



LAND USE CONTROL IMPLEMENTATION PLAN

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

FACILITY: Mission Support Building Area
Solid Waste Management Unit 108

CONTAMINANTS: Vinyl chloride in groundwater

CONTROL: Prohibit 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 Mission Support Building Area (MSBA) 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 MSBA, an institutional land use control (LUC) is necessary to prohibit groundwater use at the site. Controls will include periodic inspection, condition certification, and agency notification.

WHY LAND USE CONTROLS ARE NEEDED

One chemical of concern (COC; vinyl chloride) exceeded the Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels (GCTL). The COC was identified as posing potential human health risk during the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI).

SITE DESCRIPTION

The Site is currently developed with the Back-Up Generator Building (K6-1248) and the Operations Support Building II (OSBII; K6-1249), and Mission Support Building (MSB; K6-1298). The site contains parking areas that are shared by the MSB and OSBII along with a large grass field located east of the OSBII.

SITE LOCATION

The MSBA is located in the Vehicle Assembly Building (VAB) area of Kennedy Space Center (KSC). The facility is bordered by Saturn Causeway to the north; the Press Site to the east; wooded property to the south; and the Former Fire Station #2 (K6-1198), Back-Up Generator Building (K6-1248), and Utility Road to the west ([Figure 1](#)). The MSBA is located in Section 18, Township 23S, and Range 37E in the Orsino Quadrangle. The groundwater use control area covered by the LUCIP is shown on [Figure 2](#). Coordinates of the corners of the LUC are provided on [Figure 2](#) in the US State Plane

¹ This LUCIP summarizes institutional controls regarding the NASA MSBA. For detailed information on the site, consult the MSBA administrative file, which is available for review by contacting the KSC Environmental Assurance Branch at telephone number (321) 867-8402.

Coordinate System NAD 1983, meters, Florida East.

SITE CONTAMINATION AND CONTROL

Concentrations of vinyl chloride were present in groundwater above the FDEP GCTL but were less than the FDEP Natural Attenuation Default Concentration (NADC). Based on the site assessment and concentrations of vinyl chloride present at the Site, a long-term monitoring (LTM) plan was recommended and approved for the Site. Since groundwater exceeds the FDEP GCTL, LUCs prohibiting the use of groundwater are required until the cleanup level is achieved. The current and projected land use of the MSBA does not include the use of site groundwater; therefore, there is no current or projected exposure risk.

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-12112, is available for review by contacting the KSC Environmental Assurance Branch at telephone number (321) 867-8402.

IMPLEMENTATION

Institutional controls will be implemented by the KSC Environmental Assurance Branch in accordance with their RCRA permit and a Land Use Control Assurance Plan included in

the Memorandum of Agreement (MOA)² between NASA and the FDEP, 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 Assurance Branch 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 the institutional controls specified herein are in place and operating will be conducted by KSC’s Environmental Assurance Branch. The inspections will verify that no groundwater use is occurring at the site.

REPORTING

KSC’s Environmental Assurance Branch will submit annual reports to FDEP certifying retention of the implemented LUCs.

ENFORCEMENT

KSC’s Environmental Assurance Branch will be responsible for stopping any activities that are not compliant with this LUCIP.

² By separate MOA effective February 23, 2001, with the FDEP and 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 the 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 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.

MAINTENANCE

The LUCIP shall remain in place until the concerns managed by the LUCIP are mitigated, or until 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 FDEP and implemented by modification of NASA's operating permit.



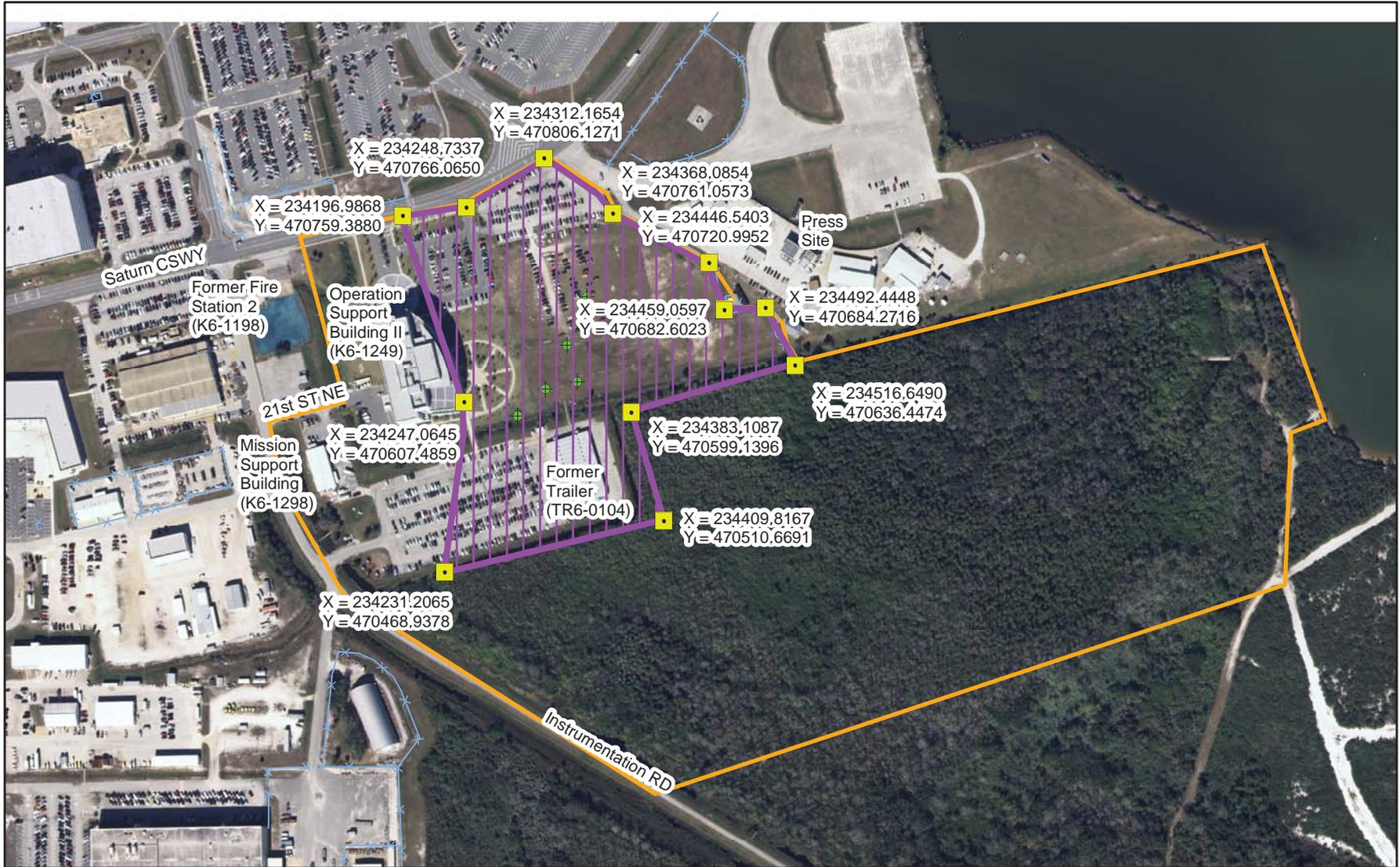
Notes:
 KSC - Kennedy Space Center
 LUCIP - Land Use Control Implementation Plan
 MSBA - Mission Support Building Area
 NASA - National Aeronautics and Space Administration
 SWMU - Solid Waste Management Unit
 VAB - Vehicle Assembly Building

Site Location Map - SWMU 108 Land Use Control Implementation Plan

Mission Support Building Area
 NASA Kennedy Space Center, Florida

Project Number: TL014017.0001

Figure 1



Legend

- Monitoring Well Screened 2 to 12 ft bls
- Fence
- SWMU Boundary
- LUC Area

Notes:

Coordinates are shown in Florida State Plane East, meters
 LUC - Land Use Control
 MSBA - Mission Support Building Area
 NASA - National Aeronautics and Space Administration
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**Area Under Institutional Controls - SWMU 108
 Land Use Control Implementation Plan**

Mission Support Building Area
 NASA Kennedy Space Center, Florida