LAND USE CONTROL IMPLEMENTATION PLAN

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

FACILITY: Rail Car Siding Site
Solid Waste Management Unit No. 64
CONTAMINANTS: PAHs 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 Rail Car Siding Site (RCSS) 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 RCSS, 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

Human health and ecological risk assessments were completed as part of a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). Chemicals of concern (COCs) identified for human health risk during the RFI and supplemental sampling activities that exceeded Florida Department of Environmental Protection (FDEP) and Environmental Protection Agency (EPA) cleanup target levels were Polynuclear Aromatic Hydrocarbons (PAHs) in surficial soils.

SITE DESCRIPTION

The RCSS is a NASA-operated facility that serves as a temporary staging area for railroad cars containing Space Shuttle hardware. The site includes a current railroad spur, the location of a former railroad spur, and the location of a former concrete plant and associated retention pond. Based on the history of operations at the SWMU, suspected sources of contamination include the activities associated with the storage of Space Shuttle components, former storage of rocket components from the Apollo program, former fueling activities, and operations conducted at the former asphalt plant.

SITE LOCATION

The RCSS is located in the vicinity of the intersection of North Kennedy Parkway and 39th Street NW (Figure 1).

The area of the RCSS covered by this LUCIP is situated immediately southwest of the North Kennedy Parkway/39th Street NW intersection. The site is located within Sections 26 and 27 of Township 21 South, Range 36 East within the Wilson, Florida quadrangle. The soil use control area is an irregular-shaped portion of the site that

[1] *This LUCIP summarizes institutional controls regarding the NASA KSC Rail Car Siding Site. For detailed information on the site, consult the RCSS administrative file, which is available for review by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.*

includes approximately 1.4 acres of land (Figure 2). Survey coordinates of the corners of the LUCs are provided in Figure 2 in the State Plane Coordinate System NAD 1983 meters, Florida East.

SITE CONTAMINATION AND CONTROL

Surficial soils in the soil use control area contain PAHs at concentrations above the FDEP's soil cleanup target levels. Further statistical analysis (as presented in the RFI Addendum) revealed that benzo(a)pyrene is the only COC in the surficial soils. The PAH-impacted surficial soils were not removed during the RFI and supplemental sampling activities because the past, current, and projected future land use of the RCSS is industrial in nature, and site rehabilitation goals were established based on the risk and potential for exposure in an industrial setting. LUCs are therefore required to prohibit residential use/exposure to contaminated soils.

DECISION DOCUMENT

A Statement of Basis (SB) establishes institutional controls as a component of the remedy for this site. The SB for the site, John F. Kennedy Space Center (KSC) document number KSC-TA-5738, 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 their 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 LUCs. 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 LUC's.*

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

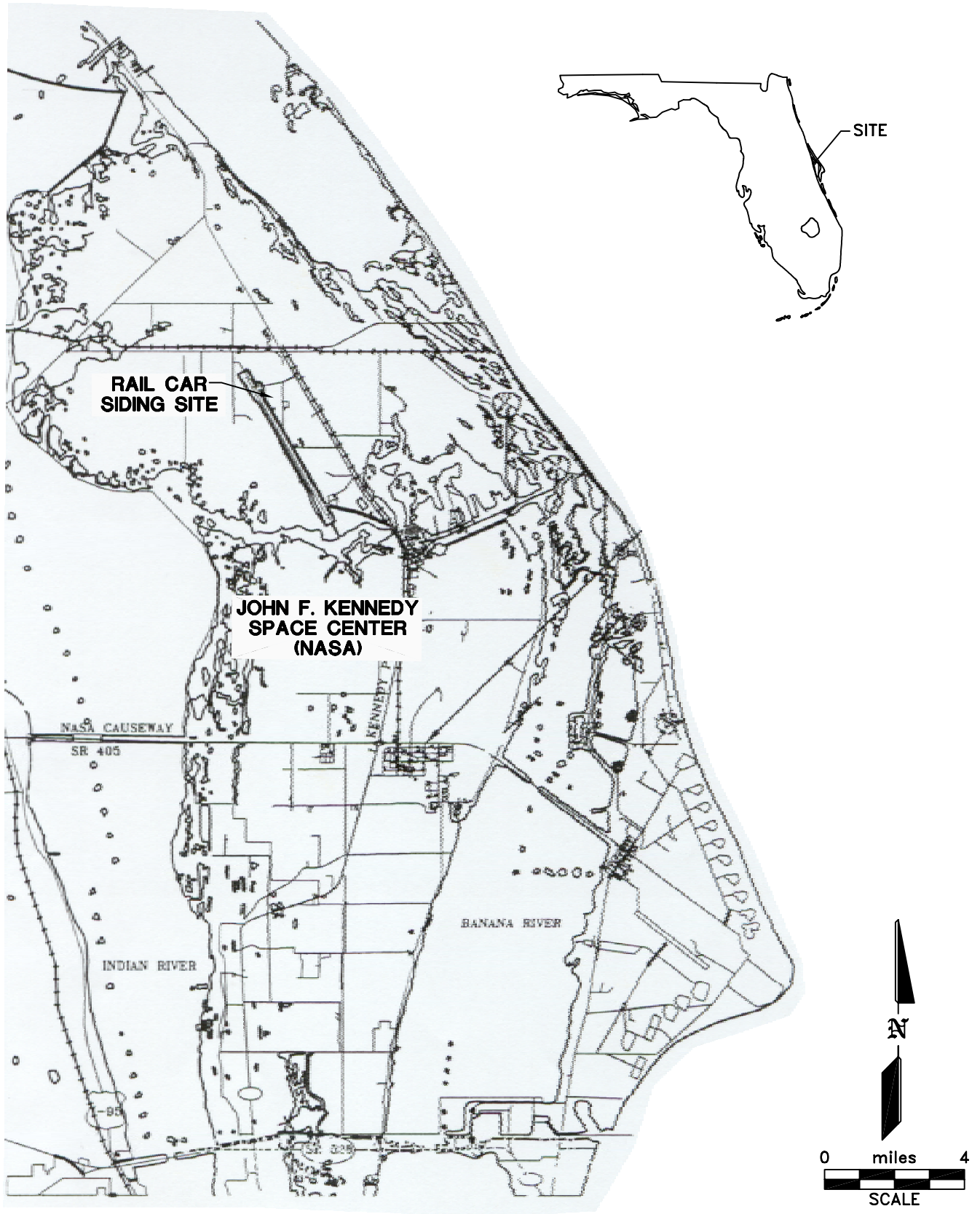
KSC's Environmental Program Office will submit annual reports to EPA and FDEP certifying retention of the implemented LUCs.

ENFORCEMENT

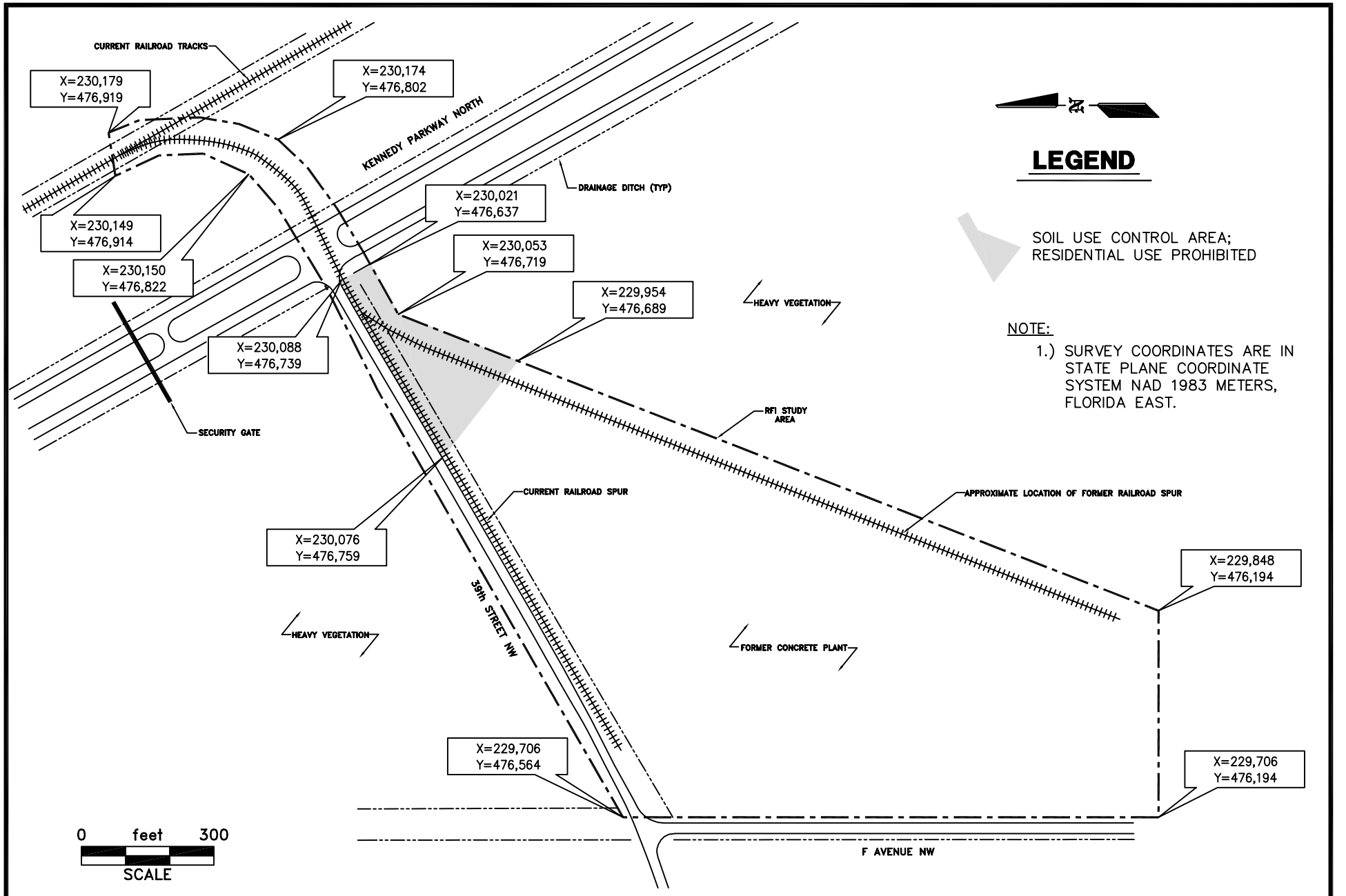
KSC's Environmental Program Office will be responsible for stopping any activities at KSC that are not compliant with this LUCIP.

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.



NASA National Aeronautics and Space Administration Kennedy Space Center, Florida	**RAIL CAR SIDING SITE** KENNEDY SPACE CENTER, FLORIDA	**KENNEDY SPACE CENTER RAIL CAR SIDING SITE LOCATION MAP**	**1** Fig. No.



NASA National Aeronautics and Space Administration Kennedy Space Center, Florida	**RAIL CAR SIDING SITE** KENNEDY SPACE CENTER, FLORIDA	**SITE PLAN**	**2** Fig No.