



INTERIM LAND USE CONTROL IMPLEMENTATION PLAN



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

FACILITY: Former Vertical Processing Facility
Solid Waste Management Unit 077

CONTAMINANTS: Chlorinated 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 Former Vertical Processing Facility (VPF) 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 VPF, 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

Groundwater impacts were documented during the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) and supplemental investigation activities. Three chlorinated volatile organic compounds (CVOCs) [trichloroethene (TCE), cis-1,2-dichloroethene (cDCE), and vinyl chloride (VC)] 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 VPF facility was originally used as a support facility for former manned space programs and for occasional staging and processing of shuttle flight payloads. The main building onsite (VPF, M7-1469) is no longer an active facility and the building was demolished during the summer of 2010.

SITE LOCATION

The Former VPF Area is located in the Industrial area of the Kennedy Space Center (KSC) within Section 4 of Township 22S, Range 37E, on the United States Geological Survey's 7.5-minute Orsino topographic quadrangle map and encompasses approximately 2 acres (Figure 1). The facility is bordered by wooded areas immediately to the north, 10th street and wooded areas to the south, Ordnance Lab #2 (M7-1417) to the

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

west, and Ordinance Storage (M7-1472), Operations Support Building (OSB; M7-1521) and OSB Annex (M7-1522) to the east. The groundwater land use control areas covered by the Interim LUCIP are presented on [Figure 2](#). The Coordinates of the corners of the LUCs provided on [Figure 2](#) are in the US State Plane Coordinate System NAD 1983, meters, Florida East.

SITE CONTAMINATION AND CONTROL

The concentration of CVOCs present in groundwater are above the FDEP's GCTLs. Since groundwater exceeds 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 VPF Area 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 former VPF facility. The interim institutional controls are temporary while 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)² 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 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 Interim 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 Interim LUCIP shall remain in place until the concerns managed by the Interim LUCIP are mitigated, or until there is a discovery, based upon analytical evidence, that scenarios managed by the Interim LUCIP are no longer a concern.

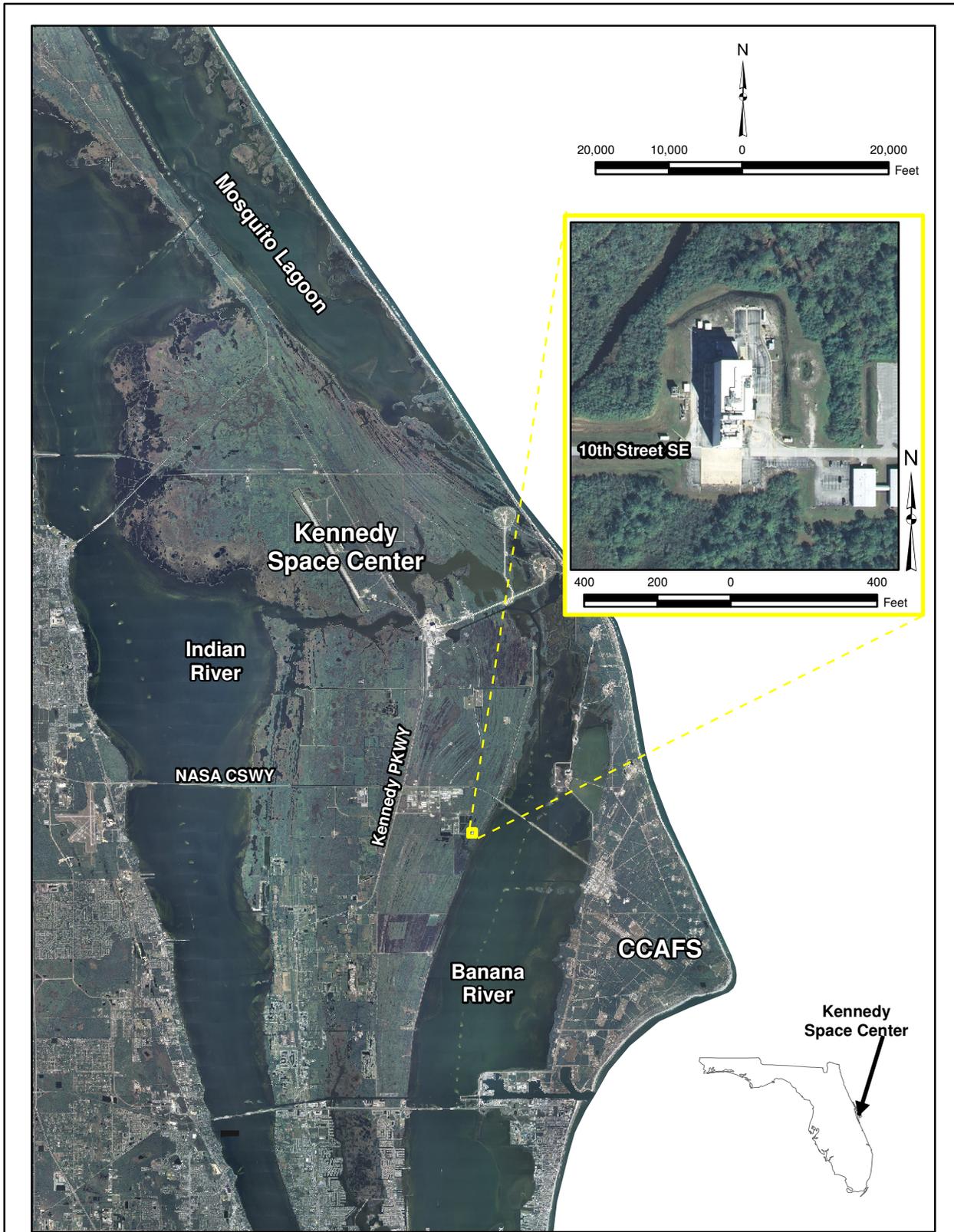


Figure 1
Vertical Processing Facility Site Location Map

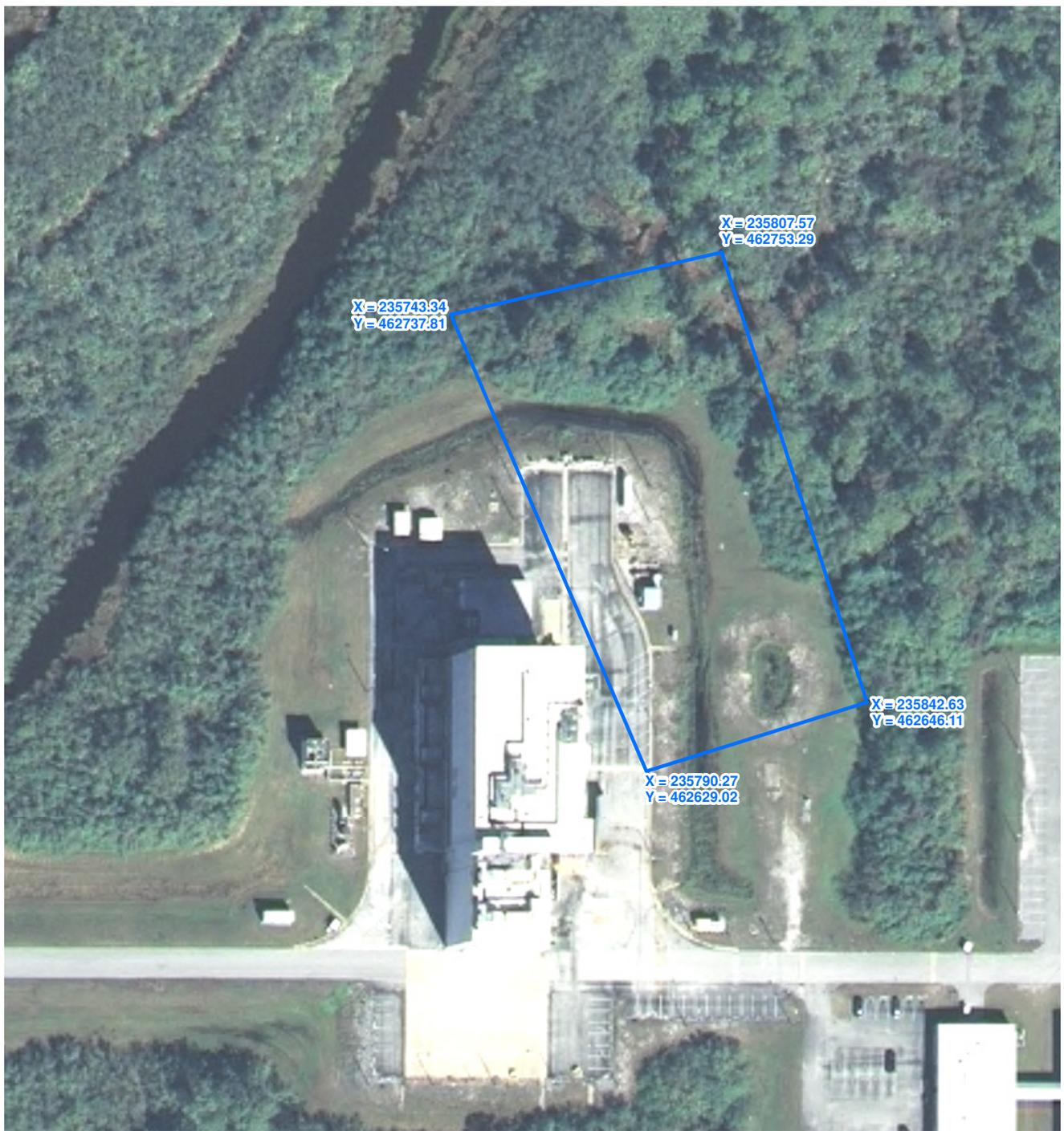


Figure 2
VPF Groundwater Use Control Area

Legend

 Area Covered by Groundwater Use Control

Notes:

1. Vertical Processing Facility (VPF; M7-1469) was demolished in the summer of 2010.
2. Survey Coordinates are in US State Plane Coordinate System NAD1983 Meters, Florida East.

