



INTERIM LAND USE CONTROL IMPLEMENTATION PLAN



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

FACILITY: Area South of K7-516
Solid Waste Management Unit 100
CONTAMINANTS: Volatile Organic Compounds in Groundwater
CONTROL: Prohibit Groundwater Use

PURPOSE OF LAND USE CONTROL IMPLEMENTATION PLAN

This Interim Land Use Control Implementation Plan (LUCIP) has been prepared to inform current and potential future users of the Area South of K7-516 (516S) 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 516S, institutional land use controls (LUCs) are necessary to prohibit the use of groundwater at the site and to prevent potential discharge of contaminated groundwater to adjacent surface water bodies that have been designated as Outstanding Florida Water (OFW). Controls will include periodic inspection, condition certification, and agency notification.

WHY LAND USE CONTROLS ARE NEEDED

During the SWMU Assessment for the Non-Destructive Evaluation Laboratory (NDEL), the parking area for Building K7-516 was identified as Location of Concern (LOC) 12. Soil and shallow groundwater samples were

collected as part of Confirmatory Sampling (CS) activities, and all results were less than regulatory criteria. No Further Action was approved for LOC 12 in the May 2004 CS Report. However, more recent investigations at the Components Cleaning Facility (CCF) identified groundwater contaminated with volatile organic compounds (VOCs) within the 516S area.

SITE DESCRIPTION

SWMU 100 is a parking area that was originally constructed in 1968 for KSC personnel working at the CCF. Wastewater from cleaning operations was discharged to ditches from 1964 to 1991. The wastewater from Building K7-516 was discharged to the southern drainage ditch (Figure 1). During the mid-1970s, the southern portion of the parking area was used for miscellaneous storage. From the mid-1990s to present, the area was used by Propellants North to store compressed gas tankers and demineralized water tankers. In 2002 and 2003, the Propellants North breathing air transfer system was located in the southwestern portion of the parking area. No record of spills were identified for the 516S

¹ This Interim LUCIP summarizes institutional controls regarding the NASA 516S site. For detailed information on the site, consult the 516S administrative file, which is available for review by contacting the KSC Environmental Assurance Branch at telephone number (321) 867-8402.

area. The primary contaminants at 516S are trichloroethene (TCE) and daughter products.

SITE LOCATION

516S includes a parking area and grassy and forested area located on the southern side of Crawler Way and east of the NDEL (Figure 1). 516S is found in Section 8, Township 22S, Range 37E, as shown on the 7.5-minute Orsino topographic quadrangle map. The groundwater use control area covered by the Interim LUCIP is shown on Figure 2. Coordinates of the corners of the LUC are provided in Figure 2 in the State Plane Coordinate System NAD 1983, Florida East, meters.

SITE CONTAMINATION AND CONTROL

Groundwater at the site contains VOCs at concentrations greater than Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels. The past, current, and projected future land use of 516S is industrial in nature. LUCs are therefore required to prohibit the use of groundwater at the site until cleanup levels are achieved. The current and projected land use of 516S does not include the use of site groundwater; therefore, there is no current or projected exposure risk.

DECISION DOCUMENT

The Kennedy Space Center (KSC) Remediation Team determined that interim institutional controls should be implemented at 516S. The interim institutional controls are temporary while investigation, interim measures, and corrective measures are in progress.

IMPLEMENTATION

Institutional controls will be implemented by the KSC Environmental Assurance Branch in accordance with their Resource Conservation and Recovery Act (RCRA) permit and a Land Use Control Assurance Plan included in a Memorandum of Agreement (MOA)² between NASA, FDEP, and Environmental Protection Agency (EPA), effective February 23, 2001. 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.

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 LUCs specified herein are in place and operating and will be conducted by KSC's Environmental Assurance Branch. The inspections will verify that no groundwater use is occurring.

REPORTING

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

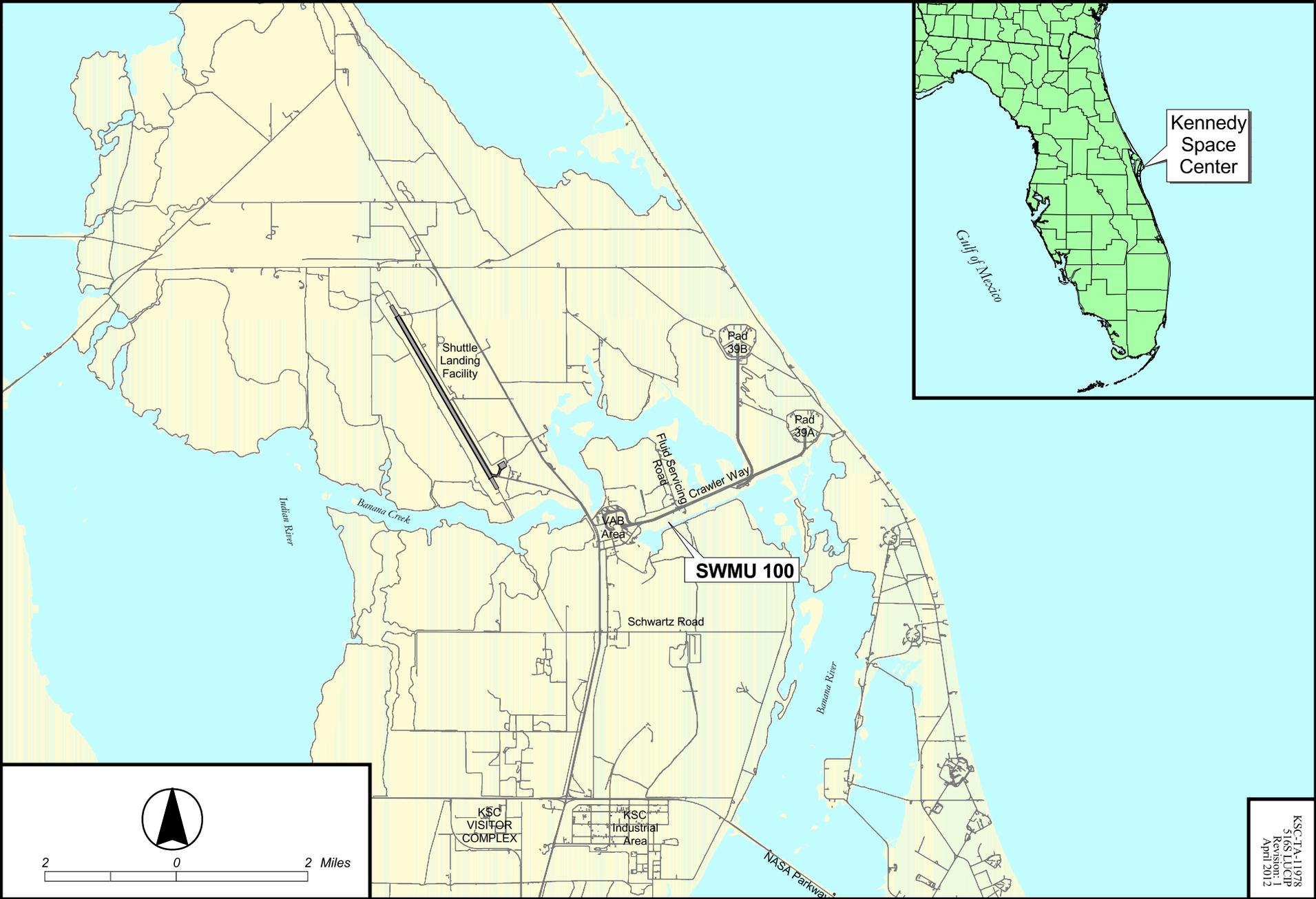
ENFORCEMENT

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

MAINTENANCE

The Interim LUCIP shall remain in place until a land use change is implemented and the concerns managed by the Interim LUCIP are mitigated, or until there is a discovery, based on analytical evidence, that scenarios managed by the Interim LUCIP are no longer a concern.

FIGURE 1 LOCATION OF KENNEDY SPACE CENTER AND SWMU 100
SWMU 100 - AREA SOUTH OF K7-516, KENNEDY SPACE CENTER, FLORIDA



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516S LUCIP
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FIGURE 2 GROUNDWATER LAND USE CONTROL AREA
 SWMU 100 - AREA SOUTH OF K7-516, KENNEDY SPACE CENTER, FLORIDA

