocky Mountains. The site is divided into three geographic areas, each fenced and protected by security forces. The industrial area, 384 acres, is located in the center of the Rocky Flats Plant site (Site). There are 436 structures that include approximately 150 permanent buildings and 90 temporary trailers, with the remainder smaller structures, temporary structures, or parts of larger buildings. Most of the buildings are industrial, constructed of a concrete, concrete block, or corrugated metal. The roofs are generally flat and of tar or asphalt built up over concrete. The windows are nearly all fixed, metal sash, and multi-paned. The doors are solid metal, some contain windows. These buildings housed manufacturing, chemical processing, laboratory, and support activities. The protected area is the northern portion of the industrial area. The protected area contains the complex of former plutonium production facilities. It is heavily fenced and guarded. The buffer zone, the remaining 5,882 acres, surrounds the industrial area and protects the Site from potential encroachment.

Many of the buildings were constructed 40 years ago. Based on age and previous function, the buildings are in various stages of repair. Many building are in poor condition, due to limited upkeep and out dated construction, and/or are contaminated. Temporary structures were placed for short term use only. Department of Energy (DOE) owns and maintains the utilities at the Site, much of which also is in need of repair.

The Plant is a self contained, concentration of industrial buildings surrounded by ranch land, preserved open space, mining areas, and low-density residential area. The original site was 1900 acres, with the purchase of an additional 4600 acres in 1972. In 1995, 234 acres, the wind site in the north west corner, were released to the DOE Golden Field Office. Due to restricted access and use of the site over the past 20 to 40 years, the buffer zone contains what are now believed to be rare or declining habitats of the Colorado Piedmont. All undisturbed areas within the Buffer Zone, totaling about 5,900 acres, have been surveyed for archaeological resources. Very few resources have been identified, none of which have been determined eligible for listing in the National Register by the Colorado State Historic Preservation Office.

General History

The first construction at the Plant, by the Austin Company of Cleveland, began in 1951 and was

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completed in 1953. A temporary guard shack on the Site property was constructed in 1951 along Highway 93, at the west entrance to the site. Building 91 (991) was the first permanent building, followed by buildings 71 (771), 44 (444) and 81 (881). In 1952, buildings 11 (111), 12 (112), 21 (121), 22 (122), 23 (123) and 42 (442) were constructed. At the end of the year, 11, 12, 22, 31, 34, 44, 51, 61, and 71 were occupied. By November, there were 1,081 employees.

The Plant was originally composed of four widely separated areas, each one performing a different type of work. Plant A (444) fabricated parts from depleted uranium. Plant B (881) recovered enriched uranium and fabricated parts from it. Plant C (771) contained the plutonium operations, and Plant D (991) was the assembly and shipping point. Those facilities handling the more highly radioactive plutonium were located on the north side of Central Avenue at a distance from the other buildings on site. Those facilities handling the less radioactive enriched uranium and depleted uranium were located on the south side of Central Avenue and some distance from it. The support buildings were located along Central Avenue closest to Plant A, the least radioactive facility of the production buildings. The completed Plant in 1953 contained the four production buildings with their guard houses, and a number of support buildings including an administration building (111), cafeteria (112), plant safety building (121), medical emergency building (122), paper shredder shed (122S), health physics building (123), hazardous storage shed (123S), garage and fire station (331), paint and blast shop (333), maintenance shop (334), production support building (441), laundry (442), heating plant (443), warehouse (551), sealed gas storage building (552), metal fabrication building (553), storage building (554), waste storage and emergency breathing air (714), temporary electric shop (772), waste treatment plant (774), sewage treatment plant (887), and a waste water treatment plant (995). Originally, each production plant had its own cafeteria; building 112 was used by those employed in the administrative section of the Plant.

A major expansion to the Plant took place in 1956-57 when the trigger design changed, necessitating the addition of seven new buildings, 447, 776, 777, 778, 883, 884, 997, 998, and 999, as well as additions to 444, 881, and 771. Further additions to the Plant were continuous, with several buildings added every year. A second large expansion came in 1964-65 when 11 buildings were added, primarily research and development laboratories, guard houses, and waste water treatment facilities. In 1967, building 559 was built, and in the 1970s buildings 440, 707, 750, and 865 were added. Two further major buildings 371 and 460 were constructed in the 1980s. The 1980s and 1990s saw the addition of numerous temporary trailers and a number of low-level and mixed hazardous waste tents.

In 1975, a state task force appointed to study the Plant concluded that the siting of the Plant, with its vast amount of plutonium and potential for nuclear accidents, so close to the metropolitan area of Denver, had been a mistake. In the ensuing years Jefferson County's Health Department Director, Dr. Carl J. Johnson, published reports allegedly linking plutonium contamination from the Plant to cancers and infant mortality. A 1988 report submitted to Congress indicated that the Plant's facilities were aging, waste storage and clean-up was a major problem, and the public was opposed to the siting. During the 1980s a number of complaints concerning safety and environmental errors surfaced, culminating in the 1989 raid on the Plant by the Federal Bureau of Investigation (FBI) and the Environmental Protection Agency (EPA) for alleged environmental infractions. That same year production at the Plant was halted by the Secretary of Energy, James Watkins, for correction of safety deficiencies. The Plant remained closed for an extended period

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for the new operating contractor to address the safety concerns. In 1989, the Plant was added to the National Priorities List of contaminated sites to be remediated under the government's SuperFund program.

By 1991, a series of events worldwide, such as the fall of the Berlin Wall in 1989 and the breakup of the U.S.S.R. with the subsequent dissolution of the Warsaw Pact in 1991, reduced the Cold War threat. In that year President George Bush ordered all bombers and tankers to be taken off alert, and the Department of Defense (DoD) began to reconsider its needs in terms of the size and nature of its military force. As a result of this reconsideration, DoD began cutting its military forces and cutting back on the production of new weapons. That same year President Bush also announced the cancellation of several nuclear weapons programs, those that would provide the Plant with future work. In 1992, Bush also canceled the production of the Trident II missile and its warhead (the W-88), the weapon that had been the primary program at the Plant. The Secretary of Energy that year publicly announced that the mission at the Plant would be changed to environmental restoration and waste management, with the goal of cleaning up and converting the Plant for new use.

Of the buildings at the site, 61 structures are considered directly related to the mission of the Plant and are considered contributing properties to a proposed Rocky Flats Plant historic district. The buildings central to the Plant's mission include the following, arranged by systems: Production work, including 371, 444, 460, 701, 707, 771, 776/777, 881, 883, 991, 996, 997, 998, 999; research and development, including 125, 126, 559, 779, 865; worker safety/health/life, including 112, 114, 122, 123, 331, 442, 778, 886; security, including 111, 120, 121, 133, 372, 372A, 375, 440, 446, 461, 550, 557, 761, 762, 762A, 764, 773, 792, 792A, 864, 888, 901, 920, 992; administrative, including 441; infrastructure (heating, water, sewage, storage), including, 124, 215A, 443, 551, 995; maintenance, including 333, 334; and production waste treatment, including 374 and 774.

The original administrative, maintenance and infrastructure, waste treatment and storage buildings, built between 1951 and 1953, are considered contributing to the historic district. These facilities indicate the original layout of the site and were necessary for both Plant function and to meet the needs of employees in a remote and secured work place. The remaining administrative, office, maintenance, infrastructure, waste treatment, and storage buildings were built to accommodate increase in production and site population and did not represent new, but redundant, functions at the site, therefore, these facilities are considered non-contributing to the district. Temporary buildings were also considered non-contributing due to the short term nature of the structure. Most of the temporary structures are trailers that provided additional office space for a variety of technical and administrative personnel, and various storage structures and tents. These structure are not unique to this site. Structures built after 1989, when the production ceased, were considered non-contributing. Structures that have been demolished were also eliminated from consideration in the historic district.

The contributing buildings retain integrity of location, setting, materials and association. They are in their original locations, and the addition of numerous temporary trailers and tents have not compromised their setting. They retain their industrial materials of concrete and corrugated metal. Many additions and upgrades have been made to the original structures for expanded or new use to

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meet the needs of Atomic Energy Commission (AEC). The Plant's significance rests on its function as producer of triggers for weapons, part of the United States mission to gain military supremacy over the Soviets. Because their function continued throughout various upgrades, integrity of association becomes more important here than integrity of original design. (As stated in the draft *Cold War History Study Report to Congress*, "continuity of use" considerations for Cold War buildings may be more important than the traditional view of integrity for facilities which have experienced changes to materials and design.) The Plant retains integrity of association as well. Virtually all the original Plant buildings remain, as well as those constructed for the two subsequent significant phases of development at the Plant -- the new trigger design era and the sole trigger producer era. The large scale of the facilities and their physical relationship to each other provide important visual clues to the historic activities on the site.

General Plant Operations

The Plant manufacturing activities can be divided into three separate phases, as described below:

1951-1955

The original two trigger designs at the Plant were modeled on the designs of the bombs that were dropped on Hiroshima (Little Boy) and Nagasaki (Fat Man), both involving solid cores of fissile materials. The Little Boy design contained two solid masses of uranium at opposite ends of a tube that were forced together by an explosive to achieve criticality. The Fat Man design had a small plutonium core surrounded by a large amount of enriched uranium and then by explosives. The detonated explosives caused the uranium and plutonium to implode to a reduced volume to cause criticality. These initial-generation trigger designs made use of enriched uranium, depleted uranium, some plutonium, and beryllium, fabricated in the 1950s in the original four Plants (Plant A, Plant B, Plant C, and Plant D, see map section 7, page 17).

Enriched uranium, the largest component of the trigger, was supplied by the Oak Ridge Y-12 plant in the form of buttons and was handled at Plant B, building 881. The buttons were cast, shaped and formed, machined, inspected, and assembled into component parts for the triggers. Enriched uranium recovery and purification of the waste from manufacturing these triggers also took place in Plant B. Floors in the chemical salvage area and a machining room were covered with stainless steel sheets to make cleaning easier. A large part of the early work at the Plant took place in this building, since the trigger required a large amount of enriched uranium.

Depleted uranium was cast and machined in Plant A, building 444. The material was shipped to the Plant originally as derby-shaped parts (like the crown of a derby hat) from Paducah, Kentucky, and later as ingots from the Feed Materials Production Center in Fernald, Ohio. The material was cast in the foundry into "near-net-shape" (close to the final product form) and then machined into finished parts, and inspected. These components were then sent to the Pantex Plant in Texas for assembly. Some beryllium was also processed in building 444, but as part of research and development for production engineering and weapon development, rather than as part of the regular manufacturing process. It was cast in the foundry into "near-net-shapes" that were then machined.

Plant C, building 771, housed all the plutonium processes, including casting, fabrication of

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buttons, fabrication of component parts from the buttons, coating, inspection, testing, storage, and the recovery of plutonium from wastes created during this manufacturing process. These wastes ranged in size from tiny particles trapped in rags to large pieces created during the machining process. The plutonium was created in reactors at Hanford, Washington; Savannah River, South Carolina; and sometimes from Oak Ridge, Tennessee; and came to the Plant in the form of either plutonium nitrate or as buttons. Building 774 was used to process the liquid wastes generated at building 771; the liquid radioactive wastes were reduced and put into a form for transportation off site to a burial grounds. The remaining aqueous wastes were sent to the solar evaporation ponds adjacent to 777 or to the "B" series of holding ponds. Initially the use of this Plant was small because the prime material in the triggers was enriched uranium.

Trigger components manufactured in Plants A, B, and C, as well as those manufactured at Oak Ridge, were sent to Plant D, building 991, for assembly and storage. They were then shipped off site to the Pantex Plant in Amarillo, Texas for final assembly of the weapon. The underground storage vaults near building 991 (996, 997, 998) were used to store retired weapons triggers, sent by Pantex for recovery of plutonium and uranium, until they were taken to the 700-area buildings for recovery operations.

1956-1963

After 1957, a design change was made in the triggers, from a solid mostly uranium core to a hollow mostly plutonium core, that was lighter than the previous units and could be made smaller. This change in weapon design came as a result of both economic and military considerations. Economically "weapons grade" plutonium was cheaper and simpler to produce than enriched uranium, and thus the new triggers were designed to use more plutonium than uranium. Militarily, the Department of Defense required the development and production of smaller lightweight warheads at this time. The plutonium buttons were machined into hollow hemispheres that were then joined. This hollow design required a great deal more machining than the previous designs. The same materials were used as previously but in a different ratio and form. Such a change required the construction of a number of new buildings and a change in use of existing buildings. An estimated \$21 million was spent on the expansion, and the Plant nearly doubled in size by 1962.

With a greater use of plutonium required, the facilities in building 771 were no longer adequate, and plutonium fabrication and foundry buildings, 776 and 777, essentially one long building with a concrete block wall between them (removed in 1961 to accommodate additional equipment), were constructed in 1956-57. Plutonium recovery operations remained in building 771. Casting took place within 16 furnaces at the foundry in building 776, rolling, forming, and machining slightly east of the casting, and inspection, assembly, and storage in building 777. The plutonium buttons were cast into ingots that were rolled to the desired thickness and stamped out as blanks. The blanks were formed to the desired hemispherical shape, then turned and polished.

There were four glovebox systems in 776/777 to handle plutonium operations: the North Foundry Line and the South Foundry Line, the Center Line, and the North-South-East Machining Line. Materials were moved from one glovebox to another, originally by belts and later via an overhead chain link conveyor. Because the trigger was more complex, it was assembled in building 777 as well, rather than at building 991. Assembly of the hollow cores required drilling, welding,

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brazing, turning, and polishing. After assembly the units were packed and shipped off site or sent to building 991 for shipping. The new design called for the rolling and forming of both enriched and depleted uranium as well. Building 883 was constructed in 1957 adjacent to building 881 for rolling and forming uranium. Depleted uranium was cast in ingots in building 444, sent to Side A of 883 for rolling and forming, and then returned to building 444 for machining and inspection. After 1958 depleted uranium, formerly shipped to the Pantex Plant in Texas, was retained and fabricated on site. Building 447 was added to the southwest corner of building 444 in 1956 to house heat treating furnaces to anneal depleted uranium parts, plus facilities for assembling certain parts from buildings 444, and to process wastes. Building 445 was added to the east side of 444 in 1957 to house the carbon shop that supplied graphite molds and crucibles to the foundries in buildings 444 and 776. Building 448 was added to the north side of building 447 in 1962 to house production control. Building 451 housed the exhaust filter plenum and exhaust fans for buildings 447-8.

Enriched uranium was cast in building 881, (enlarged for manufacturing in 1956), sent to Side B of building 883 for rolling and forming, and returned to building 881 for machining and inspection. A reinforced concrete tunnel was constructed in 1957 to transport enriched uranium between the two buildings.

The design change for triggers also meant that beryllium would be used to a greater degree than in the past. In 1958 when beryllium operations became a standard part of Plant operations, the beryllium blanks were provided by an outside source and were milled, turned, drilled, and polished in building 444. Beryllium was used as a neutron reflector within the weapon.

During this period when the trigger assembly operation was moved to building 777, building 991 became more of a storage and shipping area. It supplied certified packaging for storage and shipment of nuclear material. Another vault, building 999, was added to the existing three in 1956. The trigger design remained roughly the same from 1958 to 1989 when the Plant ceased operations, with changes only in materials and dimensions.

1964-1989

The next large-scale change to the Plant came in the 1960s when the AEC chose to make it the sole producer of triggers under the "single mission" concept. Previously a number of the nuclear weapons facilities had overlapping functions, to provide redundancy in case of enemy attack. Hanford was manufacturing similar plutonium units and Oak Ridge similar enriched uranium components to those at the Plant. Los Alamos National Laboratory also produced triggers on a small scale. Under the new arrangement, made for economic reasons, each facility was to provide separate weapons components. As a result, the enriched uranium operations, including both manufacturing and recovery work, were transferred to Oak Ridge in 1964, and the trigger manufacturing was given solely to Rocky Flats Plant. Production at the Plant increased dramatically.

Plutonium fabrication continued at an expanded level with production continuing in buildings 776/777. By 1967, construction had begun on a new plutonium building, 707, to augment operations at buildings 776/777. By 1969, building 707, a state-of-the-art facility of precast concrete panels on concrete posts and beams, was finished. It was divided into eight modules --

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separated to minimize potential fire damage -- each for a different operation, such as casting into ingots, rolling, forming, heat-treating, machining, inspecting, assembling, and testing. A major fire in buildings 776/777 in 1969 necessitated the relocation of some of its foundry, fabrication and assembly operations into the new building 707. Building 707A was built in 1971 to handle these extra operations. Final assembly remained in 707 until the Plant ceased operations. Buildings 776/777 were cleaned of contamination from the 1969 fire in 1971, and additional interior walls were constructed. Building 776 was used for machining, plutonium recovery, and waste-related operations, and building 777 was used for machining, disassembly and assembly, and testing operations. Much of the work became special-order or research and development operations.

Building 771 was expanded in 1963/64 (771A), in 1967 (771B), and in 1971 (771C) to handle increased recovery operations. Building 774 continued in use as a waste treatment facility; around 1965 an evaporator was added to building 774 to handle liquids from the solar evaporation ponds. By 1968, because building 771 was outmoded and new technologies had been developed for plutonium recovery from solid and liquid waste, a new recovery building, 371 (based on higher AEC standards than had been in operation when 771 had been constructed), was planned. However, it suffered from various design problems that prevented its opening until 1981 and caused termination of recovery operations in 1986. It never did become a fully operating recovery facility, and as a result, building 771, planned to be closed in anticipation of the use of building 371, remained in operation. Building 371's related facilities are 373, the cooling tower, 374, the waste treatment plant (1974) -- that serviced the wastes from building 371, and processed all secondary stage liquid wastes from building 774 and the evaporation ponds -- and 381, the fluorine storage area (not in use). It contains a Stacker/Retriever storage vault for barrels of plutonium with an inert atmosphere (filled primarily with nitrogen rather than air to prevent combustion) and robotics retrieval capabilities. Buildings 707, 771, and 776/777 remained as plutonium production buildings until 1989 when production ceased.

The finished triggers were taken from the 700-area buildings by armed truck to a small shed near building 551, where they were stored for placement on specially configured Atomic Material Transport (ATMX) rail cars. The spur line from the railroad came onto the Plant from the southwest and curved up to run along the west side of building 551. Building 440 (1971) was constructed to modify standard freight cars for shipment of the triggers to the Pantex Plant in Texas as well as waste materials to Nevada. Later the building was also used to modify standard trailer trucks into Safe Secure Trailers (SSTs) for shipping the triggers, making them tamper-proof. These unmarked SSTs, escorted by unmarked trucks and cars, drove the triggers to the Pantex Plant in Texas. Building 991 remained as a shipping and storage area. The underground vaults were used to store Special Nuclear Materials.

When the enriched uranium operations were transferred to Oak Ridge between 1964-66, building 881 was shut down and decontaminated. Side B of building 883, formerly used for enriched uranium, was then used for beryllium rolling and forming. In 1966 stainless steel operations, called the "J Line," were transferred from Albuquerque, New Mexico and were located in building 881. The AEC took this business from the American Car and Foundry, for reasons of economy, and made it part of Plant mission. Its processing was done in building 881 and 444 until building 460 was constructed in 1984 specifically for all non-nuclear manufacturing, at which time all stainless steel processing was consolidated there. The stainless steel was used to make the

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reservoirs within the bomb that hold tritium gas to boost the yield of the explosion.

Over the years since the addition of new fabrication and tooling in 1958 for the hollow triggers, the manufacturing facilities and production processes have not changed much, although they have moved from building to building.

Research and Development

Research and development were also important components of the Plant work. In the early years of the Plant, most of the research and development functions were handled by the two laboratories associated with the Weapons Complex: Los Alamos National Laboratory, New Mexico, and Lawrence Livermore National Laboratory in northern California. Any research done at the Plant was incorporated into production engineering for new weapon design. The Plant specialized in research concerning the properties of plutonium, that as a recent man-made substance, were as yet little known. Laboratories were established in each of the three manufacturing buildings, specializing in the material of the Plant, either plutonium, enriched uranium, or depleted uranium.

When the Plant became the sole producer of plutonium triggers, research and development activities increased markedly. Building 779, a plutonium laboratory, was constructed in 1965 to learn more about plutonium's chemistry, its interaction with other materials, and its shelf-life. Building 865 was built in 1970 to house metal-working equipment for the study of non-plutonium metals and the development of alloys. Building 993 was used from 1965-1968 for explosive bonding tests, joining plates of stainless steel and uranium alloy. Building 886 was constructed in 1965 as a place for the Nuclear Safety Group to conduct critical mass experiments with uranium and plutonium. It is one of two remaining general purpose critical mass laboratories in the United States, and its experiments were used to set safety standards for the Nuclear Regulatory Commission (NRC).

Several testing laboratories were also constructed. Building 125 (1965), the standards laboratory, was used for analysis of incoming materials for quality assurance/quality control. Building 126 (1968), the calibration laboratory, was used to calibrate the machining equipment used in manufacturing precision components. Building 705 (1966) was the site for experiments with the various coatings used on materials, as well as development work for reactor fuels using depleted uranium oxides. Additionally, work with beryllium took place here. Building 701 (1962) was used to design waste treatment processes. The plutonium laboratory, building 559 (1967), was used for analysis of the purity of plutonium, where incoming materials, and recovered, cast, and purified materials from the site were sampled. A second building, 561 (1973), expanded the capabilities of the laboratory in building 559.

Safety and Health

Safety and health concerns were of major importance at the Plant, most obviously so because of the radioactive nature of the materials used in production. Containment and shielding meant that plutonium was machined inside lead-and-water-lined gloveboxes. Plutonium was moved from work station to work station within the six modules in building 707 in a system of interconnected enclosed gloveboxes and lines that ran for several hundred feet. In addition, building 707 was connected to building 776 via a glovebox conveyor line. In 1971 the operations in the Waste Treatment building (774) were enclosed, providing containment of radioactive airborne particles.

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Additional shielding, using lead, leaded glass, and Benelux and Plexiglas was added to the gloveboxes and conveyor lines in buildings 777 and 771 in 1968 to reduce exposure to plutonium. From the outset of operations in the late 1950s, employees wore dosimetry badges to measure external radiation exposure, and radiation and health physics monitors watched operations in the production buildings. The original health facilities were a medical building (122) and a health physics building (123). The medical building housed the doctor and emergency health care, and the health physics building housed a laboratory and administrative area.

Very little was known initially of the properties of uranium, plutonium and beryllium, and as accidents happened at the Plant, new safety measures were instituted to prevent such accidents from happening in the future. For example, in 1969 a major fire occurred in gloveboxes in building 776/777, contaminating a number of fire fighters. As a result, new safety features such as creating an inert nitrogen atmosphere in the gloveboxes to prevent combustion of the plutonium chips, and the addition of water sprinklers and more fire walls, were provided. Additionally, as health regulations became stricter and more research on the effects of radiation or inhalation of particles became known, other changes took place at the Plant. In 1966, a personnel decontamination room was added to the medical building (122) at the southeast corner, consisting of shower facilities and first-aid equipment. This addition enabled contaminated workers needing medical attention to go directly to the decontamination area rather than through the regular emergency building entrance.

With the exception of those employees working in low contamination areas such as the laboratories, all the men (women initially were not allowed to work in the production buildings) wore white clothing - coats, pants, hats, underwear, socks, and booties - provided by AEC/DOE. This protective clothing was laundered in various buildings; originally buildings 771, 881, and 991 had their own laundries, and building 442 laundered the clothing from building 444. When building 778 was constructed, the laundry for the plutonium-related buildings was washed there; after 1976 -- when building 442 became used for filters -- all laundry on the site was handled in building 778.

Security

As a top-secret weapons production facility, the Plant from its inception was concerned with security precautions. The site was surrounded by 10 miles of barbed wire fence, electric fence, and livestock fence, and armed guards patrolled the outside of the Plant. Each of the four lettered plants had its own guard house: 446 for Plant A; 864 for Plant B; 773 for Plant C; 992 for Plant D. A plant protection building (121) and firing range for security force practice were constructed as part of the original Plant. As new production buildings were constructed, individual guard houses were also constructed for them. Guard house 888 was built in 1964, close to the criticality laboratory, 886, and guard house 461 in 1985 for the stainless steel fabrication plant 460.

The first security chief at the Plant was James A. O'Brien, a former narcotics and Army intelligence officer. According to a former Security Director, in the early years security was concerned with the Cold War, espionage, and the secrecy associated with building nuclear weapons. It was important to safeguard design secrets, and later, the numbers of weapons being produced. Classified documents were available only on a "need-to-know" basis. All employees required Q clearance, a top-secret level for atomic workers requiring a 15-year background check,

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Rocky Flats Plant
Jefferson County, CO

and were forbidden to talk about their work with anyone.

Most employees were cleared for work only in their own buildings and knew only what operations went on in their buildings. They were required to have a separate badge for each area entered. Workers parked outside the Plant area, at the west end (the sole entry point), and were bused from the front gate to building 111 where they checked in at the clock room, and then went to their own buildings. A small bus stop (114) was built in the administrative area. At some point cars were then allowed onto the site; a guard post, building 100 (1969), was built at the west access road to check traffic. By 1964, an east access route off Indiana Road had been built, with its guard house, building 900 (1964) at the east access road.

In 1978 plans to install a \$5 million Perimeter Security Zone (PSZ) (protected area) surrounding the plutonium operations buildings were established. The PSZ, when finished in 1983, consisted of a double perimeter fence with closed-circuit TV, alarms, and an uninterrupted power supply. Access to the area was controlled at three checkpoint guard houses: 372 at the inner fence by building 371, 762 by building 707, and 792 by building 771. Four guard towers, 375, 550, 761, and 901, were installed along the inner fence. Guards were trained in handgun and automatic weapons use. In 1983, a new policy required that all vehicles driven onto the Plant be searched by security forces at the gate. By 1985, a Perimeter Intrusion Detection Assessment System (PIDAS) was in place, with its security building 764, to detect activities at the PSZ. Guard posts and badge check houses were added at the west gate in 1985 and at the east gate in 1986. Guard houses were established as well in the west parking lot (133) in 1986 and at the west end of Central Avenue (113) in 1988.

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Contributing Resources

Buildings and Facilities- 61

<u>Bldg #</u>	<u>Use/function</u>	<u>Yr. built</u>
Production Facilities		
371	Plutonium recovery facility	1981
444	Depleted uranium and beryllium manufacturing facility	1953
460	Stainless steel manufacturing facility	1984
701	R&D facility-waste treatment processes	1962
707	Plutonium fabrication	1969
771	Plutonium fabrication	1952
776/777	Plutonium fabrication	1956
881	Enriched uranium facility	1953
883	Enriched uranium facility	1957
991	Final assembly and shipping	1952
996	Storage vault	1952
997	Storage vault	1952
998	Storage vault	1952
999	Storage vault	1952
Production Support Facilities		
125	Testing-standards laboratory	1965
126	Testing-calibration laboratory	1968
Research and Development Facilities		
559	Laboratory-chemical analytical support for plutonium production	1967
779	Laboratory-plutonium production and recovery processes	1965
865	Enriched uranium-material processing development laboratory	1972

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Safety/Health/Employee Facilities		
112	Cafeteria	1953
114	Bus stop	1959
122	Emergency medical services	1953
123	Health physics laboratory	1953
331	Fire station	1953
442	Laundry for uranium contaminated clothing	1953
778	Laundry for plutonium contaminated clothing	1957
886	nuclear safety facility and critical mass laboratory	1965
Security Facilities		
111	Administrative offices, worker check in	1953
120	West gate guard post and Badging	1985
121	Cleaning and firearms check	1953
133	Guard post	1986
372	Guard post-portal 2 (PSZ)	1983
372A	Badging station	1983
375	Guard tower	1984
440	Modification facility for transportation safeguard division	1971
446	Guard post for Plant A	1952
461	Guard post for Building 460	1985
550	Guard tower	1984
557	Guard post	1968
761	Guard tower	1983
762	Guard post-portal 1 (PSZ)	1983

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762A	Guard post/access control	1983
764	PIDAS security station	1985
773	Guard post for Plant C	1952
792	Guard post-portal 3 (PSZ)	1983
792A	Access control/Badging	1983
864	Guard post for Plant B	1952
888	Guard post for Building 886	1964
901	Guard tower	1983
920	East gate guard post	1986
992	Guard post for Plant D	1951
441	Security offices	1953
Infrastructure		
124	Waste handling-water treatment plant	1953
215A	Water tower	1953
443	Steam plant	1953
551	Fabrication shop, warehouse	1953
995	Low-level waste water treatment	1953
Maintenance		
333	Paint shop and sand blast facility	1953
334	Electrical shop & general shop maintenance	1953
Waste Treatment		
374	Aqueous waste treatment	1977
774	Aqueous and organic waste treatment facility	1954

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Non-Contributing Resources

Buildings and Facilities-62

<u>Bldg #</u>	<u>Use/function</u>	<u>Yr. built</u>
	Production Support	
130	Engineering offices	1985
376	Pre-engineering offices	1983
381	Fluorine transfer	1980
445	Carbon storage	1956
447	Depleted uranium-assembly and waste operations	1956
448	Material storage, shipping & receiving	1961
449	Carpenter and paint shop	1964
452	Pre-engineering offices	1983
453	Material storage	1972
549	Electrical shop	1972
552	Gas cylinder storage facility	1952
553	Metal fabrication and electrical assembly operations	1951
554	General warehouse, shipping & storage	1953
556	Metal cutting shop	1962
663	Shipping and storage	1971
666	Chemical storage	1965
705	Coating laboratory	1966
714A	Gas cylinder storage	1953
717	Magnehelic gauge building	1974
750	Engineering support	1968

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770	Maintenance for 771	1964
771A	Offices for 771	1963
771B	Carpenter shop for 771	1967
772	Electrical shop and inspection for 771	1952
780	Pipe cutting and threading, metal welding	1965
880	Storage and shops for 886	1967
885	Material and paint storage	1961
889	Equipment decontamination facility	1968
903	Decontamination facility	19?
968	Warehouse	1968
980	Vehicle and equipment maintenance	1957
984	Shipping container storage for 991	1986
	Safety/Health/Employee Facilities	
335	Fire training facility	1972
714B	Emergency breathing air	1953
967	Locker rooms	1968
	Security Facilities	
119	Offices, shop, gym	1988
122S	Paper shredder shed	1953
123S	Hazardous Waste Storage Shed	1953
128	Garage	1985
439	Machine shop, upholstery, battery maintenance for 440	1971
763	South breeze way	1983
765	Secondary alarm system center	1988

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987	Storage vault	1963
993	Ammunition storage	1963
	Infrastructure	
662	Power plant	1957
	Waste Treatment	
129	Raw water strainer	1972
373	Water cooling process	1977
569	Waste storage	1987
570	Crate counter support facility	1987
664	Low-level waste shipping & storage	1965
668	Drum certification facility	1970
771C	Nuclear waste packaging facility	1971
788	Cementation and storage	1985
884	Waste storage facility	1956
887	Sewage and process waste lift station for 881	1953
988	Waste water treatment	1974
990	Waste water treatment	1964
	Administrative	
115	Offices	1986
131	Offices	1987
564	Offices	1983
706	Library	1966
850	Logistics office	1984

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(Rev. 8/86) OMB No. 1024-0018

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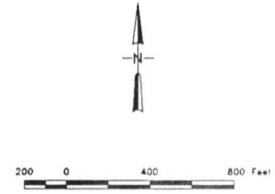
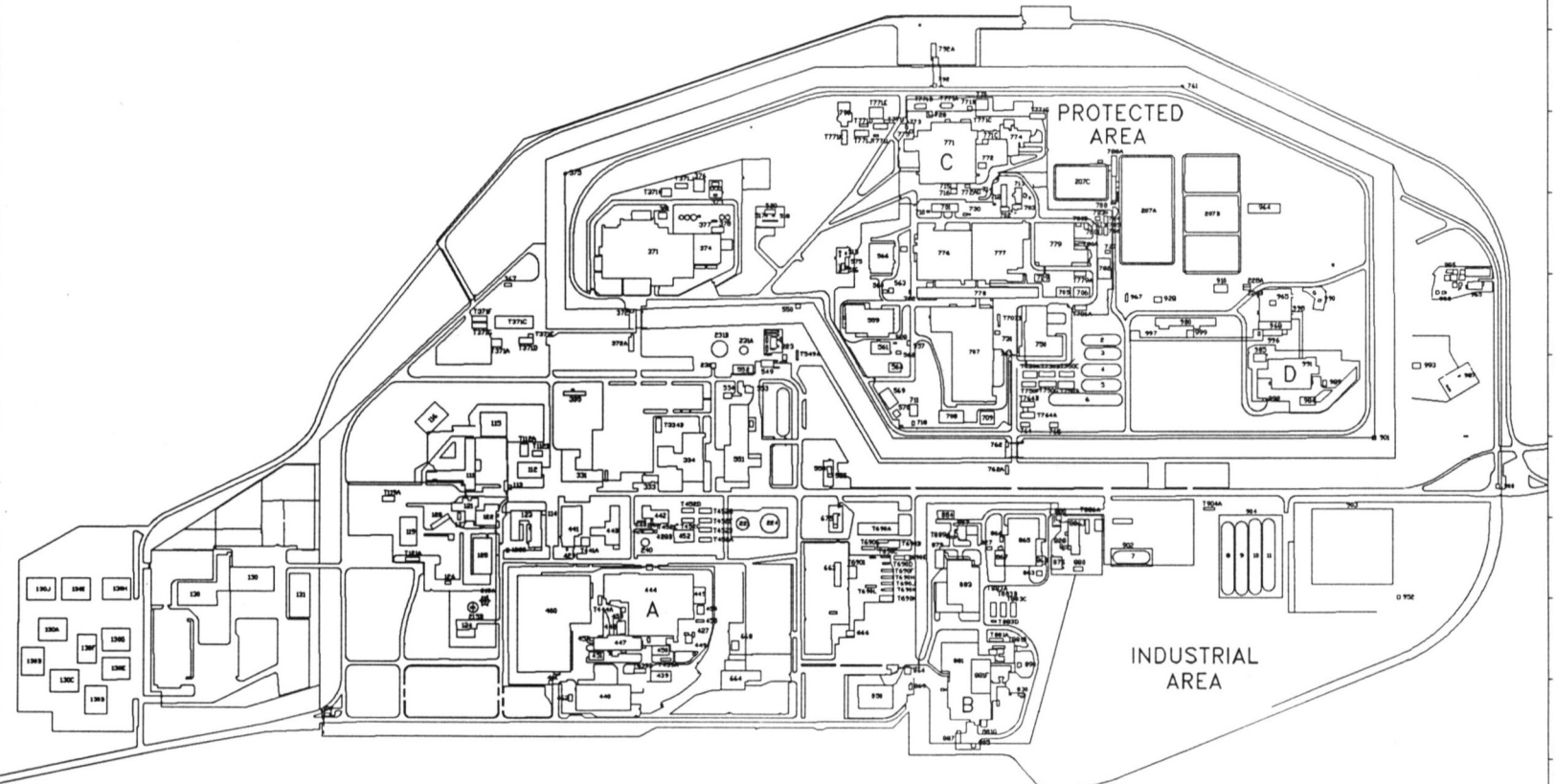
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Rocky Flats Plant
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Rocky Flats
Environmental Technology
Site in 1994

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State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD57

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:
SAC
Science Applications
International Corporation

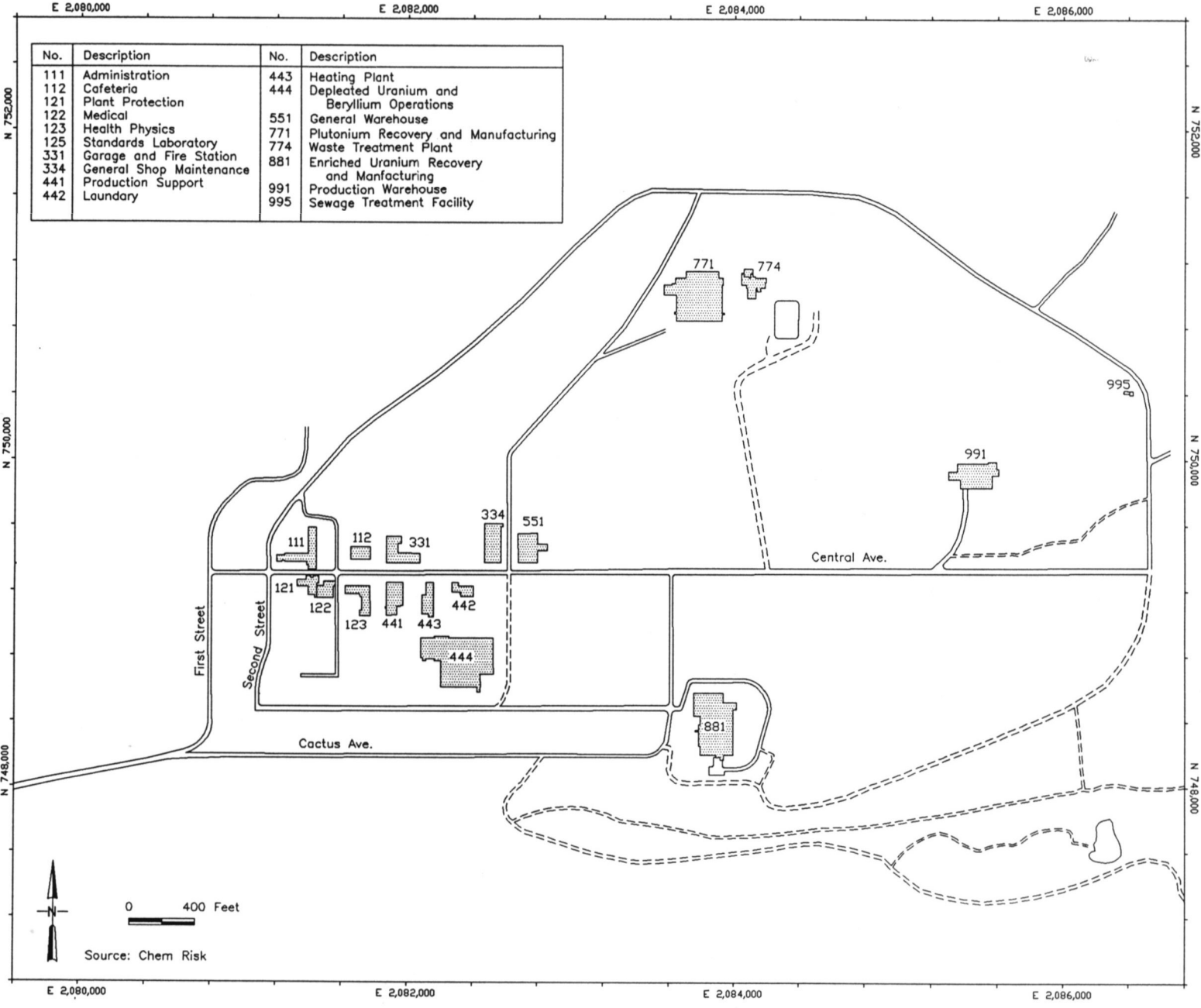
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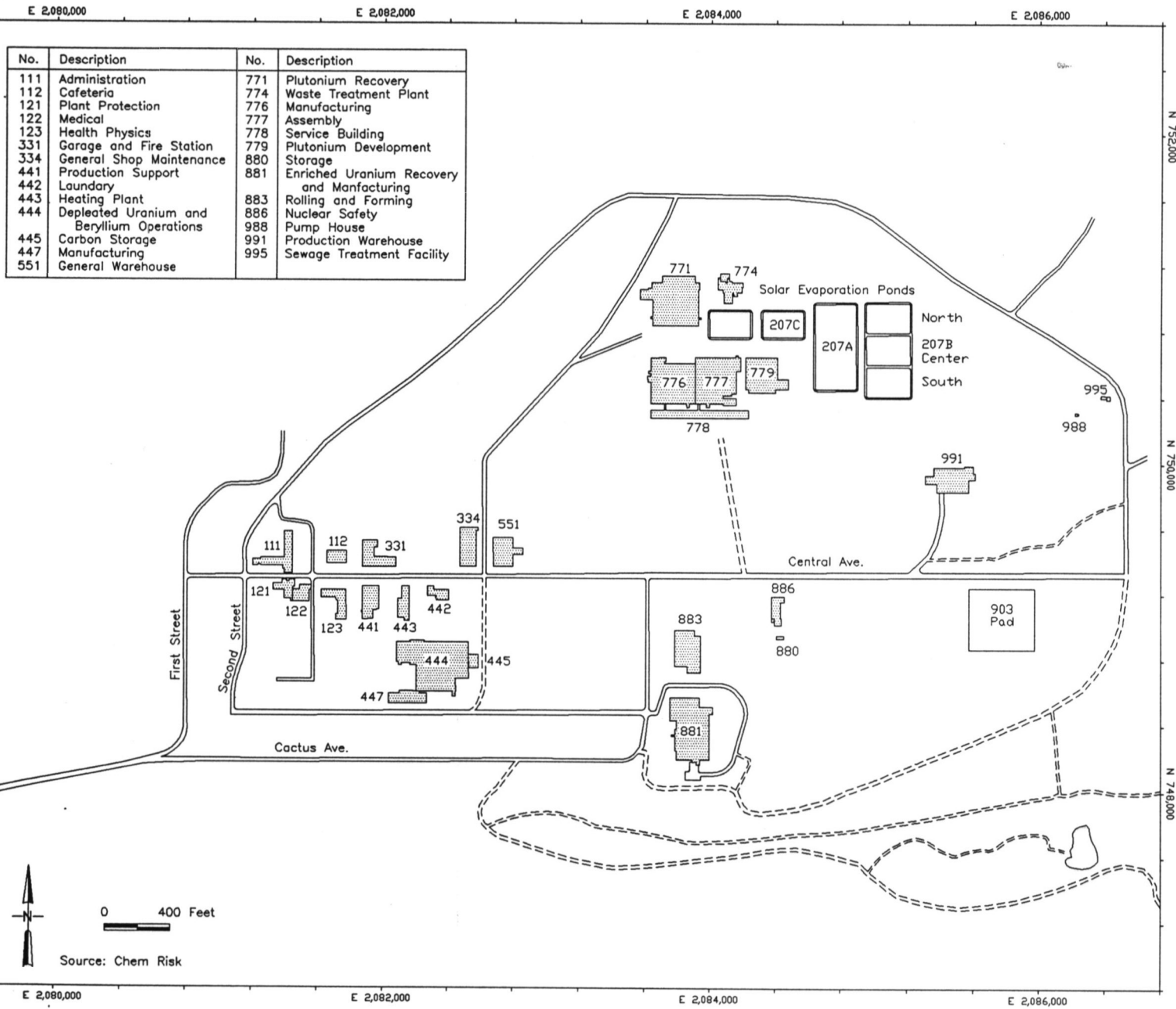
Rocky Flats Plant in 1953.

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Rocky Flats Plant
Jefferson County, Colorado



Rocky Flats Plant in 1964.

Rocky Flats Plant

Jefferson County, Colorado

Name of Property

County/State

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

Areas of Significance
(Enter categories from instructions)

Military

Industry

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Periods of Significance

1951-1989

Significant Dates

1956

1964

Significant Person(s)

(Complete if Criterion B is marked above).

N/A

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

Cultural Affiliation

N/A

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Architect/Builder

Austin Construction Co.

Narrative Statement of Significance Attached

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographic References

Bibliography Attached

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey
- # _____
- recorded by Historic American Engineering Record
- # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other:

Name of repository:

US Department of Energy

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Rocky Flats Plant
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Statement of Significance

The Rocky Flats Plant (Plant) is less than 50 years old, the normal date for qualifying cultural resources for assessment for eligibility to the National Register. The NRHP *Guidelines for Evaluating and Nominating Properties that have Achieved Significance within the Last Fifty Years* indicates that such properties, either individually or as a district, must have "exceptional importance" to be eligible for the NRHP (U.S. Department of the Interior n.d.). The Rocky Flats Plant is exceptionally significant under Criterion A at the national level under the Cold War military theme: Development of Atomic Weapons for Military Purposes. Its period of significance dates from its inception in 1951 to its closure in 1989 as the Cold War ended, and its particular significance comes as being the sole producer of triggers for nuclear weapons from 1964 to 1989. The plant is related as well to the 12 other plants comprising the Nuclear Weapons Complex. The property is significantly associated with the U.S. strategy of military deterrence against the Soviets, producing and maintaining a sufficient arsenal of weapons, to be launched by air, land, or sea, to prevent a preemptive strike by the Soviets. This strategy is considered of major importance in preventing nuclear war during the Cold War period.

As an industrial facility, the Plant operations were similar to other foundries. Operations at the Plant included machining, casting, assembly, inspection, and waste management. However, the Plant differs in the safety and health concerns associated with working with radioactive materials in production. Workers needed to be shielded from exposure and plutonium needed to be contained. This meant that plutonium was machined inside lead-and-water-lined gloveboxes. From the outset of operations in the late 1950s, employees wore dosimetry badges to measure external radiation exposure, and radiation and health physics monitors watched operations in the production buildings.

Private industry, also, usually did not have the security concern that the Plant did. In the early years, security was concerned with the Cold War, espionage, and the secrecy associated with building nuclear weapons. It was important to safeguard design secrets, and later, the numbers of weapons being produced. Classified documents were available only on a "need-to-know" basis. All employees required Q clearance, a top-secret level for atomic workers requiring a 15-year background check, and were forbidden to talk about their work with anyone. Most employees were cleared for work only in their own buildings and knew only what operations went on in their buildings. They were required to have a separate badge for each area entered. Site access was limited as well, workers parked outside the plant area, at the west end (the sole entry point), and were bused into the Plant.

The establishment of the Plant was the result of a post-war atomic race with the Soviet Union. In the first few post-war years, the United States held a monopoly on atomic energy and the production of nuclear weapons. The Atomic Energy Act of 1946 established the Atomic Energy Commission (AEC), a civilian group, with the directive to develop both military and peacetime uses for the newly discovered nuclear energy. It was to be the owner of existing nuclear facilities and any fissionable material that would be produced in the future. Because of the Cold War, the

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AEC's emphasis during these years was on the development of uranium and other raw materials for weapons production and the manufacture of bombs, rather than for peacetime applications .

During these years from 1946 to 1950, AEC's first mandate was to rehabilitate the wartime plants, find additional sources of uranium and plutonium, continue to carry out scientific research, and create and stockpile atomic weapons. Each year the president determined the number of bombs to be made as part of the AEC military program, and the AEC carried out the president's mandate, which was to stockpile uranium and plutonium and to make atomic weapons. At this stage, all nuclear bombs were made at Los Alamos from materials shipped from Hanford or Oak Ridge.

This trend toward military rather than peacetime uses of nuclear energy came about in part because of the change in the political climate from 1945 to 1950, at which time the stance of the United States toward the Soviet Union, its World War II ally, hardened into enmity, which translated into what became known as the Cold War. Through a series of events in the Soviet Union in 1948-49 - - such as the detonation of its first atomic bomb, its blockade of Berlin, and its growing influence in neighboring China culminating in the Communist takeover -- the United States came to believe that the Soviets were planning both to claim the world for Communism and to eradicate the United States through a surprise nuclear attack.

President Truman responded to the Soviet threat with a policy declaration, NSC-68 (National Security Council) in 1950 that committed the United States to the arms race against the Soviet Union and approved the production of fusion weapons, i.e. a hydrogen bomb (H-bomb), and other nuclear weapons as the method for deterring Soviet attack. The AEC was directed to produce "more and bigger bombs," to build reactors to produce plutonium, and to develop uranium and other raw materials. The outbreak of the Korean War in the same year convinced the United States that the Soviet Union was poised to attack Europe after decoying forces away from Europe to Korea. The United States detonated a H-bomb in 1952 and the Soviet Union did so in 1953.

The establishment of the Plant was the result of this post-war fear of the Soviet Union, a fear that drove the federal government to build a vastly expanded nuclear weapons production system. It was one of a number of plants built by the AEC between 1948 and 1953 to design, manufacture, test, and maintain nuclear weapons for the United States military. It has been estimated that by 1952-1953, the height of expansion, the AEC was employing 150,000 construction workers -- equal to 5 percent of the United States construction work force -- to fabricate its necessary military nuclear facilities.

The Plant was established in 1951 to manufacture pits or triggers for use in nuclear weapons and to purify plutonium recovered from retired weapons. The trigger consisted of a first-stage fission bomb that set off a second-stage fusion reaction in a hydrogen bomb. Parts were formed from plutonium, uranium, beryllium, stainless steel, and other materials. The majority of the Plant expansion was driven by changes in weapon design, higher safety requirements for building construction, and expansion of production.

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While specific periods of expansion at the Plant (1956-57 and 1964-65) cannot be attributed to specific political and military actions, the Plant's overall growth can be seen in the context of the huge expansion of military weapons during the 1950s and 1960s when the United States and the Soviet Union became locked in an arms race.

Political tension between the United States and the Soviet Union became heightened in the 1950s. Communism was a real fear, fueled by the investigations of the House Un-American Activities Committee, Senator Joseph McCarthy's hunt for alleged Communists, and the Julius and Ethel Rosenberg atomic espionage trial. The U.S. feared that the Soviet Union would invade western Europe as it had invaded south Korea in 1950. Under President Dwight D. Eisenhower, Secretary of State John Foster Dulles developed a dual policy of deterrence through "massive retaliatory power" and containment of Soviet expansion through alliances with non-Communist countries. This policy resulted in the formation by the mid-1950s of the North American Treaty Organization (NATO), the Southeast Asia Treaty Organization (SEATO), and the Baghdad Pact. This loose association linked allies from whose territory retaliatory attack against the Soviet Union could be made if necessary. In response the Soviet Union organized the eastern European Communist countries into the Warsaw Pact. The years 1956 and 1957, saw the invasion of Hungary by the Soviets and the invasion of Egypt by France and Great Britain with the threat of Soviet counter-invasion there.

This tense political atmosphere both at home and abroad drove weapons research and development. Since 1948, when United States scientists discovered a way to produce low-yield nuclear warheads in large quantities, the continued threat of Soviet expansion became the reason to produce these tactical nuclear weapons in large numbers. President Harry S. Truman at this time approved a major expansion of the atomic program with a corresponding development of smaller bombs and missile warheads for installation in Europe. In 1953 the Atomic Energy Commission (AEC) developed a high-yield, lightweight atomic weapon; this "thermonuclear breakthrough", combined with a report that the Soviets were developing long-range ballistic missiles, led President Eisenhower to assign highest priority to the development of an intercontinental ballistic missile (ICBM) that could carry these lightweight weapons.

A United States "bomber-gap" panic occurred between 1954 and 1957, based on a RAND report that the Soviets had more long-range bombers than the U.S., with the potential to bomb U.S. cities. A "missile gap" panic followed in 1957-1961, caused by the Soviet launch in 1957 of both Sputnik, the world's first satellite, and the world's first ICBM. This perceived technological imbalance between the U.S. and U.S.S.R., coupled with the Gaither Report of late 1957 that discredited U.S. military preparedness and urged a 50% increase in military spending, led to a huge infusion of money into U.S. weapons research and development. Between 1958 and 1960 the American nuclear stockpile tripled to 18,000 weapons.

Although there was an attempt at conciliation through the summit of 1960 attended by the U.S., the U.S.S.R., France, and Britain, a limited test ban treaty in 1963, and the installation of a hot line

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between Moscow and Washington, the Cuban Missile crisis of 1962 and the increased involvement in the Vietnam conflict beginning in the 1960s, brought renewed fears of Communism, this time from China, and the need for greater weapons creation, particularly after China exploded an atomic bomb in 1964 and a hydrogen bomb in 1966. The loss of Vietnam to the Chinese was considered unallowable; according to the prevailing domino theory, if Vietnam fell, then all of Southeast Asia would fall to the Communists. The replacement of Khrushchev by Brezhnev in 1964, with his desire to maintain a stronghold over eastern Europe and to develop nuclear parity with the United States, was another contributing factor to the continuing arms race.

During the 1970s both the U.S. and the U.S.S.R. maintained thousands of nuclear weapons aimed at each other, based on submarines, bombers, and ICBMs. Both the NATO and Warsaw Pact countries in Europe had small nuclear warheads called "theater weapons", used as part of the Mutually Assured Destruction (MAD) program. MAD acted as a deterrent in that if one side attacked with nuclear weapons, the other would retaliate and both sides would perish. Sophisticated weapons of this period included missiles armed with multiple warheads (MIRVs). The final nuclear weapon program at the Rocky Flats Plant was the W-88 nuclear warhead for the Trident II missile, designed at the Los Alamos National Laboratory. This mission ended in 1992 when President Bush canceled production of the Trident II missile.

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Jefferson County, CO

by Jennifer Thompson.

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_____. 1991b. *Guidelines for Completing National Register of Historic Places Forms*. National Register Bulletin 16A. Washington, D.C.: U.S. GPO.

_____. n.d. *Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Last Fifty Years*. National Register Bulletin 22. Washington, D.C.: U.S. GPO.

7. PERSONS CONSULTED

Joseph Bell, Compliance Officer, Office of Archaeology and Historic Preservation, Denver

Patricia Buffer, Communications, Rocky Flats ETS

Rodger L. Dickey, Senior Nuclear Engineer, Rocky Flats Plant Office, M.H. Chew & Associates.

Cameron Freiboth, Nuclear Engineer, Rocky Flats ETS

Dale Heckendorn, National Register coordinator, Office of Archaeology and Historic Preservation, Denver

Patricia Powell, NEPA Compliance Officer, DOE, Rocky Flats Site

Bill Richardson, Rocky Flats Plant Office, M.H. Chew & Associates

Susan Stacy, Historian, Boise, Idaho

Rocky Flats Plant

Jefferson County, CO

Name of Property

County/State

10. Geographical Data

Acreege of Property 175.83

UTM References

(Place additional UTM references on a continuation sheet.)

Zone-Colorado Central (State Plane Coordinate Projection)

1.	13	481,860	4,415,020	4.	13	483,440	4,416,140
	Zone	Easting	Northing		Zone	Easting	Northing
2.	13	481,860	4,415,630	5.	13	483,440	4,415,350
	Zone	Easting	Northing		Zone	Easting	Northing
3.	13	482,390	4,416,140	6.	13	483,120	4,415,020
	Zone	Easting	Northing		Zone	Easting	Northing

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Patricia Powell/Cultural Resource Manager
Jayne Aaron/Technical Analysts

organization Department of Energy date 12/15/95
Science Applications International Corporation

street & number Highway 93 telephone (303) 966-3260

city or town Golden state CO zip code 80401

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Department of Energy

street & number Highway 93 telephone (303) 966-7000

city or town Golden state Colorado zip code 80401

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number 10 Page 27

Rocky Flats Plant
Jefferson County, CO

Verbal Boundary Description

The boundary of the district is shown on the attached map. The heavy line encompasses the Rocky Flats Plant Historic District.

Boundary Justification

The boundaries for the Historic District were selected to encompass the buildings that contribute to the Historic District of Rocky Flats, while excluding as many non-contributing facilities as possible.

NPS Form 10-800a
(Rev. 8/88)

OMB No. 1024-0018

United States Department of the Interior
National Park Service





National Register of Historic Places
Continuation Sheet

Section number 10 Page 28

Rocky Flats Plant
Jefferson County, Colorado

Boundary of Rocky Flats Plant Historic District

LEGEND

-  RFP Historic District Boundary
-  1951 - 1953 Original Buildings
-  1956 - 1963 Trigger Design Change
-  1964 - 1989 Sole Trigger Producer

DATA SOURCE:
Buildings, roads and fences provided by
Facilities Engr.,
ED&G Rocky Flats Inc. - 1981

DISCLAIMER:
Neither the United States Government nor Kaiser
Ill. Co., nor Battelle, nor any agency thereof, nor
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express or implied, or assumes any legal
liability or responsibility for the accuracy,
completeness, or usefulness of any information,
opinion, product, or process disclosed, or
represents that its use would not infringe
privately owned rights.



200 0 400 800 Feet

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared
by:

SAE
Science Applications
International Corporation

MAP ID: ***DRAFT*** December 1, 1995

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number Additional Documentation Page 29

Rocky Flats Plant
Jefferson County, CO

Photograph Log

The following information pertains to the photographs number 1 - 8, except as noted:

Name of Property: Rocky Flats Plant
Location: Jefferson County
Photographer: EG&G staff photographers,
the Managing and Operating Contractor at the time the
photographs were taken.
Rocky Flats Environmental Technology Site
Building 111
Date of Photographs: June 27, 1995

<u>Photo No.</u>	<u>Information</u>
1	View to the northwest, overall plant negative number: 47906-01
2	View to the north, 800 series buildings in the foreground negative number: 47926-20
3	View to the north, 400 series buildings in the foreground negative number: 47911-03
4	View to the northwest, 100 series buildings negative number: 47923-16
5	View to the northwest, 300 series buildings negative number: 47924-13
6	View to the northwest, 700 series buildings negative number: 47924-16
7	View to the northwest, 900 series buildings negative number: 47921-08
8	View to the south, 700 series buildings negative number: 47913-03

NPS Form 10-900a
(Rev. 8/86) OMB No. 1024-0018





United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number Additional Documentation Page 30 Rocky Flats Plant
Jefferson County, Colorado

Properties of Recent
Scientific Significance
(Eligible for the NRHP)

LEGEND

-  1951 - 1953 Original Buildings
-  1956 - 1963 Trigger Design Change
-  1964 - 1989 Sole Trigger Producer
-  Photograph Numbers, Locations and Views

DATA SOURCE:
Buildings roads and fences provided by
Facilities Eng'g,
EG&D Rocky Flats Inc. - 1991

DISCLAIMER:
Neither the United States Government nor Kaiser
Hill Co., nor RSES, nor any agency thereof, nor
any of their employees, make any warranty,
express or implied, or assumes any legal
liability or responsibility for the accuracy,
completeness, or usefulness of any information,
apparatus, product, or process disclosed, or
represents that its use would not infringe
privately owned rights.



200 0 400 800 Feet

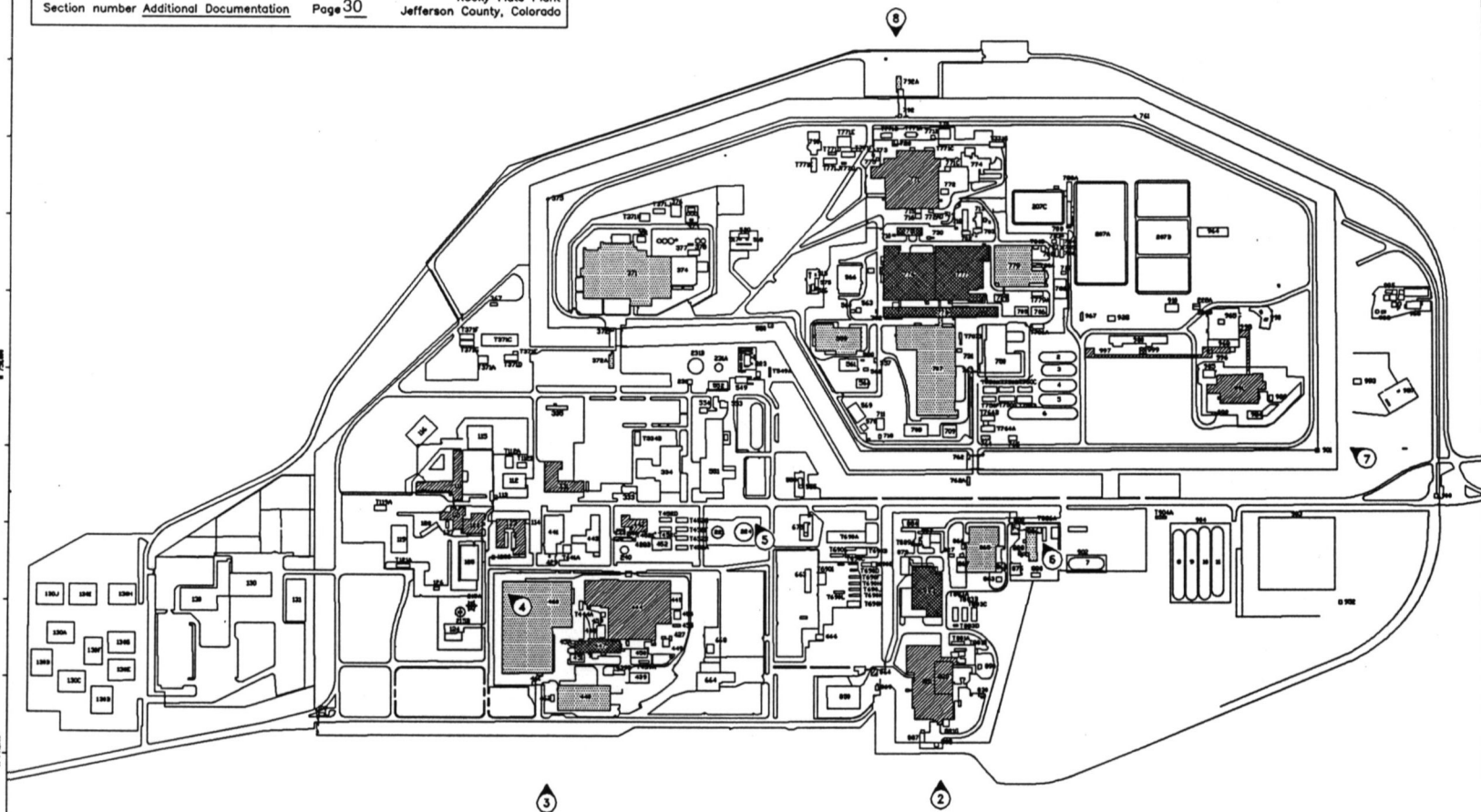
State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared by:

Science Applications
International Corporation

MAP ID: **DRAFT** March 26, 1996



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Rocky Flats Plant

MULTIPLE NAME:

STATE & COUNTY: COLORADO, Jefferson

DATE RECEIVED: 4/04/97 DATE OF PENDING LIST: 4/15/97
DATE OF 16TH DAY: 5/01/97 DATE OF 45TH DAY: 5/19/97
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 97000377

NOMINATOR: FEDERAL

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: Y PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: Y NATIONAL: N

COMMENT WAIVER: N

 ACCEPT RETURN REJECT DATE

ABSTRACT/SUMMARY COMMENTS:

RECOM./CRITERIA Accept - A

REVIEWER Poland DISCIPLINE Historian

TELEPHONE 202-343-9545 DATE 5/19/97

DOCUMENTATION see attached comments ~~N~~ see attached SLR Y/N



Photo #1 - View to the Northwest, Rocky Flats Environmental Technology Site
(Neg. #47906-01, 6-27-95)



Photo #2 - View to the North, of 800 Series Buildings
(Neg. #47926-20, 6-27-95)

Rocky Flats Plant
Jefferson County, CO
#2





Photo #3 - View to the North, 400 Series Buildings
(Neg. #47911-03, 6-27-95)

Rocky Flats Plant
Jefferson County, CO
#3

THIS PAPER
MANUFACTURED
BY KODAK

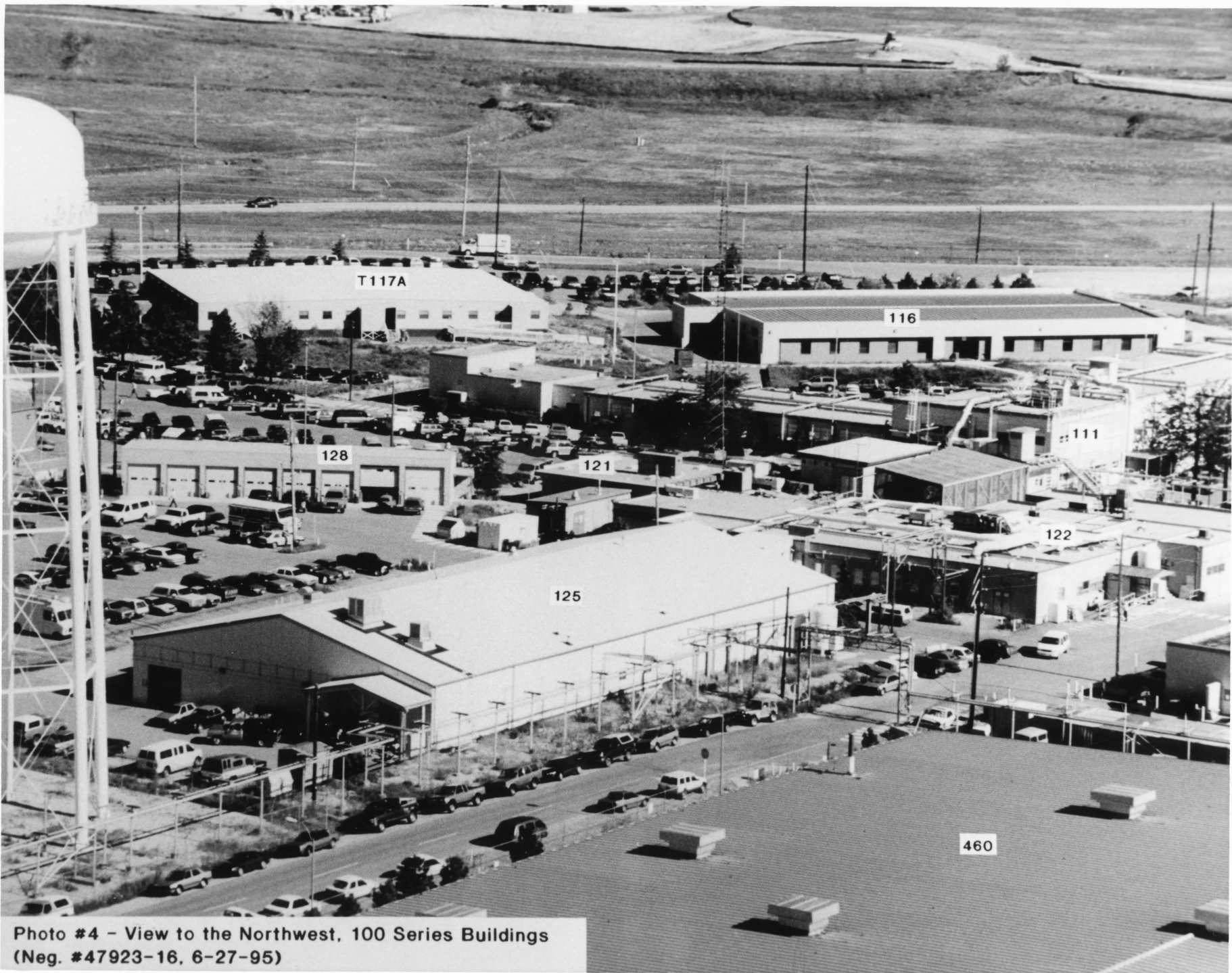


Photo #4 - View to the Northwest, 100 Series Buildings
(Neg. #47923-16, 6-27-95)

Rocky Flats Plant
Jefferson County, Co
4

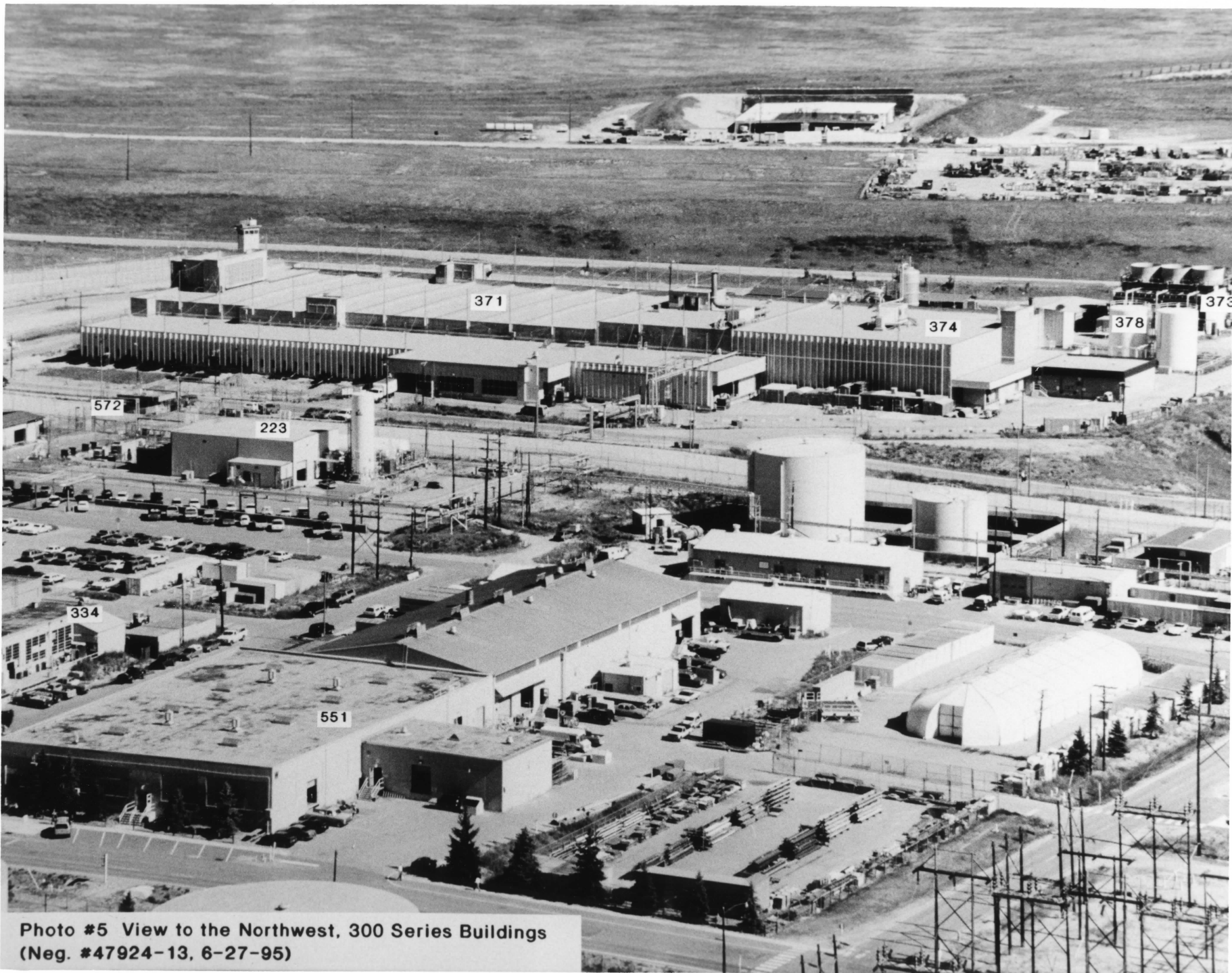


Photo #5 View to the Northwest, 300 Series Buildings
(Neg. #47924-13, 6-27-95)

Rocky Flats Plant
Jefferson County, CO
#5



Photo #6 View to the Northwest, 700 Series Buildings
(Neg. #47924-16, 6-27-95)

Rocky Flats Plant
Jefferson County, CO
#6

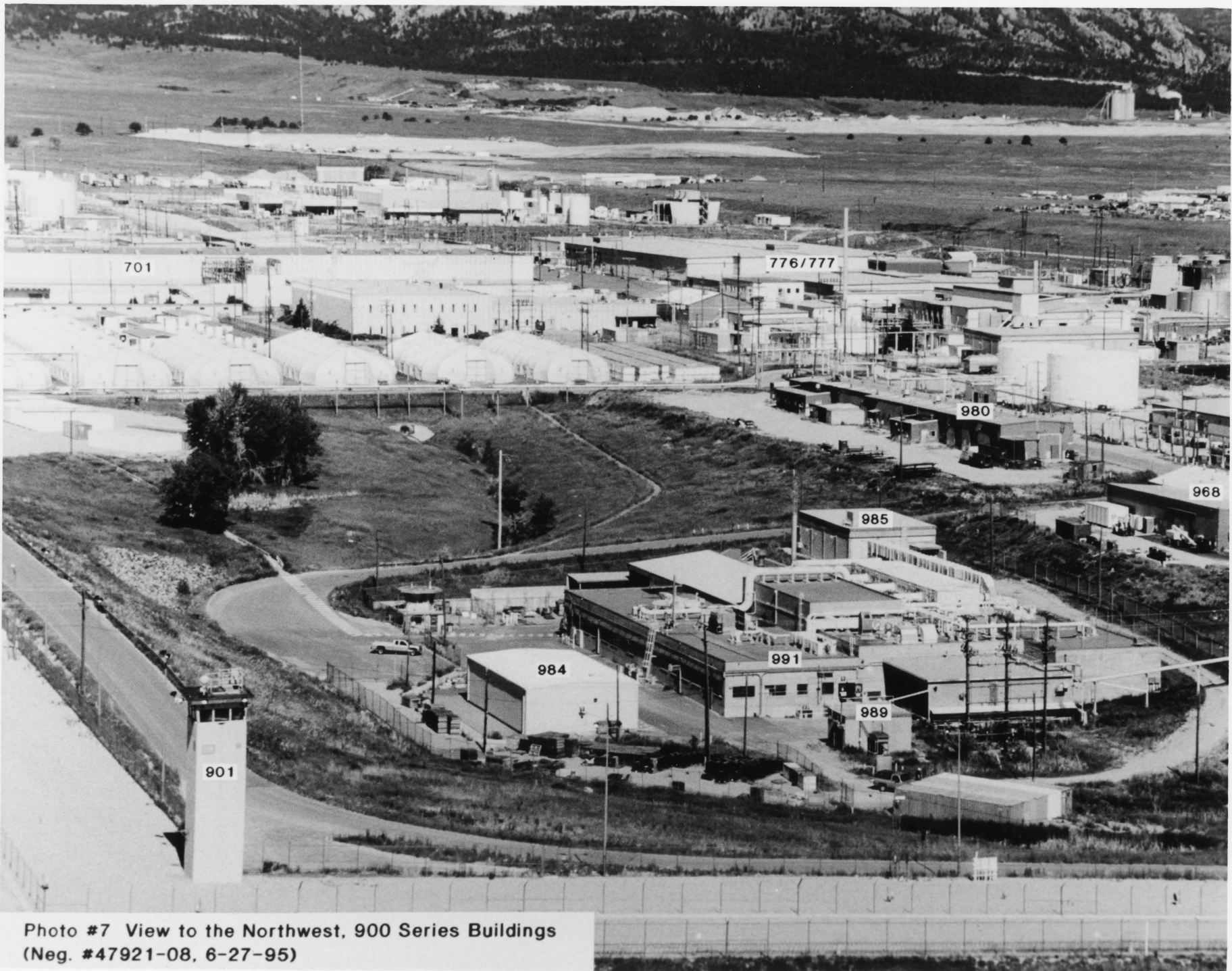


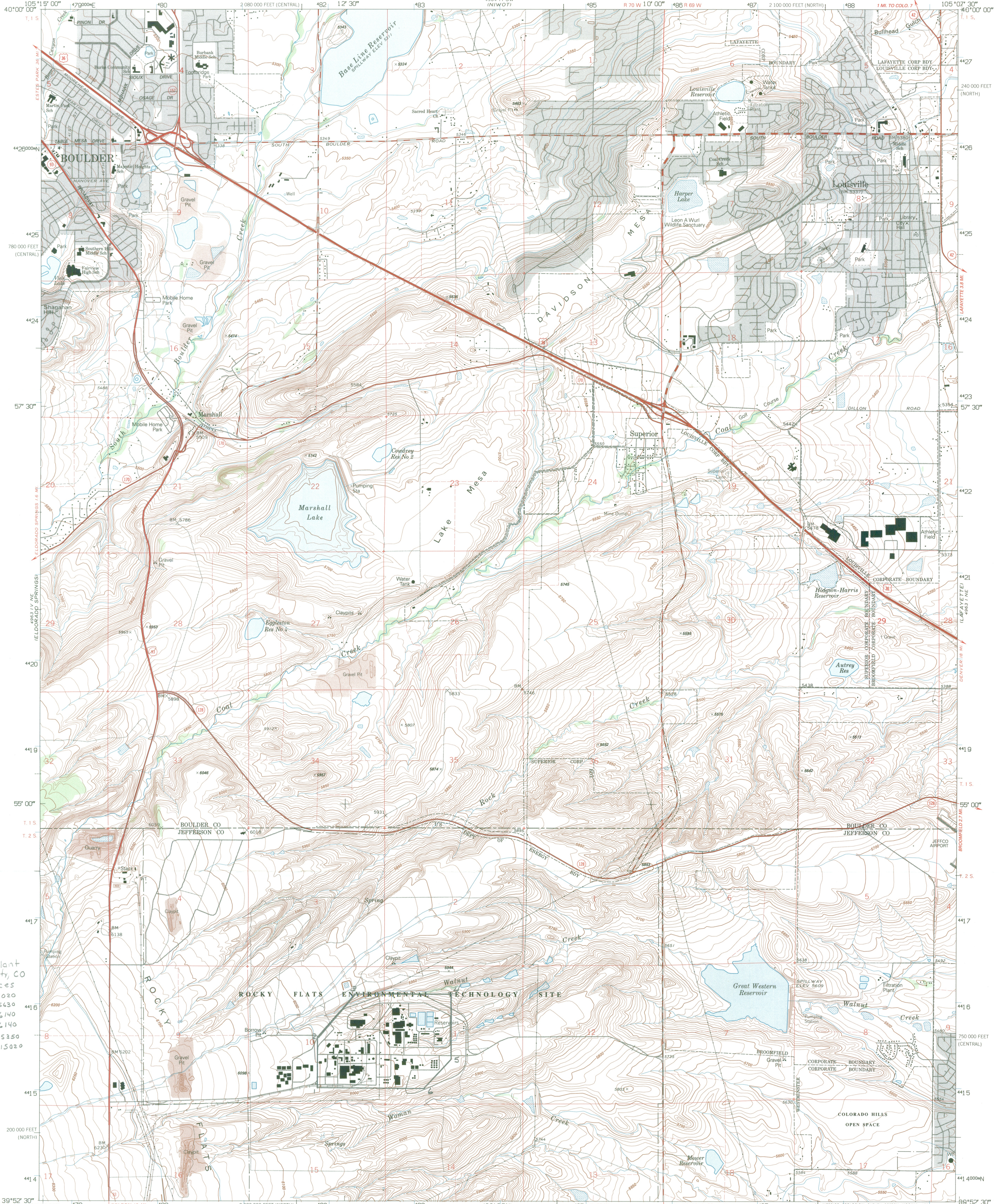
Photo #7 View to the Northwest, 900 Series Buildings
(Neg. #47921-08, 6-27-95)

Rocky Flats Plant
Jefferson County, Co
#7

THIS PAPER
MANUFACTURED
BY KODAK

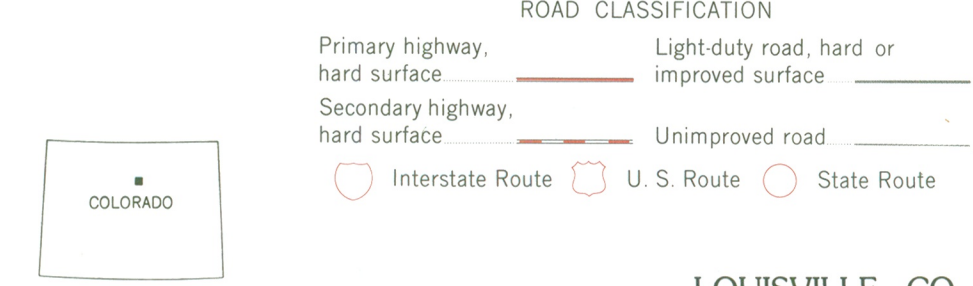
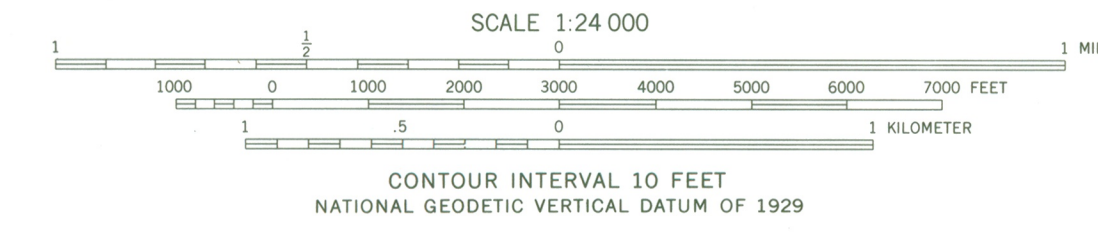
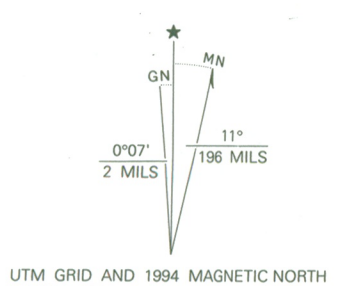


Photo #8 View to the South, 700 Series Buildings
(Neg. #47913-03 6-27-95)



Rocky Flats Plant
Jefferson County, CO
UTM References
1. 13/481860/4415020
2. 13/481860/4415630
3. 13/482390/4416140
4. 13/483440/4416140
5. 13/483440/4415350
6. 13/483120/4415020

Produced by the United States Geological Survey
Control by USGS and NOS/NOAA
Compiled from aerial photographs taken 1964. Field checked 1965
Revised from aerial photographs taken 1988 and 1990 and other sources. Map edited 1994. Contours and land elevations have not been revised and may conflict with other content
North American Datum of 1927 (NAD 27). Projection and blue 1000-meter Universal Transverse Mercator ticks, zone 13 1000-foot ticks. Colorado Coordinate System north and central zones
North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software
There may be private inholdings within the boundaries of the National or State reservations shown on this map
Gray tint indicates areas in which only landmark buildings are shown



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

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United States Government

Department of Energy
Rocky Flats Field Office

memorandum

DATE: **JAN 30 1997**

REPLY TO
ATTN OF: P&I:PMP:02251

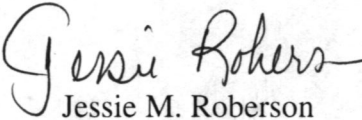
SUBJECT: Nomination of Rocky Flats Plant to the National Register of Historic Places

TO: Lois Thompson, Federal Preservation Officer, EH-412, HQ

Attached is a completed package to nominate the former Rocky Flats Plant as a historic district to the National Register of Historic Places. The nomination package was compiled with the cooperation and assistance of the Colorado Historical Society, and it has been approved by the Colorado State Historic Preservation Officer. Please review and sign the nomination in Section 3 of the package, and submit the package to National Register in Washington, DC.

We anticipate that the nomination will result in the listing of Rocky Flats Plant on the National Register. While we do not plan to preserve any of the nominated facilities, the significant information about historic facilities at Rocky Flats will be documented through photographs, drawings, and narrative reports. This process is now underway for several facilities.

Please feel free to call upon Tricia Powell at (303) 966-3260 if you have questions about the nomination package. We would appreciate receiving any information that comes your way regarding the progress of the package. Thanks for your help in this process.


Jessie M. Roberson
Manager

Attachment

cc w/Att:
J. Karpatkin, CED, RFFO
J. Stover, EC, RFFO
P. Powell, P&I, RFFO

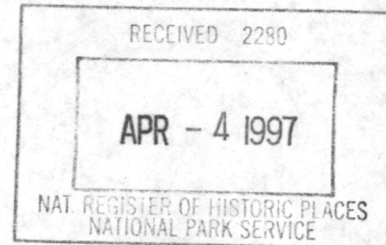


Department of Energy

Washington, DC 20585

MAR 31 1997

Ms. Carol D. Shull
Chief of Registration
National Register of Historic Places
National Park Service
U.S. Department of Interior
P.O. Box 37127
Washington, DC 20013-7127



Dear Ms. Shull:

The U.S. Department of Energy is formally submitting the registration forms for the nomination of the former Rocky Flats Plant as a historic district to the National Register of Historic Places. The Rocky Flats Plant historic district consists of 61 contributing resources dating from 1951 to 1989 within the industrial area of the nuclear weapons production plant. The industrial buildings housed equipment to manufacture triggers for use in nuclear weapons and to purify plutonium recovered from retired weapons. The nomination will ensure that information regarding these historic structures are well documented through appropriate photographs, drawings, and narrative reports.

These nomination forms have been reviewed and signed by the Department of Energy Federal Preservation Officer, Lois Thompson. If there are any questions regarding the nomination forms please contact Ms. Thompson at (202) 586-9581.

Sincerely,

Raymond F. Pelletier
Director
Office of Environmental Policy
and Assistance

Enclosure

