



**LAND USE CONTROL IMPLEMENTATION PLAN**



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



**FACILITY:** Paint and Oil Locker Facility  
Solid Waste Management Unit No. 67  
**CONTAMINANTS:** VOCs and Aluminum in Groundwater;  
PCBs and benzo(a)pyrene in Soil  
**CONTROL:** Prohibit Residential and Groundwater 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 Paint and Oil Locker (POL) Facility of institutional controls that have been implemented at the site<sup>1</sup>. Although there are no current unacceptable risks to human health or the environment associated with the POL Facility, institutional land use controls (LUCs) are necessary to: prohibit the use of groundwater from the site and prohibit residential exposure to site soils and swale soil at 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 that exceeded Florida Department of Environmental Protection (FDEP) and Environmental

Protection Agency (EPA) cleanup target levels were volatile organic compounds (VOCs) and aluminum in groundwater, and polychlorinated biphenyls (PCBs) and polynuclear aromatic hydrocarbons (PAHs) in soil.

**SITE DESCRIPTION**

The POL Facility is a NASA-operated facility that was constructed between 1965 and 1972 to support space flight efforts at KSC. The facility includes the POL Building, an acid storage facility, a gas cylinder storage structure, a covered storage structure, and a storage area that comprise an area of approximately 7 acres. Past and current operations at the POL Facility include storage of chemicals, such as solvents, adhesives, photographic and printing chemicals, detergents, insecticides, greases, oils, lubricants, and waxes at the POL Building; storage of acids, corrosives, oils, and alcohols at the acid storage area and the covered storage structure; storage of gas cylinders at the gas cylinder storage structure; and storage of construction material, such as metal, wood, plastic, and other unknown commodities.

*1. This LUCIP summarizes institutional controls regarding the NASA KSC Paint and Oil Locker (POL) Facility. For detailed information on the site, consult the POL Facility administrative file, which is available for review by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.*

## SITE LOCATION

The POL Facility is located in the southern central portion of the KSC Industrial Area (Figure 1). It is located at the intersection of Fourth Street S.E. and C Avenue S.E. The site is located within Section 4 of Township 23S, Range 37E which is in the Orsino Quadrangle. The soil and groundwater use control areas covered by the LUCIP are shown on 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

Groundwater at the site contains VOCs and aluminum above FDEP's groundwater cleanup target levels. PCBs and PAHs were present in soil above FDEP's residential soil cleanup target level (SCTL). The past, current, and projected future land use of the POL Facility is industrial in nature. LUCs are therefore required to prohibit the use of groundwater at the site and to prohibit residential use/exposure to soils. Indoor air quality shall be evaluated prior to any construction within the groundwater use control area.

## DECISION DOCUMENT

A Statement of Basis (SB) establishes institutional controls as a component of the

remedy for the site. The SB for the site, KSC document number KSC-TA-6818, 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 a Land Use Control Assurance Plan included in a Memorandum of Agreement (MOA)<sup>2</sup> 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.

*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 inspections, 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.*

**MONITORING**

Quarterly inspections to monitor that the 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 exposure to site soils or swale soils or groundwater use is occurring.

**REPORTING**

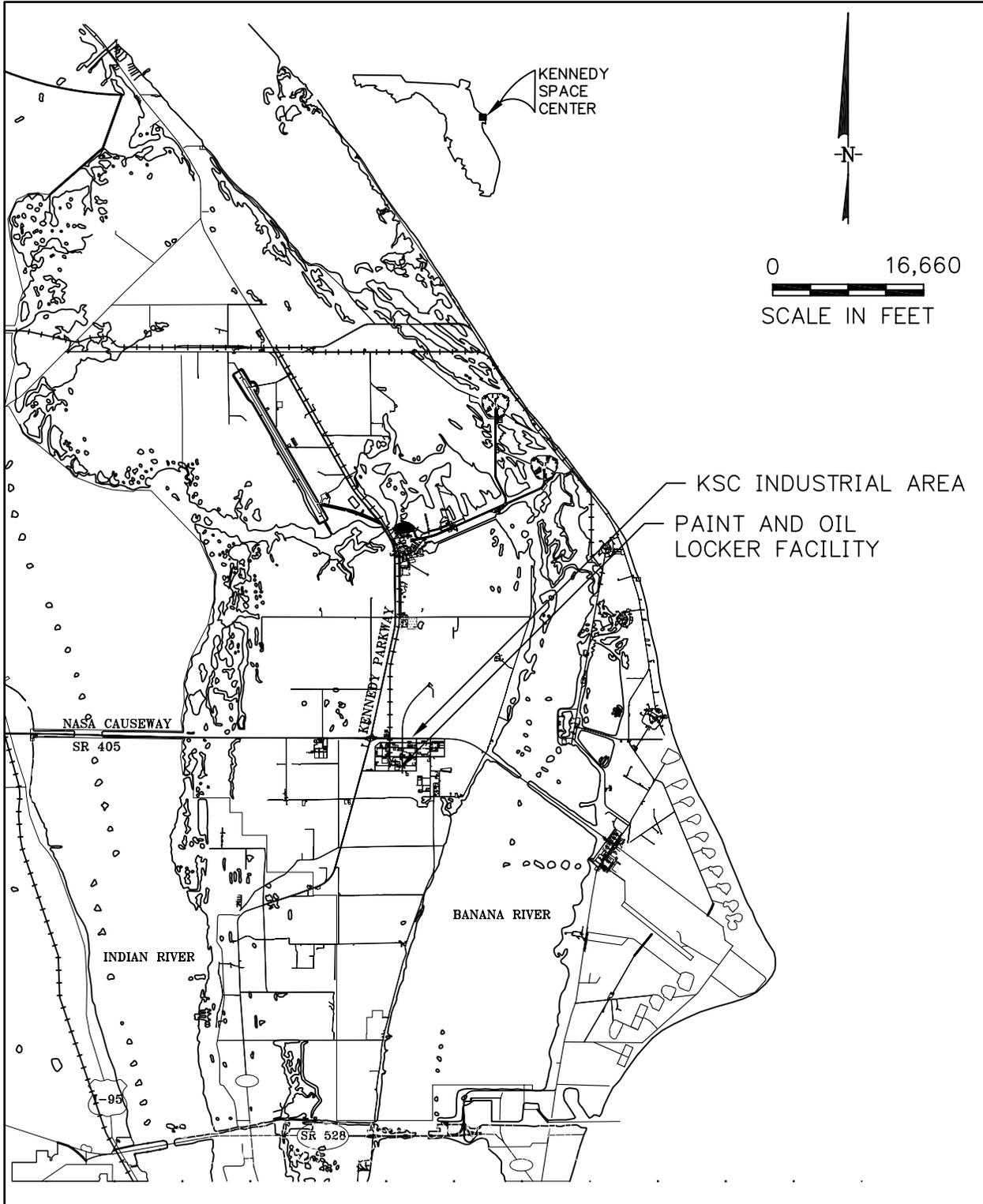
KSC’s Environmental Program Office will submit annual reports to EPA and FDEP certifying retention of the implemented LUCs.

**ENFORCEMENT**

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

**MAINTENANCE**

The LUCIP shall 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 the EPA and FDEP and implemented by modification of NASA’s operating permit.



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Figure 1  
POL Facility (SWMU 56)  
Location Map

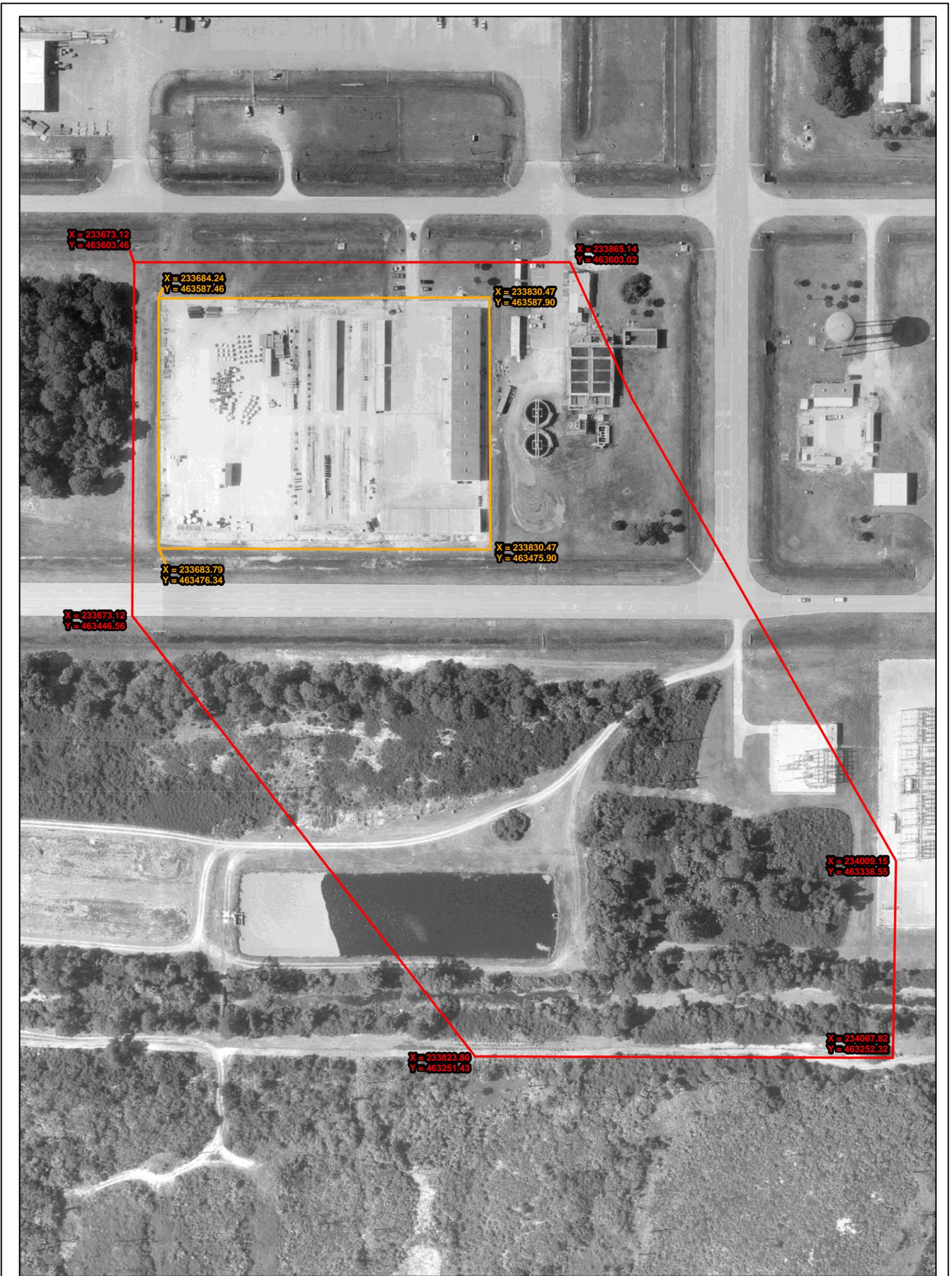


Figure 2  
 Site Map of the POL Facility (SWMU 56)

- Area Covered by Statement of Basis and Groundwater Use Control Area
- Surface Soil Use Control Area

Survey Coordinates are in US State Plane Coordinate System NAD 1983 Meters, Florida East

140 70 0 140  
 Feet

