



## LAND USE CONTROL IMPLEMENTATION PLAN

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

FACILITY: Launch Equipment Test Facility  
Solid Waste Management Unit 091

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 Kennedy Space Center (KSC) Launch Equipment Test Facility (LETF) of institutional controls that have been implemented at the site<sup>1</sup>. Although there are no current unacceptable risks to human health and the environment associated with the LETF, institutional Land Use Controls (LUCs) are necessary to prohibit the use of groundwater affected with vinyl chloride at the site. Controls will include periodic inspection, condition certification, and agency notification.

#### WHY LAND USE CONTROLS ARE NEEDED

During the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), one chemical of concern (vinyl chloride) was identified above the Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Level (GCTL) and was identified as a potential

human health risk. An LUC was developed to ensure contact with the groundwater at the site is prohibited to prevent human health exposure.

#### SITE DESCRIPTION

The Supply, Shipping, and Receiving Warehouse (M7-504) was the first building constructed in this area between 1963 and 1964. In 1966, this building was incorporated into the Payload Support Building (M7-505). The area of investigation for the site included the LETF, eastern portion of Building M7-505, the Prototype Shop, and the Cryogenics building. A release from a former waste treatment tank, recorded on the western side of Building M7-505, is currently being managed under Solid Waste Management Unit (SWMU) 039. The eastern and southern portions of the site contain asphalt areas that have launch equipment testing structures. East of E Avenue S.E. and north of the Cryogenics building and Prototype Shop, there are mowed and maintained grassy areas.

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

## SITE LOCATION

The LETF is located south of the Operations and Checkout Building (M7-355) on the western side of E Avenue S.E. and north of Third Street S.E., in the southern portion of the KSC Industrial Area. The LETF is located in Section 19, Township 22S, Range 37E in the Orsino Quadrangle. The site is located on the eastern side of the Payload Support Building (M7-505) and encompasses the steel structures on the eastern side of the facility that are used for launch equipment testing (Figure 1).

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 U.S. State Plane Coordinate System NAD 1983, meters, Florida East.

## SITE CONTAMINATION AND CONTROL

Concentrations of vinyl chloride in groundwater are present at the LETF above the FDEP GCTL. The past, current, and projected land use of the LETF is industrial in nature and does not include the use of site groundwater. LUCs are, therefore, required to prohibit the use of groundwater at this site. Indoor air quality will 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-12187, 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)<sup>2</sup> between NASA and the FDEP, 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.

## MONITORING

Quarterly inspections to monitor that the institutional controls specified herein are in

<sup>2</sup> By separate MOA effective February 23, 2001, with the FDEP and KSC, on behalf of NASA, agreed to Center-wide implementation of 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.

place and operating will be conducted by KSC's Environmental Assurance Branch. The inspections will include a review of current groundwater data to verify the LUC is still required at the site, and 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 that are not compliant with this LUCIP.

**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 the National Aeronautics and Space Administration's operating permit.



**Legend**

 SWMU Location

- Notes:
- KSC - Kennedy Space Center
  - LETF - Launch Equipment Test Facility
  - LUCIP - Land Use Control Implementation Plan
  - NASA - National Aeronautics and Space Administration
  - SWMU - Solid Waste Management Unit

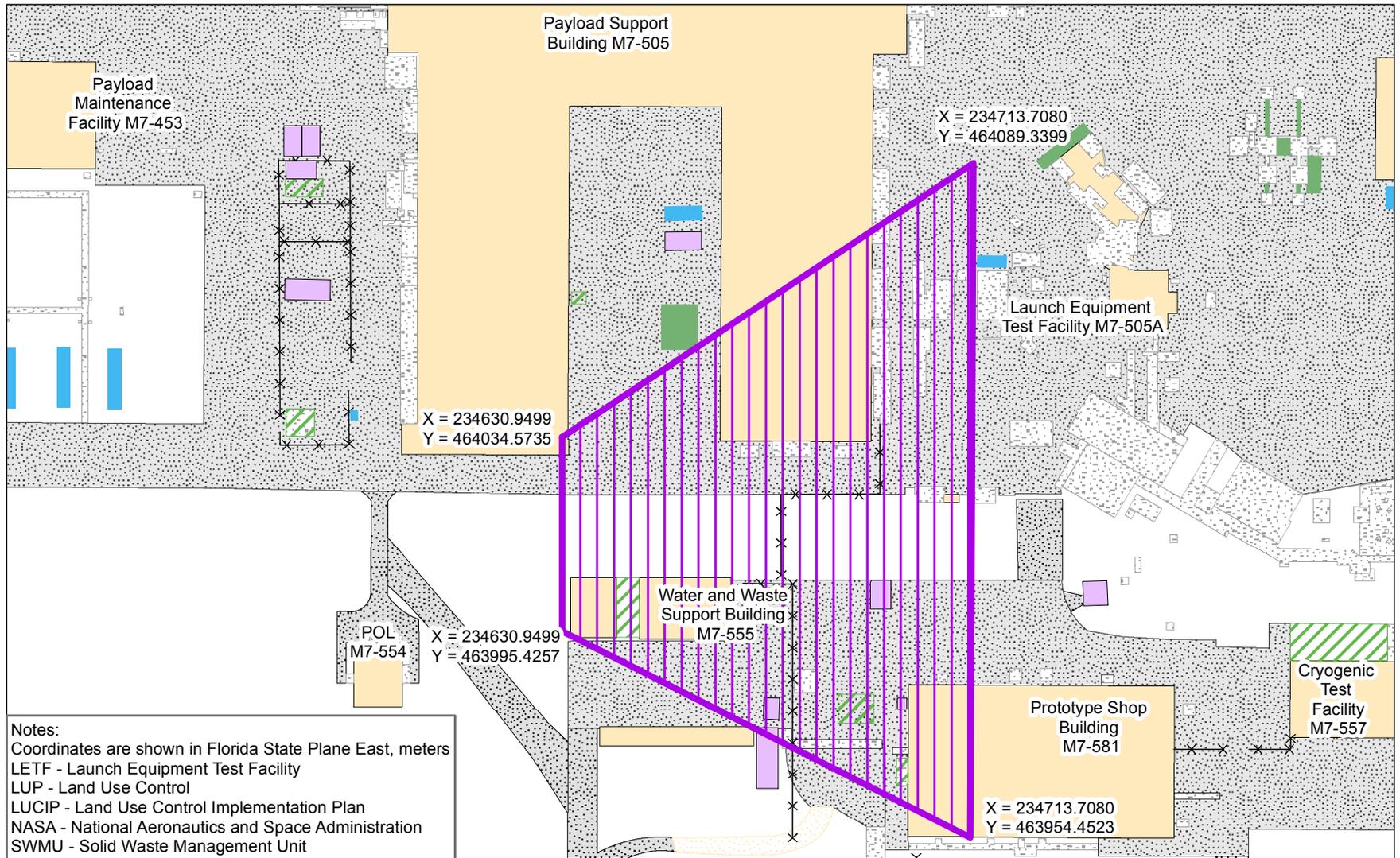


**Site Location Map - SWMU 091**  
**Land Use Control Implementation Plan**

Launch Equipment Test Facility  
 NASA Kennedy Space Center, Florida

Project Number: TL014018.0001

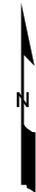
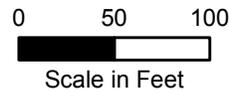
**Figure 1**



Notes:  
 Coordinates are shown in Florida State Plane East, meters  
 LETF - Launch Equipment Test Facility  
 LUP - Land Use Control  
 LUCIP - Land Use Control Implementation Plan  
 NASA - National Aeronautics and Space Administration  
 SWMU - Solid Waste Management Unit

**Legend**

- ✕—✕ Fence
- LUC Area
- Permanent Shed Location
- Temporary Shed Location
- Canopy Area
- Concrete Slab or Sidewalk
- Permanent Structure
- Temporary Structure
- Pavement
- Dirt Road



**LUC Area - SWMU 091  
 Land Use Control Implementation Plan**

Launch Equipment Test Facility  
 NASA Kennedy Space Center, Florida