



## INTERIM LAND USE CONTROL IMPLEMENTATION PLAN



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

**FACILITY:** Communications, Maintenance, and Storage Facility  
Solid Waste Management Unit (SWMU) 082

**CONTAMINANTS:** Tetrachloroethene, Trichloroethene, *cis*-1,2-Dichloroethene, Vinyl Chloride, and 1,1-Dichloroethene 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 Communications, Maintenance, and Storage (CM&S) 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 CM&S Facility, institutional land use controls (LUCs) are necessary to prohibit groundwater use at the site. Controls will include periodic inspection, condition certification, and agency notification.

#### WHY LAND USE CONTROLS ARE NEEDED

A human health risk assessment was completed as part of a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). In addition, post-RFI groundwater assessment was completed to further evaluate groundwater impacts at the site. Five chemicals of concern

[tetrachloroethene (PCE), trichloroethene (TCE), *cis*-1,2-dichloroethene (cDCE), vinyl chloride (VC), and 1,1-dichloroethene (1,1-DCE)] exceeded their Florida Department of Environmental Protection (FDEP) Groundwater Cleanup Target Levels (GCTLs) and were identified as a potential human health risk, therefore a LUC is required.

#### SITE DESCRIPTION

The CM&S Facility site consists of eight numbered structures that were constructed between 1964 and 2000. These include: Communications, Maintenance, and Storage Building (M6-791); Loading Dock (M6-791A); Hazardous Waste Staging Building (M6-791B); Cardboard Baler Building (M6-791C); Radio Tower (M6-791D); Communication Cross Connect (M6-790); Cable Storage Shed (M6-792); and NASA Exchange Storage Building (M6-740). The CM&S Facility is currently and has historically been used for storage of communications equipment, equipment maintenance, and repair activities.

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

## SITE LOCATION

The CM&S Facility is located in the Industrial Area of KSC within Section 5 of Township 23S, Range 37E, on the United States Geological Survey's 7.5-minute Orsino topographic quadrangle map and encompasses approximately 6.5 acres at the northern terminus of Cape Canaveral (Figure 1). The facility is bordered by Third Street then wooded area to the north, Central Supply Facility (SWMU 092) to the east, Fourth Street then Supply Warehouse #3 (SWMU 088) to the south, and Avenue B then General Services Administration (GSA) Vehicle Maintenance Facility (VMF) (SWMU 013) to the west. The groundwater use control area covered by the LUCIP, including coordinates of the corners of the LUC (in the US State Plane Coordinate System NAD 1983, meters, Florida East), are provided on Figure 2.

## SITE CONTAMINATION AND CONTROL

The concentrations of PCE, TCE, 1,1-DCE, cDCE, and VC present in groundwater are above the FDEP's GCTLs. Since groundwater concentrations exceed the FDEP GCTLs, LUCs prohibiting the use of groundwater are required until the cleanup level is achieved. The current and projected land use of the CM&S Facility 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 the CM&S Facility. 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 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.

<sup>2</sup> 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.

**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.

**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.

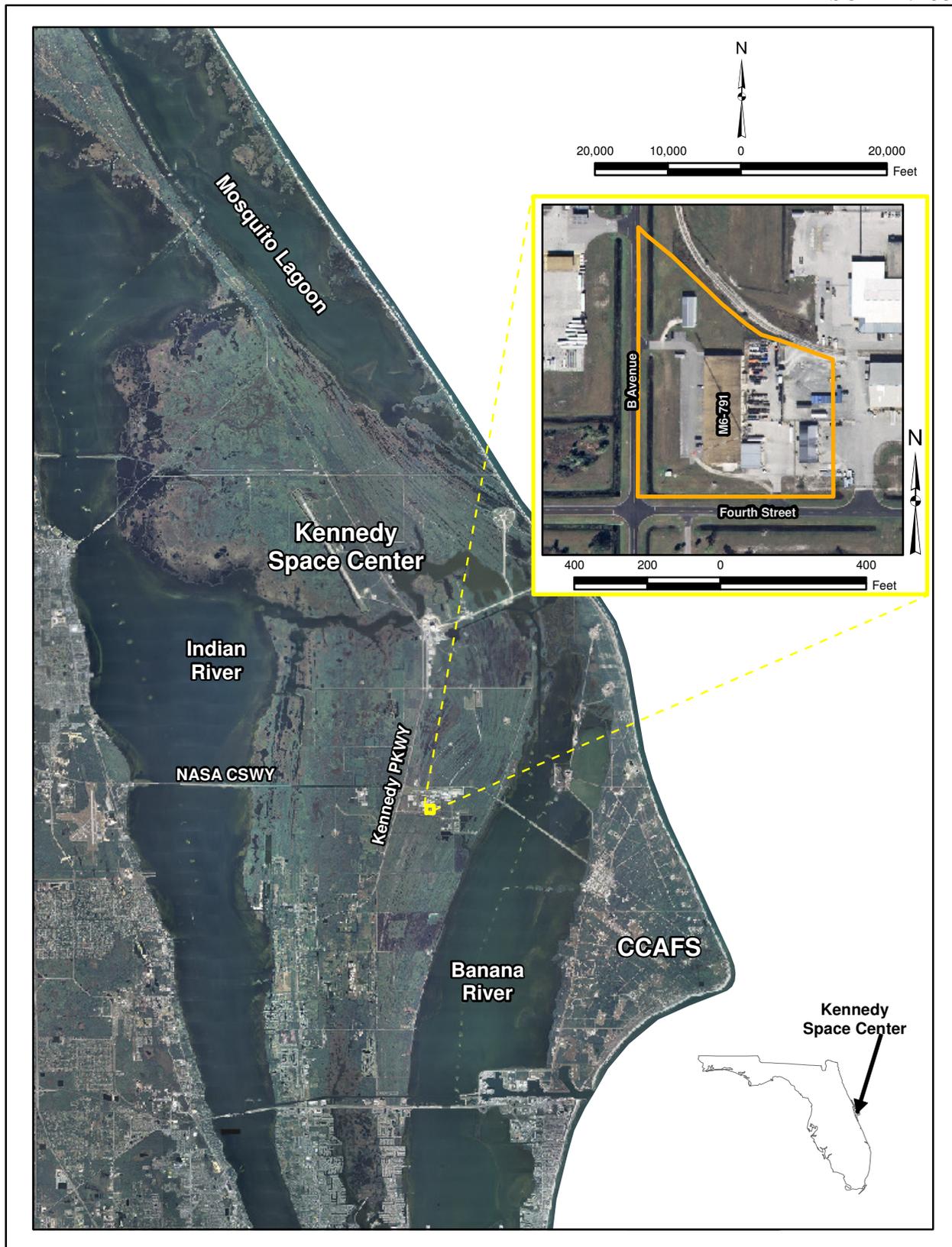
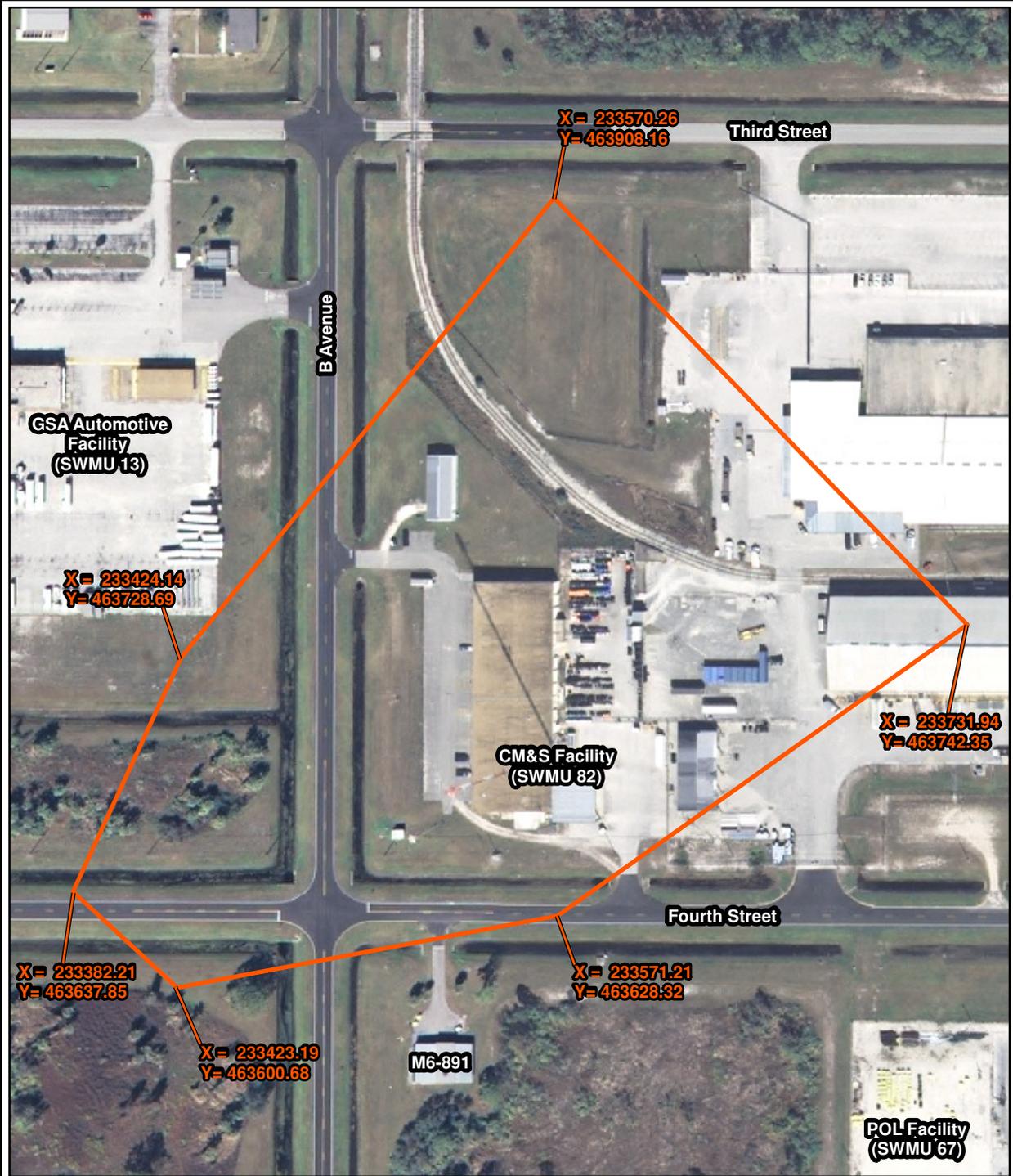


Figure 1  
Site Location Map



**Legend**

 Area Covered by Groundwater Use Control

Note: Survey Coordinates are in US State Plane  
Coordinate System NAD1983 Meters, Florida East.

