



LAND USE CONTROL IMPLEMENTATION PLAN



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



FACILITY: East Crawler Park Site
Solid Waste Management Unit No. 43

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 East Crawler Park Site (ECPS) of institutional controls that have been implemented at the site¹. Although there are no current unacceptable risks to human health or the environment associated with the ECPS, 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 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 polychlorinated biphenyls (PCBs) in surficial soils.

SITE DESCRIPTION

The ECPS is a NASA-operated facility used as one of two parking areas for large transport vehicles (crawlers) that transport Space Shuttles from NASA's Vehicle Assembly Building (VAB) to the launch pads. The roadway that the crawlers ride and park on is referred to as the crawlerway and is comprised of gravel to cobble-sized quartz river rock underlain by several feet of compacted limestone road-base material. Routine operation and maintenance of the crawlers takes place at the ECPS. Formerly, the site was used for parking the Mobile Service Structure (MSS), which was used during the Apollo Program Era. Based on the history of operations at the ECPS, suspected sources of contamination include lubricating grease and oil, and solvents that were used during operation and maintenance of the crawlers and the former MSS.

1. This LUCIP summarizes institutional controls regarding the NASA KSC East Crawler Park Site (ECPS). For detailed information on the site, consult the ECPS administrative file, which is available by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.

SITE LOCATION

The ECPS is located on the southeast side of KSC's crawlerway between the VAB and the launch pads (Figure 1). The ECPS SWMU area is about 350 by 700 feet with most of the site enclosed within a fenced area. Structures located within the fenced area include a former pumphouse currently used for dry storage, an electrical interface building, a shed used to store petroleum, oil, and lubricants, a restroom, and an electrical switch station building.

The site is a spur of the crawlerway and is bounded on the north by the crawlerway and the south by Saturn Causeway. The site is located within Section 9 of Township 22 South, Range 37 East, which is in the False Cape Quadrangle. Coordinates of the soil use control area are provided in Figure 2 in the State Plane Coordinate System NAD 1983 meters, Florida East.

SITE CONTAMINATION AND REMEDY

Some soil from within the fenced site and sediment from nearby ditches that direct surface water runoff from the site were excavated, properly disposed, and replaced with clean fill. Soils with PCBs detected at concentrations over FDEP's industrial-site

cleanup target levels were removed. Soils with PCBs detected at concentrations over FDEP's residential-use cleanup target levels were not removed because the past, current, and projected future land use of the ECPS 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 of the site.

DECISION DOCUMENT

A Statement of Basis (SB) establishes institutional controls as a component of the remedy for this site. The SB for the site, KSC document number KSC-TA-5657, 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

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.

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.

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.

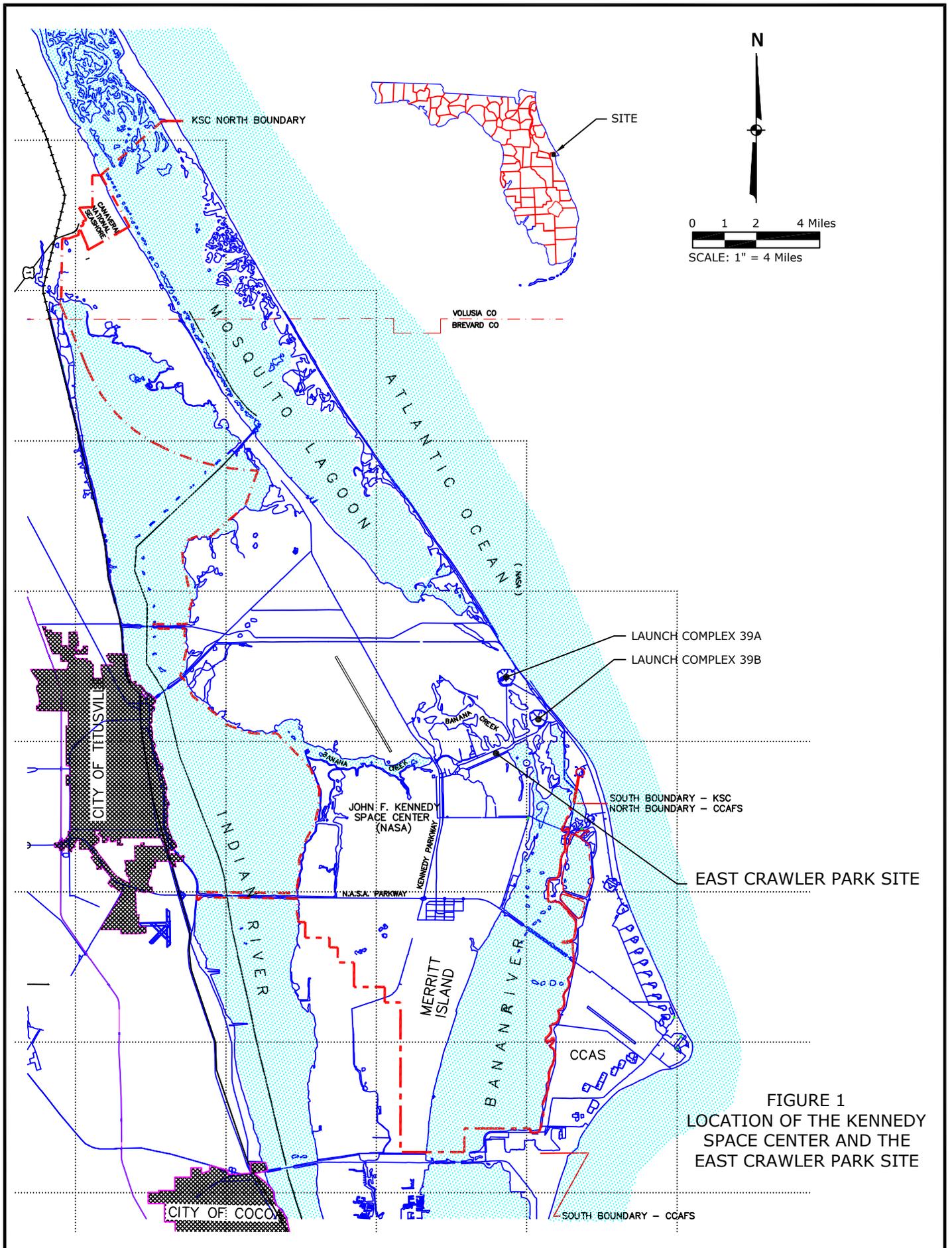


FIGURE 1
LOCATION OF THE KENNEDY
SPACE CENTER AND THE
EAST CRAWLER PARK SITE

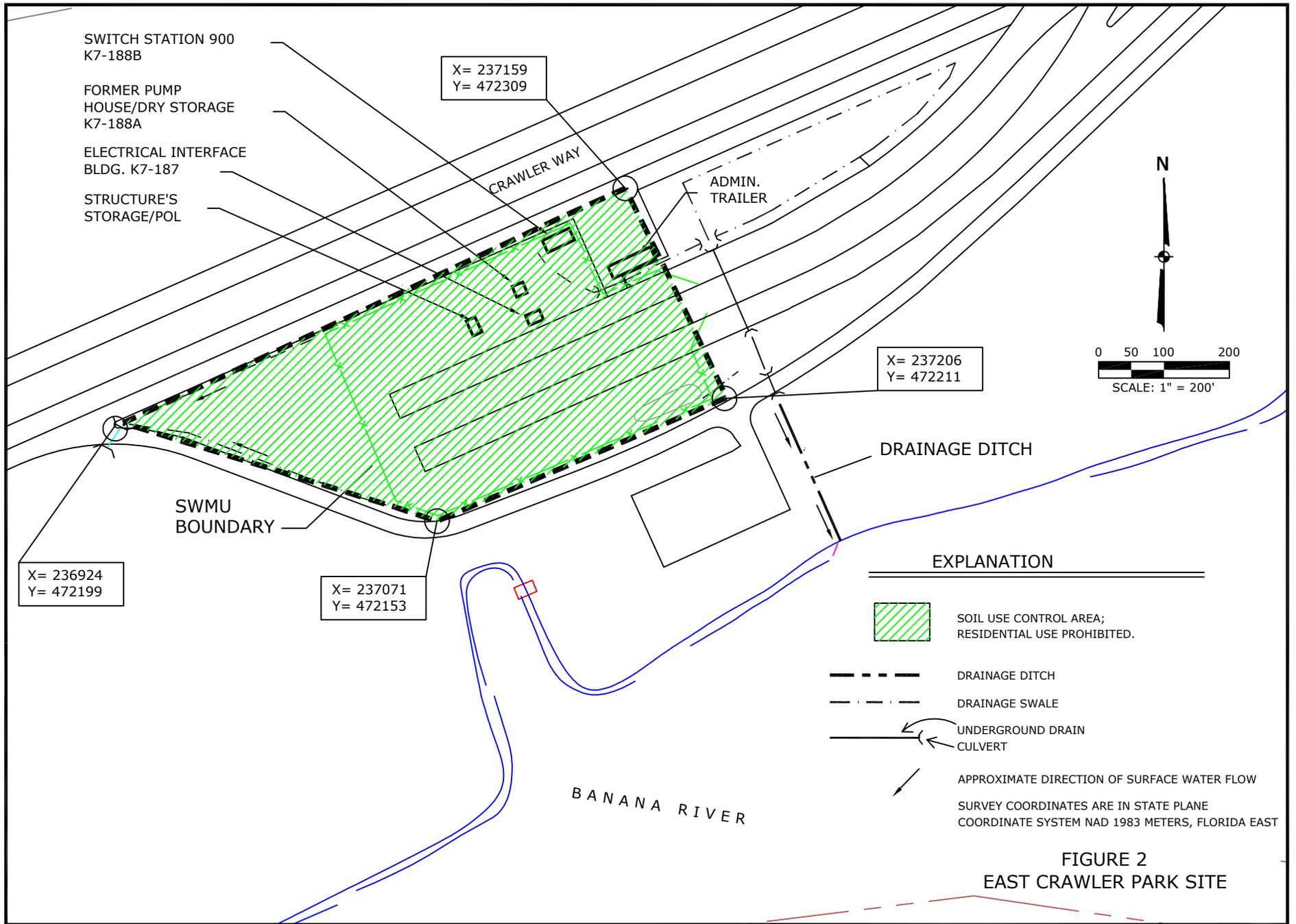


FIGURE 2
EAST CRAWLER PARK SITE