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LAND USE CONTROL IMPLEMENTATION PLAN FOR SITE 1 INCINERATOR LANDFILL AND
SITE 41 FORMER INCINERATOR MCRD PARRIS ISLAND SC
5/1/2002
TETRA TECH NUS

**Land-Use Control Implementation Plan For Site/SWMU 1 and SWMU 41
Marine Corps Recruit Depot
Parris Island, South Carolina**

This document identifies Land-Use Controls (LUCs) restricting Site/Solid Waste Management Unit (SWMU) 1 (Site 1), Incinerator Landfill, and SWMU 41, Former Incinerator, at the Marine Corps Recruit Depot (MCRD) Parris Island, South Carolina. LUCs will be implemented for the purposes of (a) restricting human contact with solid waste material contained within a capped area, (b) restricting soil disturbance activities (i.e., construction activities) that may expose waste material; and (c) prohibiting residential development of the site.

1. SITE DESCRIPTION

SWMU 41, the Former Incinerator, consisted of a coal-fired brick chamber and from 1921 to 1959, Site 1 served as the disposal site for combustion residues from the incinerator. Although SWMU 41 ceased operation in 1959, Site 1 continued to be used for disposal of combustible trash and noncombustible waste until 1965. The location of both sites are shown in Figures 2-1 and 2-2 of the main text. After implementation of the selected remedy for Site 1 and SWMU 41, sediment, soil, and waste that pose risks to human health and the environment will be consolidated within a low permeability cap system.

A human health risk assessment (HHRA) was conducted at Site 1 and SWMU 41 that evaluated risks to human receptor populations that may come in contact with site contaminants [Tetra Tech NUS, Inc. (TtNUS), 2001]. The HHRA concluded that cancer risks for adolescent recreational users and hypothetical residents are not considered to be acceptable by the United States Environmental Protection Agency (U.S. EPA). Additionally, non-cancer risks for the construction worker and hypothetical future resident are not considered to be acceptable by the U.S. EPA. Lastly, risk estimates to recreational users (fishermen) are not considered to be acceptable by the U.S. EPA under scenarios that assume daily fish consumption over a 30-year period and higher concentrations of contamination. Site remediation will address these concerns; however, the MCRD Parris Island, U.S. EPA Region 4 and the South Carolina Department of Health and Environmental Control (SCDHEC) agreed that LUCs should be implemented at Site 1 and SWMU 41 to prevent direct contact with consolidated soil, sediment, and waste.

2. LOCATION

MCRD Parris Island (as shown in Figure 2-1 of the main text) is located along the southern coast of South Carolina, approximately 1 mile south of the city of Port Royal and 3 miles south of the city of Beaufort within Beaufort County. Site 1 and SWMU 41 are located in northeastern tip of Horse Island in the northern section of MCRD Parris Island.

3. LAND-USE CONTROL OBJECTIVES

The Site 1 and SWMU 41 Proposed Plan for Soil and Sediment Remedial Action (TtNUS, 2002) calls for the initial implementation and continued application of appropriate restrictions on future usage of the property encompassing Site 1 and SWMU 41 while it is owned by the federal government. These restrictions will apply until/unless site remediation is conducted to restore the site for unrestricted use. Should the Navy later decide to transfer, by deed, ownership in the property encompassing Site 1 and SWMU 41 to any private person or entity, then the provisions of paragraph Deed Covenants and Conveyance of Title as set forth on page A-3 of this Land-Use Control Implementation Plan (LUCIP) shall apply. Until that time, the following LUCs addressed in the following section will remain in effect.

4. LUCS IMPLEMENTED TO ACHIEVE OBJECTIVES

Quarterly visual inspections and reviews will be conducted for the purposes of verifying that all necessary LUCs have been implemented and are being properly maintained. An annual report will be prepared and forwarded to U.S. EPA and SCDHEC signed by the Depot Commanding General [with copy to Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM)], certifying the continued retention of all implemented LUCs associated with Site 1 and SWMU 41.

Authorized Activities. The following activities are permissible within the confines of Site 1 and SWMU 41:

- Activities or uses that will not result in residential site development.
- Recreational use of the site (e.g., fishing and jogging) that does not affect the integrity of the landfill cap over the landfill.
- Unintrusive site maintenance activities (e.g., mowing) that do not affect the integrity of the cap system over the landfill.
- Intrusive activities, as required, to maintain or replace existing monitoring wells. Required personal protection equipment (PPE) will be at least Level D (e.g., long sleeve shirt, gloves, and Tyvek® coveralls and boot covers if the potential exists for soiling work attire) unless conditions indicate otherwise.

Unauthorized Activities. Those activities and uses that are inconsistent with the objectives of this LUCIP and that, if implemented at Site 1 and SWMU 41, could pose an increased risk of harm to health, safety, public welfare, or the environment. The following activities will not be permitted within the confines of Site 1 and SWMU 41:

- Construction of facilities specifically intended for use as residential housing or child care.
- Intrusive construction activity without the use of Level D PPE. Also, intrusive construction activity without the use of continuous air monitoring to determine whether upgrades to Level C or B PPE may be required.
- Extraction of groundwater except as required for groundwater monitoring.

Proposed Changes in Use. Any proposed changes in permissible uses at Site 1 and SWMU 41 that may result in the development of Site 1 and SWMU 41 for residential use shall be evaluated by the MCRD Parris Island Natural Resources and Environmental Affairs Office (NREAO) to determine whether or not the proposed changes might pose potential risks to human health or the environment. Any proposed change in use of the site will be subject to review and approval by U.S. EPA Region 4 and the SCDHEC in accordance with the approved LUC and Memorandum of Agreement (MOA).

Deed Covenants and Conveyance of Title. Should the decision later be made to transfer ownership of the property encompassing Site 1 and SWMU 41 to any private person or entity, then the Navy shall either (1) take all actions necessary to remediate the site to then-existing residential (i.e., unrestricted use) cleanup standards prior to effecting such transfer or (2) deed record with the Beaufort County Register of Deeds appropriate restrictive covenants prohibiting future residential usage of the property. Should the Navy not have the requisite legal authority to record such deed restrictions, then it shall take all steps necessary to ensure that the cognizant federal agency with such authority does so unless the property is remediated to residential standards prior to such transfer. Should cleanup of the site not be effected to residential standards, then notification will be given to U.S. EPA Region 4 and SCDHEC at least 30 days prior to any conveyance of title to the site to any third party(ies) and the purchaser(s) of the site will be advised via the deed documentation as to then-existing site conditions and any/all associated LUCs and long-term monitoring requirements.

Posting. This LUCIP will be referenced in all MCRD Parris Island utility maps and in MCRD Parris Island's Base Master Plan. In conjunction with MCRD Parris Island's Base Master Plan and utility maps, this LUCIP is included in the Land-Use Control Assurance Plan (LUCAP) Agreement. No maintenance or construction activities on or near Site 1 and SWMU 41 should be planned without first referring to these documents.

5. DECISION DOCUMENTS

The following decision documents have been issued for Site 1 and SWMU 41:

- Record of Decision (ROD) for Soil and Sediment Remedial Action at Site 1 and SWMU 41, MCRD Parris Island, South Carolina dated _____ 2002.

6. OTHER PERTINENT INFORMATION (REFERENCES)

Tetra Tech NUS, Inc. (TtNUS), 2001. Final Remedial Investigation/RCRA Facilities Investigation for Site/SWMU 1 – Incinerator Landfill and SWMU 41 – Former Incinerator, MCRD Parris Island, South Carolina, June.

TtNUS, 2002. Final Proposed Plan for Soil and Sediment Remedial Action at Site/SWMU 1 – Incinerator Landfill and SWMU 41 – Former Incinerator, MCRD Parris Island, South Carolina, February.

Attachment A

Site/SWMU 1 and SWMU 41 Land-use Controls Quarterly Inspection Checklist

Date _____ Date of Previous Inspection _____

Time _____ Date of Next Quarterly Review _____

Name _____

If the answer to any of the following questions deviates from the prescribed LUC, please describe and explain on the attached comment sheet. Photo documentation of the discrepancies is recommended.

Land-Use Control	Inspection
Residential development is prohibited	Has residential developed occurred within the LUCIP boundary? Yes No
The property will be inspected quarterly to ensure that unauthorized activities on the property do not occur and that status of the property is unchanged (Section 4 of the LUCIP)?	Did any unauthorized land-use changes or activities occur within the last year? Yes No Have any major land-use changes been requested, since the last inspection report? Yes No
The MCRD will notify the implementing agency upon the discovery of any unauthorized change in land use (Section 4 of the LUCIP).	If unauthorized change in land use occurred, on what date were the current regulatory authority(ies) notified. _____
Annual reporting of the site status is required. The annual report will be submitted to U.S. EPA and SCDHEC by MCRD Parris Island each year.	Was the annual report submittal deadline exceeded last year? Yes No Are there any discrepancies from previous reports that have not been addressed? Yes No
These LUCs will be documented in the MCRD Parris Island Master Plan annually.	Has it been greater than a calendar year since the Base Master Plan was updated with LUCs? Yes No

Attachment B

Site/SWMU 1 and SWMU 41 Land-use Controls 5-Year Review Criteria

Date _____ Date of Previous 5-Year Review _____

Time _____ Date of Next 5-Year Review _____

Name _____

Objective: Every 5 years, the facility will prepare a review of the remedy effectiveness and submit the report to the implementing agency. Site-specific reports will be combined and submitted as a single package to implementing agencies.

Procedure:

- Confer with Base Planner to determine whether any change in land use is anticipated in the next 5 years.
- Evaluate current regulatory policies and requirements for closing sites with contaminants in place.
- Have any factors changed to impact risk (e.g., report of a new release, construction, or washout due to hurricane or tropical storm)?
- Should LUCs be amended or removed?
- Review actions taken in response to the quarterly checklist to determine if repetitive problems are present which are present which would benefit from an alternative solution.