LAND USE CONTROL IMPLEMENTATION PLAN

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
KENNEDY SPACE CENTER
BREVARD COUNTY, FLORIDA

FACILITY: Launch Umbilical Tower #1 (LUT-1) Storage Area
Potential Release Location (PRL) No. 99
CONTAMINANTS: PCBs in Soil
CONTROL: Prohibit Residential Use

PURPOSE OF LAND USE CONTROL IMPLEMENTATION PLAN

This Land Use Control Implementation Plan (LUCIP) has been prepared to inform current and potential future users of the Launch Umbilical Tower #1 (LUT-1) Storage Area of institutional controls that have been implemented at the site[1]. Although there are no current unacceptable risks to human health or the environment associated with the LUT-1 Storage Area, institutional land use controls (LUCs) are necessary to prohibit residential use of the site. Controls will include periodic inspection, condition certification and agency notification.

WHY LAND USE CONTROLS ARE NEEDED

Confirmation sampling was completed in compliance with the Resource Conservation and Recovery Act (RCRA). Chemicals of concern identified for human health risk during Confirmation Sampling activities that exceeded Florida Department of Environmental Protection (FDEP) and Environmental Protection Agency (EPA) cleanup target levels were polychlorinated biphenyls (PCBs) in surficial soils.

SITE DESCRIPTION

The Launch Umbilical Tower #1 (LUT-1) Storage Area has been used since 1983 to store the sections of the Saturn V launch tower removed from Launch Complex 39A during modifications to accommodate the Space Shuttle. The site was undeveloped prior to 1983. The site is enclosed within a chain-linked fence and is bordered on the north, south and east by earthen stormwater conveyances. The ground surface at the site is unimproved with sparse vegetation. Based on the history of operations at the PRL, suspected sources of contamination include the activities associated with the storage of launch tower components and sandblasting activities conducted at the site.

SITE LOCATION

The LUT-1 Storage Area is located in the Industrial Area at the center of the Kennedy Space Center (Figure 1). It is located at the

[1] *This LUCIP summarizes institutional controls regarding the NASA KSC Launch Umbilical Tower #1 Storage Area. For detailed information on the site, consult the LUT-1 Storage Area administrative file, which is available for review by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.*

intersection of Fourth Street S.E. and D Avenue S.E. (Figure 1). The site is bounded by Fourth Street S.E. to the north, D Avenue S.E. to the east, and Fifth Street, S.E. to the south. The site is located within Section 5, Township 23S, Range 37E, of the Orsino Quadrangle. The soil use control area covered by the LUCIP is rectangular in shape, approximately 400 ft north to south and 600 ft east to west (Figure 2). Coordinates of the corners of the LUC are provided in Figure 2 in the State Plane Coordinate System NAD 1983 meters, Florida East.

SITE CONTAMINATION AND CONTROL

Surficial soils within the control area contain polychlorinated biphenyls at concentrations above the FDEP's soil cleanup target levels. Soils with polychlorinated biphenyls detected at concentrations over FDEP's residential-use cleanup target levels require further assessment. The additional assessment will be conducted after the LUT structures are removed from the site. LUCs are therefore required to prohibit residential use of contaminated soils.

DECISION DOCUMENT

A Confirmatory Sampling Report (CSR) establishes institutional controls as a component of the remedy for this site. The CSR for the site is available for review by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.

IMPLEMENTATION

Institutional controls will be implemented by the KSC Environmental Program Office in accordance with the RCRA permit and Land Use Control Assurance Plan included in a Memorandum of Agreement (MOA)[2] between NASA, FDEP, and EPA, effective February 23, 2001. Upon approval of this LUCIP, it will be incorporated into the permit by reference. Property transfer (if conducted in the future) will be conducted in accordance with Section X of the MOA.

KSC's Environmental Program Office will provide KSC's Master Planning Office with survey coordinates of the LUC. Restrictions will specify limitations on development and reuse for the area for as long as LUCs are necessary to protect human health and the environment.

MONITORING

Quarterly inspections to monitor that institutional controls specified herein are in place and operating will be conducted by KSC's Environmental Program Office. The inspection will verify that no residential use is occurring.

[2] *By separate MOA effective February 23, 2001, with the EPA and FDEP, KSC, on behalf of NASA, agreed to implement Center-wide, certain periodic site inspection, condition certification and agency notification procedures designed to ensure the maintenance by Center personnel of any site-specific LUCs deemed necessary for future protection of human health and the environment. A fundamental premise underlying execution of that agreement was that through the Center's substantial good faith compliance with the procedures called for herein, reasonable assurances would be provided to EPA and FDEP as to the permanency of those remedies which included the use of specific LUCs.*

Although the terms and conditions of the MOA are not specifically incorporated or made enforceable herein by reference, it is understood and agreed by NASA KSC, EPA and FDEP that the contemplated permanence of the remedy reflected herein shall be dependent upon the Center's substantial good faith compliance with the specific LUC maintenance commitments reflected herein. Should such compliance not occur or should the MOA be terminated, it is understood that the protectiveness of the remedy concurred in may be reconsidered and that additional measures may need to be taken to adequately ensure necessary future protection of human health and the environment.

REPORTING

KSC's Environmental Program Office will submit annual reports to EPA and FDEP certifying retention of the implemented LUCs.

ENFORCEMENT

KSC's Environmental Program Office will be responsible for stopping any activities at KSC that are not compliant with this LUCIP.

MAINTENANCE

This LUCIP will remain in place until a land use change is implemented and the concerns managed by the LUCIP are mitigated; or there is a discovery, based upon analytical evidence, that scenarios managed by the LUCIP are no longer a concern. Any change in LUC management must be approved by EPA and FDEP and implemented by modification of NASA's operating permit.

Figure 1. Location of LUT-1 on Kennedy Space Center, FL.

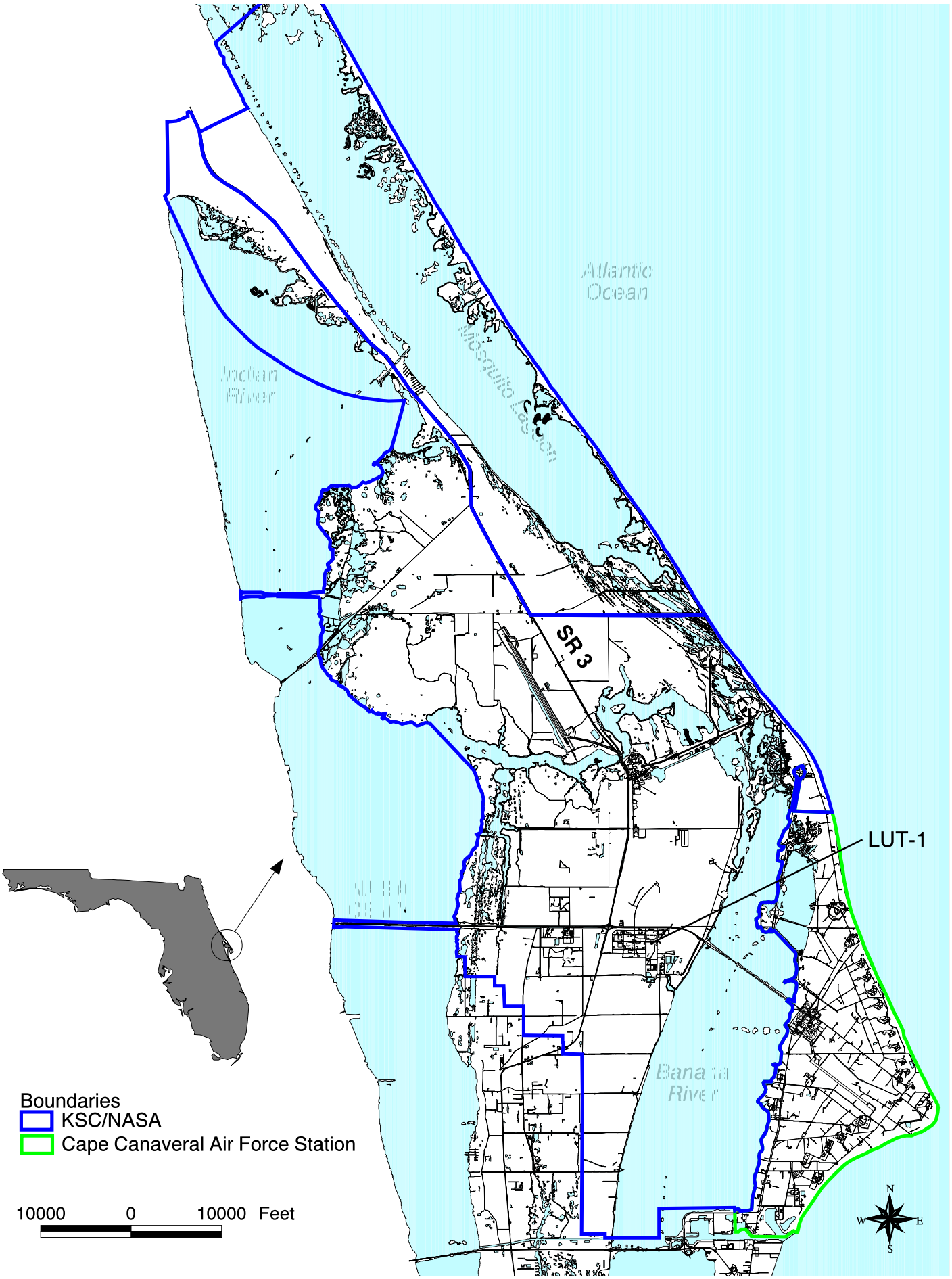
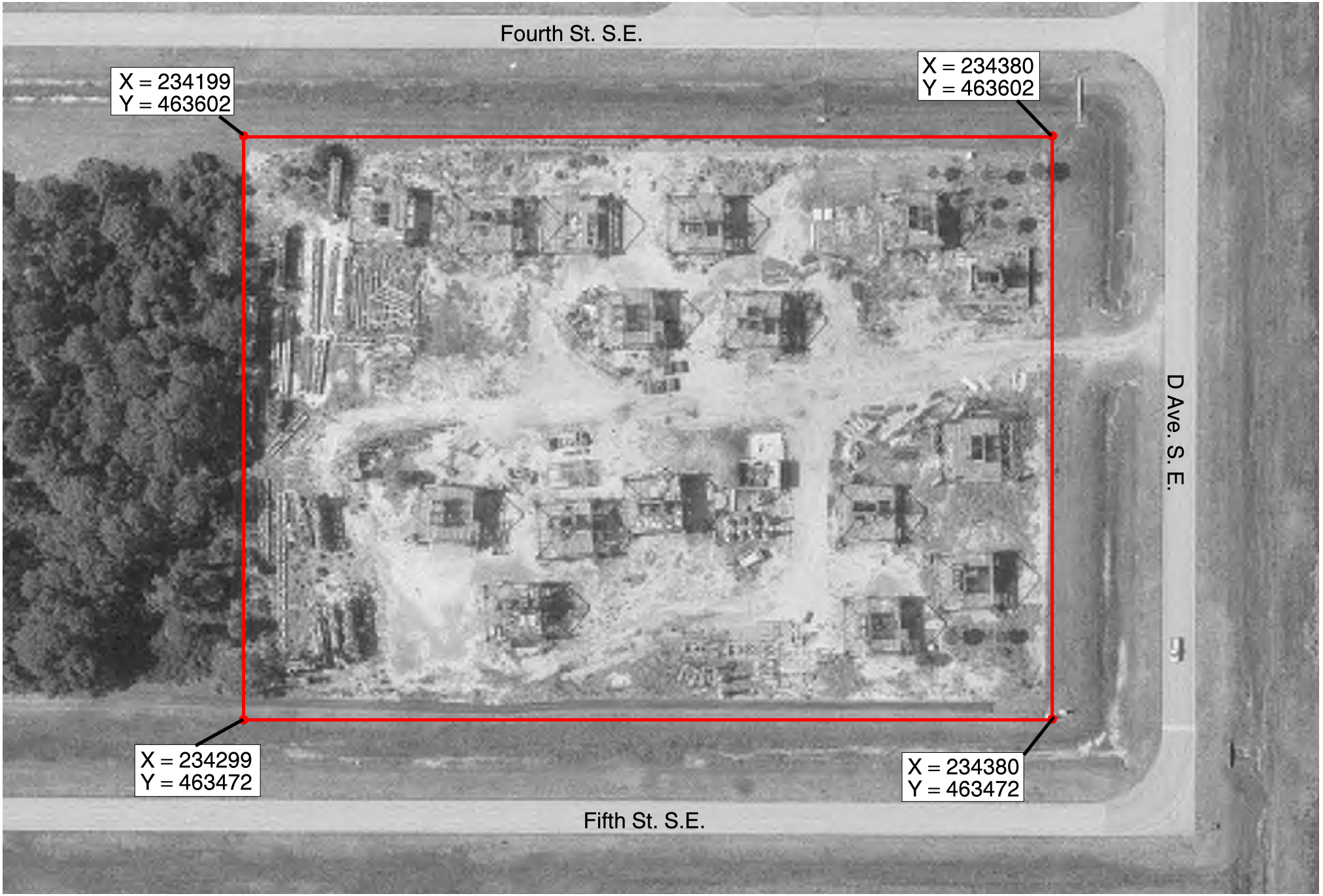


Figure 2. LUT-1 (PRL 99) Land Use Control Implementation Plan Kennedy Space Center, FL.



Soil Use Control Area; Residential Use Prohibited

Survey coordinates are in State Plane Coordinate System NAD 1983 meters, Florida East

30 0 30 60 Feet