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MCRD PARRIS ISLAND
5090.3a

LETTERS REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL APPROVAL OF REMEDIAL INVESTIGATION WORK PLAN
FOR SITE 21 AND CONFIRMATORY SAMPLING WORK PLAN FOR SITES 5, 9, 13, 27 AND
35 MCRD PARRIS ISLAND SC
8/13/1999
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



03.01.00.0071

2600 Bull Street
Columbia, SC 29201-1708

August 13, 1999

Commanding Officer
Department of the Navy
SOUTHNAVFACENCOM
ATTN: Mr. Art Sanford
2155 Eagle Drive
North Charleston, South Carolina 29406

RE: SWMU 21 RI/RFI Work Plan and SI/CS Work Plan for Site/SWMU 5,
Site 9/SWMU 8, Site 13C/SWMU 13, and SWMUs 27 and 35 (8/99)
Marine Corp Recruit Depot
Parris Island
SC6 170 022 762

Dear Mr. Sanford:

The Corrective Action Engineering and the Hydrogeology Sections of the South Carolina Department of Health and Environmental Control (Department) have completed the review of the above referenced document which was received on August 13, 1999. Based on this review, the Department has determined that the above referenced document is complete with respect to R.61-79 of the South Carolina Hazardous Waste Management Regulations and all applicable guidance documents.

Additionally, the Department is aware that SWMUs 4 and 7 have been removed from the work plan due to unresolved issues in order to proceed with the work for the above referenced SWMUs. However, the confirmatory sampling for SWMUs 4 and 7 must be completed at a later date upon resolution of these issues.

If you have any questions or concerns, please feel free to contact Jerry Stamps at (803) 896-4285 or Don Hargrove of the Division of Hydrogeology at (803) 896-4033.

Sincerely,

David Scaturo, P.E., Manager
Corrective Action Engineering Section
Division of Hazardous and Infectious Waste Management

cc:

David Brayack, TtNUS
Tim Harrington, MCRD Parris Island
Don Hargrove, Hydrogeology
Ken Lapierre, EPA Region IV
Tom Dillon, NOAA
Priscilla Wendt, SCDNR



2600 Bull Street
Columbia, SC 29201-1708

MEMORANDUM

TO: Jerry Stamps, Engineering Associate
Hazardous Waste Permitting Section
Division of Hazardous and Infectious Waste Management
Bureau of Land and Waste Management

FROM: Donald C. Hargrove, Hydrogeologist
Hazardous Waste Section
Division of Hydrogeology
Bureau of Land and Waste Management

DATE: 13 August 1999

RE: Parris Island Marine Corps Recruit Depot (MCRD)
Parris Island, South Carolina
Beaufort County
SC6 170 022 767

FINAL SWMU 21 RI/RFI Work Plan and
SI/CS Work Plan for Site/SWMU 5, Site 9/SWMU 8,
Site 13C/SWMU 13, and SWMUs 27 and 35
(March 1999)

The Division of Hydrogeology has reviewed the Document listed above. This document (dated 11 August 1999) was received on 12 August 1999. It provides a physical description of the Solid Waste Management Units (SWMUs) listed in the title that includes the history of each SWMU. It briefly describes previous studies performed at some of the SWMUs and indicates that the previous studies suffer from outdated information and/or data gaps. This work plan proposes a sample strategy to fill the data gaps in order to fully characterize the nature and extent of contamination at SWMU 21. It also proposes limited Confirmatory Sampling at the other five SWMUs in order to determine the presence or absence of contamination. This document also contains responses to comments generated during review of the DRAFT version of this document (memo: Hargrove to Stamps, 31 March 1999).

This document was reviewed with respect to R.61-79 of the South Carolina Hazardous Waste Management Regulations (SCHWMR), and appropriate guidance documents. Based on this review, the Division of Hydrogeology has determined that MCRD has adequately responded to these comments and sufficiently incorporated them into this FINAL version. It is therefore recommended

that this FINAL version of the RI/RFI, and SI/CS Work Plan can be approved and implemented as written.

This work plan proposes groundwater sampling at three separate SWMUs. As such, separate Monitoring Well Approvals have been written for each SWMU. These approvals are listed below and copies are attached:

Site 9/SWMU-8: Approval #HW-99-068 for two (2) temporary monitoring wells

Site 13C/SWMU-13: Approval #HW-99-069 for two (2) temporary monitoring wells

SWMU-35: Approval #HW-99-070 for one (1) temporary monitoring well

If you have any questions regarding this decision, please call me at (803)896-4033.

Attachments: HW-99-068
HW-99-069
HW-99-070



200 Bull Street
Columbia, SC 29201-1708

MONITORING WELL APPROVAL

Approval is hereby granted to:

Commanding Officer
Department of the Navy
SOUTHNAVFACENGCOM
ATTN: Art Sanford (Code 1862)
2155 Eagle Drive
N. Charleston, SC 29406

Date of Issue: 13 August 1999

Approval Number: HW-99-068

Facility: Marine Corps Recruit Depot
Parris Island, South Carolina
Beaufort County
SC6 170 022 767

For the installation of two (2) temporary monitoring wells at SWMU-8 as follows:

- 1) Two (2) shallow temporary monitoring wells to be installed at the locations specified on Figure 7-3 (attached), at depths just below the water table.
- 2) These temporary monitoring wells will be installed only long enough to obtain one (1) ground water sample at each well. Once the groundwater has been sampled, these temporary wells will immediately be abandoned according to R.61-71.10 of the South Carolina Well Standards and Regulations.

Conditions:

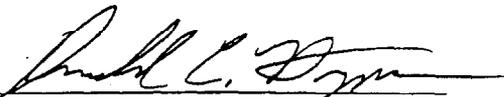
- 1) That a driller certified to operate in the State of South Carolina must install the wells. And that the certified well driller must be present during all phases of drilling, construction, and completion of these monitoring wells.
- 2) That the latitude, longitude, surveyed elevation, boring and/or geologist logs, and actual (as built) construction details for each monitoring well be submitted to the Department within thirty (30) days after installation of the last well.
- 3) All monitoring wells must be properly developed until clear, sediment-free water samples are obtained. Specific conductance, temperature, turbidity, and pH

measurements should be taken during development. A log recording the values of these parameters should be maintained during development of the wells. This log should be submitted with the "as-built" construction details required by Condition 2 above.

- 4) All well construction and sampling derived wastes, including but not limited to, drill cuttings, drilling fluids, development and purge water, must be managed properly and in accordance with all applicable state and federal requirements. If containerized, each vessel shall be clearly labeled with regard to contents, source and date of activity.
- 5) A minimum of (48) hours prior to initiation of drilling activities, provide notice to James White, District Hydrogeologist, at Low Country District EQC Office (843)522-9097.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Environmental Control's Regulation R.61-71.

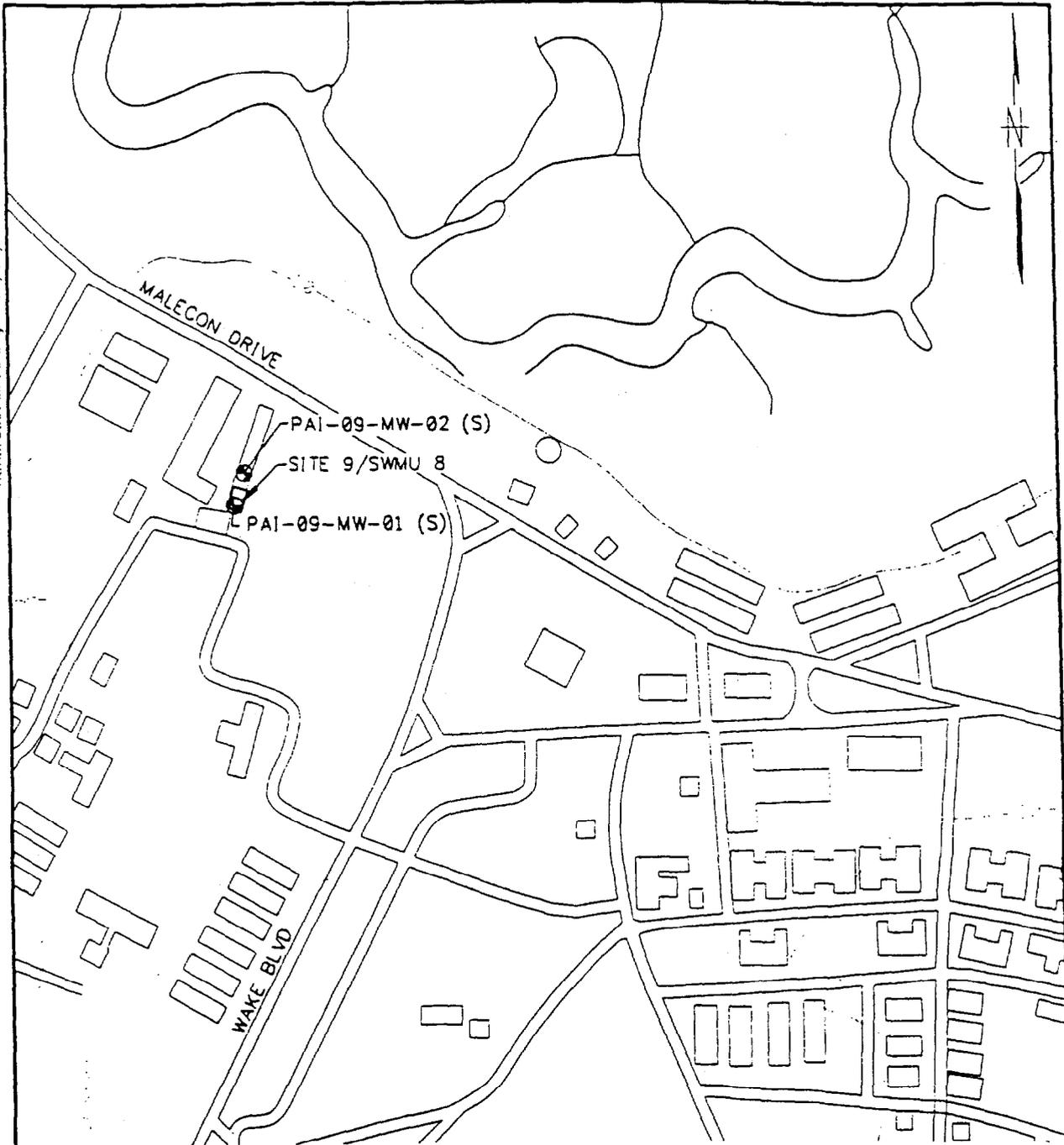
Approval granted by:


Donald C. Hargrove, Hydrogeologist
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control

Attachment: Figure 7-3, Proposed Monitoring Well Locations

cc: Jerry Stamps, Corrective Action Engineering
James White, Low Country District EQC
Kenneth Lapierre, Federal Facilities Section, USEPA Region IV

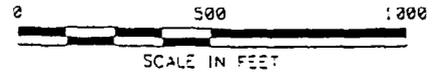
ACAD: 08995CMI16.dwg 08/11/99 MF



NOTE: AN ATTEMPT WILL BE MADE TO LOCATE PAI-09-MW-02(S) HYDRAULICALLY DOWN GRADIENT OF PAI-09-MW-01(S); HOWEVER, SURFACE FEATURES AND UTILITIES MAY IMPEDE THIS EFFORT.

LEGEND

● PROPOSED MONITORING WELL LOCATION



DRAWN BY	DATE
KW	2/9/99
CHECKED BY	DATE
COST/SCHED-AREA	
SCALE	
AS NOTED	



SITE 9/SWMU 8
PAINT WASTE STORAGE AREA
MCRD PARRIS ISLAND
PARRIS ISLAND, SOUTH CAROLINA

CONTRACT NO. 0095	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 7-3	REV. 0

FORM 3400 NC 331V.AV.DWG - REV 3 - 1/23/98

D H E C



2600 Bull Street
Columbia, SC 29201-1708

MONITORING WELL APPROVAL

Approval is hereby granted to:

Commanding Officer
Department of the Navy
SOUTHNAVFACENGCOM
ATTN: Art Sanford (Code 1862)
2155 Eagle Drive
N. Charleston, SC 29406

Date of Issue: 13 August 1999

Approval Number: HW-99-069

Facility: Marine Corps Recruit Depot
Parris Island, South Carolina
Beaufort County
SC6 170 022 767

For the installation of two (2) temporary monitoring wells at SWMU-13 as follows:

- 1) Two (2) shallow temporary monitoring wells to be installed at the locations specified on Figure 7-1 (attached), at depths just below the water table.
- 2) These temporary monitoring wells will be installed only long enough to obtain one (1) ground water sample at each well. Once the groundwater has been sampled, these temporary wells will immediately be abandoned according to R.61-71.10 of the South Carolina Well Standards and Regulations.

Conditions:

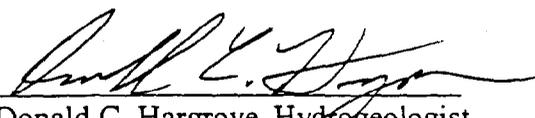
- 1) That a driller certified to operate in the State of South Carolina must install the wells. And that the certified well driller must be present during all phases of drilling, construction, and completion of these monitoring wells.
- 2) That the latitude, longitude, surveyed elevation, boring and/or geologist logs, and actual (as built) construction details for each monitoring well be submitted to the Department within thirty (30) days after installation of the last well.
- 3) All monitoring wells must be properly developed until clear, sediment-free water samples are obtained. Specific conductance, temperature, turbidity, and pH

measurements should be taken during development. A log recording the values of these parameters should be maintained during development of the wells. This log should be submitted with the "as-built" construction details required by Condition 2 above.

- 4) All well construction and sampling derived wastes, including but not limited to, drill cuttings, drilling fluids, development and purge water, must be managed properly and in accordance with all applicable state and federal requirements. If containerized, each vessel shall be clearly labeled with regard to contents, source and date of activity.
- 5) A minimum of (48) hours prior to initiation of drilling activities, provide notice to James White, District Hydrogeologist, at Low Country District EQC Office (843)522-9097.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Environmental Control's Regulation R.61-71.

Approval granted by:


Donald C. Hargrove, Hydrogeologist
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control

Attachment: Figure 7-1, Proposed Monitoring Well Locations

cc: Jerry Stamps, Corrective Action Engineering
James White, Low Country District EQC
Kenneth Lapiere, Federal Facilities Section, USEPA Region IV



Legend:

- Surface Soil Sample Location
- ⊕ Monitoring Well Sample Location

100 Feet

Source: Aerial Photograph 3-31-51, #2163 MICRD Parris Island

Tetra Tech NUS, Inc		DATE OF WORK	OWNER
SITE SWAMP 10 WERT DISPOSAL AREA D MICRD PARRIS ISLAND PARRIS ISLAND, SOUTH CAROLINA		PROJECT NO.	DATE
		FIGURE NO.	

D H E C



PROMOTE PROTECT PROSPER

2600 Bull Street
Columbia, SC 29201-1708

MONITORING WELL APPROVAL

Approval is hereby granted to:

Commanding Officer
Department of the Navy
SOUTHNAVFACENGCOM
ATTN: Art Sanford (Code 1862)
2155 Eagle Drive
N. Charleston, SC 29406

Date of Issue: 13 August 1999

Approval Number: HW-99-070

Facility: Marine Corps Recruit Depot
Parris Island, South Carolina
Beaufort County
SC6 170 022 767

For the installation of one (1) temporary monitoring well at SWMU-35 as follows:

- 1) One (1) shallow temporary monitoring well to be installed at the locations specified on Figure 7-6 (attached), at a depth just below the water table.
- 2) This temporary monitoring well will be installed only long enough to obtain one (1) ground water sample. Once the groundwater has been sampled, this temporary well will immediately be abandoned according to R.61-71.10 of the South Carolina Well Standards and Regulations.

Conditions:

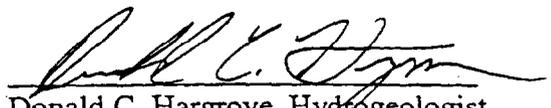
- 1) That a driller certified to operate in the State of South Carolina must install the well. And that the certified well driller must be present during all phases of drilling, construction, and completion of this monitoring well.
- 2) That the latitude, longitude, surveyed elevation, boring and/or geologist log, and actual (as built) construction details for this monitoring well be submitted to the Department within thirty (30) days after installation.
- 3) This monitoring well must be properly developed until clear, sediment-free water samples are obtained. Specific conductance, temperature, turbidity, and pH.

measurements should be taken during development. A log recording the values of these parameters should be maintained during development of the well. This log should be submitted with the "as-built" construction details required by Condition 2 above.

- 4) All well construction and sampling derived wastes, including but not limited to, drill cuttings, drilling fluids, development and purge water, must be managed properly and in accordance with all applicable state and federal requirements. If containerized, each vessel shall be clearly labeled with regard to contents, source and date of activity.
- 5) A minimum of (48) hours prior to initiation of drilling activities, provide notice to James White, District Hydrogeologist, at Low Country District EQC Office (843)522-9097.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Environmental Control's Regulation R.61-71.

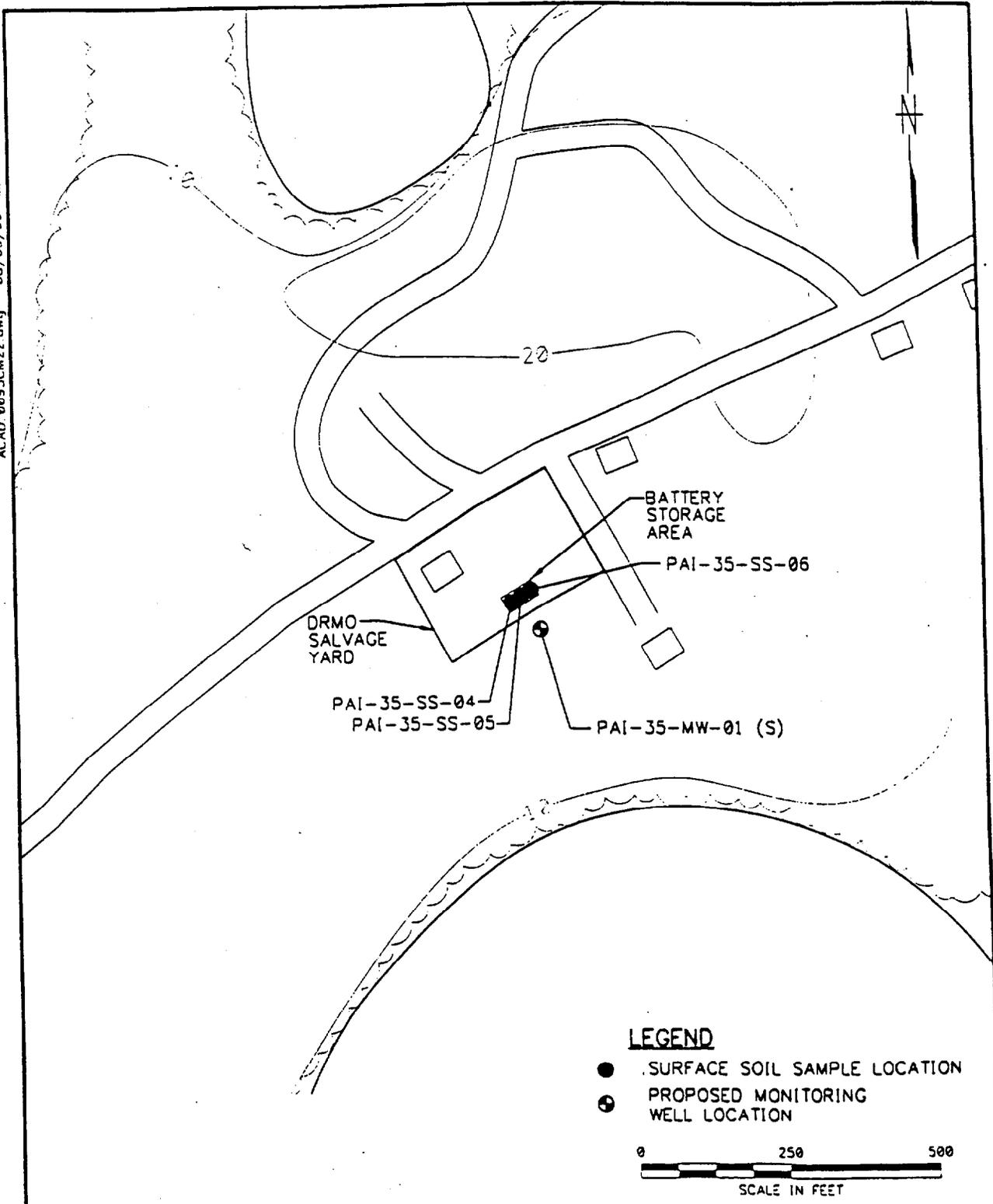
Approval granted by:


Donald C. Hargrove, Hydrogeologist
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control

Attachment: Figure 7-6, Proposed Monitoring Well Location

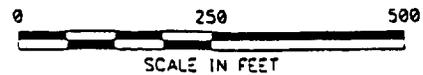
cc: Jerry Stamps, Corrective Action Engineering
James White, Low Country District EQC
Kenneth Lapiere, Federal Facilities Section, USEPA Region IV

ACAD:0095CM22.dwg 08/05/99 MF



LEGEND

- SURFACE SOIL SAMPLE LOCATION
- PROPOSED MONITORING WELL LOCATION



DRAWN BY DATE KW 2/10/99		SWMU 35 DRMO SALVAGE YARD MCRD PARRIS ISLAND PARRIS ISLAND, SOUTH CAROLINA	CONTRACT NO. 0095
CHECKED BY DATE		APPROVED BY DATE	
COST/SCHED-AREA		APPROVED BY DATE	
SCALE AS NOTED		DRAWING NO. FIGURE 7-6	REV. 0

FORM CADD NO S01V,AVJVG - REV 3 - 1/20/98