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RESPONSE TO UNITED STATES ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON REVISED CLOSURE PLAN FOR SOUTHSIDE OPEN BURNING/OPEN DETONATION UNIT CNC CHARLESTON SC

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COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION
NAVAL WEAPONS STATION
CHARLESTON, SOUTH CAROLINA

RESPONSE TO COMMENTS
REVISED CLOSURE PLAN FOR
SOUTHSIDE OPEN BURNING/OPEN DETONATION UNIT

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RESPONSE TO USEPA COMMENTS
REVISED CLOSURE PLAN FOR
SOUTHSIDE OPEN BURNING/OPEN DETONATION UNIT
NAVAL WEAPONS STATION, CHARLESTON, SOUTH CAROLINA
EPA I.D. NUMBER — SC8 170 022 620

1. Section 1.0, page 1-1 **Provide a complete description of both Solid Waste Management Unit (SWMU) 16 and SWMU 17. This includes, but is not limited to, the location of each SWMU's boundaries in relation to the OB/OD Facility, SWMU description, operational status, wastes managed and any releases detected during previous investigations.**

Descriptions of SWMUs #16 and #17 have been incorporated into Section 1.0 (page 1-3). In addition, a summary of previous investigations of these units has been incorporated into Section 2.4 (pages 2-22 through 2-23). Appendices B, H, I, and J of the Plan provide more detailed descriptions of previous investigations of these units.

2. Section 2.2, page 2-2 **Clarify the discrepancy between this closure plan, which states that no supplemental materials (such as diesel fuel) were used during the burning operations, and the RCRA Facility Assessment (RFA), which states that diesel fuel was poured on ordinance for burning. If diesel or other similar materials were not used in the burning of ordinance, describe how the ordinance was burned.**

The RCRA Facility Assessment (RFA) conducted at NWS Charleston in 1988 states that supplemental materials such as diesel fuel were used to facilitate burning operations. However, further research indicates that no such materials were used. Rather, ignition of explosives was accomplished by placing an explosive squib or safety fuse in a small pile of small web (powder grains) smokeless powder located so as to overlap the edge of the explosives to be burned. An electric squib firing system was used to remotely detonate the ignition materials. This procedure is still used at the NWS Charleston operational OB/OD facility. The procedure is described in greater detail in Section D of the facility Part B permit application, included as Appendix A of the Plan. This information has been incorporated into the Plan in Section 2.2 (page 2-3).

3. Section 2.2, page 2-3 **Describe how regulated explosives and munitions were managed at the time of closure and how they are currently managed.**

A description of how regulated explosives and munitions are currently managed and how they were managed at the time usage of the unit ceased has been incorporated into Section 2.2 (page 2-2). This information is described in greater detail in Section D of the existing NWS Charleston Part B permit application for open burning/open detonation

activities; pertinent portions of Section D of the Part B application have been included as Appendix A of the Plan.

4. Section 2.4, page 2-21 **Delete the statement that the methylene chloride found in some samples is a laboratory contaminant. Consider it a field contaminant unless a laboratory blank can confirm it originated in the lab.**

The referenced statement has been removed and methylene chloride has been added to the required analyses in Tables 4-1 (page 4-2) and 4-2 (page 4-25) within Section 4.0 of the Plan.

5. Section 4.0, page 4-1 **The strategy must include closure by removal followed by verification sampling that assures no further risk to human health or the environment.**

The overall strategy within Section 4.0 has been adjusted to reflect the closure by removal approach. Verification sampling has also been incorporated into Section 5.0 (page 5-2).

6. Section 4.0, page 4-1 (also Sections 4.1.2, 4.1.3, 4.4) **The evaluation of potential contaminants must be assessed to site specific background concentrations. The RCRA Facility Assessment Health and Environmental Assessment (RFI HEA) that you propose and EPA established health and environmental criteria are unacceptable for the assessment of this facility.**

Section 4.0 has been revised to eliminate the proposed RFI HEA cleanup levels. Rather, Section 4.0 now states that site cleanup levels will be based upon entirely upon site specific background levels.

7. Section 4.0, page 4-1 **It is not appropriate to base clean-up levels for contaminants of concern on an RFI Health and Environmental Assessment (HEA). An environmentally conservative approach is needed to assure no further risk to human health and the environment. The demonstration should be conservative in the sense that it eliminates the uncertainties associated with contaminant fate and transport that can result from an RFI HEA. Assessment of the contamination at the site must be done by comparing samples to background concentrations. See the Federal Register, March 19, 1987, Interim Status Standards for owners and operators of**

Hazardous Waste Treatment, Storage, and Disposal Facilities; Final Rule, Page 8707. Also see the Draft Surface Impoundment Clean Closure Guidance Manual, EPA/530-SW-87, page 3-10.

Section 4.0 has been revised to eliminate the proposed RFI HEA cleanup levels. Rather, Section 4.0 now states that site cleanup levels will be based entirely upon site specific background levels.

8. <u>Section 4.1, page 4-2 and Table 4-1</u> **Include trinitrobenzene (TNB) and dinitrobenzene (DNB) for constituent analysis in Table 4-1 or provide sufficient justification as to why these nitroaromatics should not be analyzed. Also, report any Tentatively Identified Compounds (TICs) found during the investigation (especially using methods 8240 and 8270) since many breakdown products are probably present.**

TNB and DNB have been added to Table 4-1 on pages 4-2 and 4-3. Section 4-1 (page 4-4) has also been revised to require the reporting of any TICs found during the investigation.

9. <u>Section 4.1.1, page 4-5</u> **Soil samples should be collected at no greater than 2 foot intervals, beginning at a depth of zero to six inches, and proceeding to a depth of 6 to 6.5 feet or to the water table. The proposed sampling depth of zero to 6 inches for obtaining both biased and unbiased surface soil samples appears to be inconsistent with open detonation practices. Open detonation occurs in pits constructed to a depth of approximately 4 feet, which is consistent with surface water sampling of the abandoned disposal pits as proposed in Section 4.3.**

Section 4.1 of the Plan, which addresses soil sampling procedures, has been revised such that all soil sampling at all locations will include subsurface samples to a depth of seven feet or to the water table. These samples will be taken at depths of 1.0-3.0, 3.0-5.0, and 5.0-7.0 feet below grade, or until groundwater is encountered. The site geologist may incorporate reduced sampling intervals to provide more discrete samples based upon site conditions. However, subsurface samples will not be obtained at intervals of greater than 2 feet. This should ensure detection of any subsurface contamination from past detonation practices in pits.

10. <u>Section 4.1.1, page 4-5</u> **The Plan states that twelve biased samples are to be taken "...from the area where OB/OD activities are known to have occurred..."**

Experienced sampling personnel should have the authority to take as many biased samples as necessary to ensure adequate coverage of any suspect areas, without being limited to twelve samples.

Section 4.1.1 (pages 4-4 to 4-10) has been revised to enable the site geologist to incorporate additional sampling points in order to ensure adequate coverage of the site.

11. <u>Section 4.1.1, page 4-7</u> **Explain the discrepancy in this section which states that unbiased samples will be taken at a 20 foot grid, then states in the same paragraph that samples will be taken at a 50 foot grid interval.**

A 20-foot grid interval will be used. Section 4.1.1 (page 4-7) has been revised to incorporate this correction.

12. <u>Figure 4-2</u> **Explain the discrepancy between the text which states that 12 biased samples will be taken and this figure which shows only 11 biased soil sample locations.**

Figure 4-2 (page 4-8) has been revised both to correct this discrepancy and to address site features not identified in earlier revisions of the Closure Plan. Twelve biased soil samples will initially be taken, as are now shown on Figure 4-2.

13. <u>Section 4.1.1, page 4-9</u> **EPA's protocols for laboratory work must be followed, the requirements of the analytical laboratory will <u>not</u> be the primary reference if they do not use SW-846 methods. Some lab procedures may be modified under certain conditions, however, EPA must approve of any changes. When a lab is chosen, submit the QA/QC plan to EPA for approval.**

Sections 4.1.1 (page 4-9) and 4.2.3 (page 4-24) have been revised to state that all containerization and preservation requirements specified by the analytical laboratory will be followed, provided they meet the requirements of Appendix A of the ECBSOPQAM, which will serve as the primary reference.

14. Section 4.1.1, page 4-10 **Include the location of all known abandoned disposal pits on a site map that also shows the proposed sampling locations.**

All known abandoned detonation pits have been shown on Figure 1-1 (page 1-2) and Figure 4-2 (page 4-8). Figure 4-2 also shows the proposed sampling locations.

15. Section 4.1.1, page 4-10 **If samples to be analyzed for non-volatiles are to be composited, then the samples should be collected at intervals of no more than two feet. The Plan states that the site geologist has the authority to alter the proposed soil boring sampling intervals which are listed as 0-1, 1-3, 3-5, 5-7, 7-9, and 9-11. The intervals may be shortened to provide more discrete samples, but intervals greater than the two feet proposed allow compositing over too great a volume of soil to acquire a meaningful sample.**

During verification sampling after removal, however, discrete samples must be taken from the remaining soils to show that whatever is left poses no risk to human health or the environment.

Section 4.1.1 has been revised state that the sampling interval for nonvolatile samples shall be no greater than two feet. Also, Section 5.2 (page 5-3) has been revised to state that discrete samples only are to be used for verification sampling following excavation.

16. Figure 4-3, page 4-11 **Propose an alternate naming scheme for the monitoring wells in the revised Work Plan and the monitoring well installation approval request. The Plan refers to the proposed monitoring wells as MW-1, MW-2, etc. While naming scheme is sufficient within the context of this Plan, it will become confusing within the context of the NWS as a whole. Each well on the NWS should have a unique name.**

The monitoring well naming scheme in Section 4.0 (page 4-18) has been revised such that the wells are designated as NWS-SWMU18-1 through NWS-SWMU18-6. The basewide well designation scheme generally refers to an associated building number; however, the OB/OD unit is not near or associated with any buildings. The wells have therefore been referenced to the unit's SWMU number.

17. Section 4.1.2, page 4-13 **Propose an alternate statistical method if Equation 6 of SW-846 is deemed inappropriate during the investigation. Using Equation 6 with such a limited sample population may or may not be appropriate for the**

establishment of background concentrations. For this equation to be accurately employed, the sample population must not depart too markedly from normality (i.e., sample distribution close to symmetric)

Sections 4.1.2 (page 4-14) and 4.2.4 (page 4-38) address statistical evaluation using a limited number of background soil and groundwater samples. These sections have been revised to state that, should background samples from multiple locations be obtained, the background level will be determined statistically, following the procedure presented in SW-846, Chapter 9, specifically Equation (6), using at least four background samples. The t-value representing a confidence interval of 80 percent will be used in the computation of the background level. In the event that the standard deviation of the background samples is very high, leading to the suspicion that the samples are coming from a non-normal population, background sampling efforts will be expanded to attempt to obtain an accurate estimate of mean levels. In the event that the increased number of samples also appears indicative of a non-normal population, an 80 percent non-parametric tolerance interval will be used.

18. <u>Section 4.1.4, page 4-16</u> **Propose additional groundwater monitoring well(s) and soil borings to assess the possible contamination resulting from the mercury batteries and propose to determine their locations after the batteries are found. The Plan currently proposes only one soil boring and one monitoring well to be placed to the east of the area where the batteries are believed to be located. Based on Figure 1-1 and 4-3, the only well east of the mercury waste burial site is MW-4, which is approximately 150 feet to the southeast. It is likely that this well will not be effective in assessing the extent of any mercury contamination. A more prudent means of sampling for effects of mercury contamination is to install a well <u>after</u> the batteries have been located and removed.**

The surface soil sampling locations in Section 4.1.1 have been revised so that three subsurface soil sampling points will be located in the mercury battery area noted on Figure 4-2. The monitoring well locations have also been shifted so that two monitoring wells are located northeast and southeast of this area. This information is reflected in Section 4.1.4 (page 4-16). Section 4.1.4 also states that an additional monitoring well, designated as NWS-SWMU18-7, will be installed adjacent to the mercury battery excavation area to evaluate for mercury contamination in groundwater after discovery of the mercury batteries. This well will be permitted by SCDHEC prior to installation.

19. <u>Section 4.2.1, page 4-16</u> **Clarify the statement that describes the background well, MW-6, as being both upgradient and perpendicular to groundwater flow. By**

definition, this is not possible. If the groundwater flow is uncertain, then propose to investigate it more thoroughly. If MW-6 is determined not to be upgradient when the groundwater flow direction is confirmed, then move MW-6 or add an additional well.

Section 4.2.1 (page 4-18) has been revised to state that the background well will be installed in an area presumed to be upgradient based on the present groundwater elevation data. Given the likelihood that tidal influence is causing periodic reversals in groundwater flow direction, an area *northeast* (perpendicular to groundwater flow direction) of the site has been selected as a background location. Groundwater flow direction and tidal influence will be determined by this investigation.

Section 4.2.2 describes the methods by which groundwater flow direction and tidal influence will be determined.

20. <u>Section 4.2.1, page 4-16</u> **Reconsider the location of the background well. The proposed background well, MW-6, is somewhat downgradient of the hardstand area which may influence the quality of the groundwater in the well. Unless an additional well, closer to the hardstand, can show that MW-6 is not being influenced by the hardstand, the background well may need to be moved to a more pristine area, perhaps to the east of the hardstand.**

Also, consider the tidal influence in this area. One background well installed at some distance (approximately 250 feet) from the site should be considered a preliminary phase of the determination of background. The tidal influences cause the groundwater flow directions to be variable and difficult to predict, therefore, determination of background concentrations is difficult. Any detection of possible contaminants in the background well should be investigated with additional wells.

Section 4.2.1 (page 4-18) has been revised to state that the background well will be installed in an area presumed to be upgradient based on the present groundwater elevation data. Given the likelihood that tidal influence is causing periodic reversals in groundwater flow direction, an area *northeast* (perpendicular to groundwater flow direction) of the site has been selected as a background location. Based upon the existing groundwater data, this location should not be influenced by the hardstand. However, groundwater flow direction will be determined during this investigation, and alternative background locations designated if the flow direction differs from the assumed direction. Section 4.2.2 describes the methods by which groundwater flow direction will be determined.

Section 4.2.4 (page 4-37) has been revised to address tidal influences on background levels. In order to determine any possible effects of tidal influences as well as to compare any fluctuations in background levels over time, Section 4.2.4 now states that monitoring well NWS-SWMU18-6 will be sampled both following well installation and during the primary sampling activities. According to the closure schedule in Section 6.0, there will a period of approximately 2 months between these sampling evolutions. If there is greater than a twenty percent disparity between levels for any constituent, three additional background wells will be installed per the procedures described in Section 4.2.1. The locations of the additional background wells will be determined by the project manager based upon existing site conditions and flow direction.

21. <u>Section 4.2.1, page 4-16</u> **Propose additional well(s) in the area northeast of the OB/OD unit. Monitoring wells MW-1 through MW-5 enclose the OB/OD area fairly well, with the exception of the northeast site, toward the hardstand area. An additional well in the hardstand is needed to determine the full extent of groundwater contamination.**

The monitoring well locations on Figure 4-2 (page 4-8) have been adjusted so that the OB/OD unit is more thoroughly bracketed. Two wells are now located east of the unit, one in the vicinity of the hardstand area.

22. <u>Section 4.2.1, page 4-17</u> **Purge monitoring wells with low flow pumps since bailers could cause turbidity. Turbid groundwater samples are not acceptable.**

Sections 4.2.1 (page 4-21) and Section 4.2.3 (page 4-22) have been revised to state that monitoring well water will be purged using either a peristaltic, bladder, or Grundfos-type (helical rotor submersible) pump with a Teflon™ vacuum container, depending on the depth of the well. All pump tubing will be constructed of a Tygon™- or Teflon™-lined material. If a pump is ineffective or impractical for successful purging, a Teflon™ bailer with a stainless-steel leader will be used.

23. <u>Section 4.2.1, page 4-17</u> **Conduct a sieve analysis to determine the appropriate slot size for the monitoring well screens. The proposed 0.010 slot screens may not be acceptable.**

Section 4.2.1 (page 4-18) has been revised to state that the grain size of the sand pack and the monitoring well screen slot size will be determined by the results of one or more (more will be necessary when distinct changes in lithology are observed) grain size

analyses. The filter pack materials shall consist of well-rounded to rounded, clean, silica sand. Filter pack material of varying grain sizes will not be used. As a general rule, the material must have a uniformity coefficient of 2.5 or less.

A procedure for conducting the grain size analysis is provided on page 4-19 and 4-20 of the Plan.

24. **Section 4.2.1, page 4-17 Propose in the Work Plan and the monitoring well installation approval request that the maximum depth of sand backfill will be 2 feet. The Plan states that "The depth of sand backfill [for monitoring wells] will vary for each well, with a minimum depth of 2 feet above the slotted screen." The filter pack should not extend more than 2 feet above the top of the screen.**

Section 4.2.1 (page 4-18) has been revised to state that the depth of sand backfill will vary for each well, with a *maximum* depth of 2 feet above the slotted screen.

25. **Section 4.2.1, page 4-17 Propose in the Work Plan and the monitoring well approval request the specific type of bentonite mixture to be used in the monitoring wells.**

Section 4.2.1 (pages 4-18 through 4-21) has been revised to state that a bentonite seal, with a minimum thickness of 2 feet, will be placed on top of the sand backfill. The bentonite will be allowed to hydrate for a minimum of 8 hours to allow for complete swelling of the seal. Upon hydration of the bentonite, the remaining annulus of the borehole will be grouted with a pumpable slurry of high solids bentonite and water (approximately 6 gallons of water to each 94 pound bag of bentonite) [Note: due to the shallow groundwater depth, the thickness of sand above the top of the screened interval and the bentonite seal may vary due to the distance between ground surface and the top of the screened interval].

26. **Section 4.2.1, page 4-17 Propose to install the wells above grade and on a concrete pad with protective bumper posts, rather than flush-mounted with protective casings as proposed.**

Section 4.2.1 (page 4-18) has been revised to state that a 3 foot by 3 foot by 6 inch elevated, outwardly sloping wellhead pad will be installed for monitoring wells. The pad will extend six inches below the ground surface. A locking cap will also be installed to preserve the integrity of the well. Due to the planned excavation activities in the area, four steel protective posts will be installed around each well to protect the well integrity.

If the well will be placed in a traffic location, a flush-mounted pad will be utilized to prevent damage to well integrity from vehicular traffic.

27. Table 4-2 **Provide the quantitation limits that the chosen lab can achieve. The quantitation limits proposed in Table 4-2 were taken directly out of the Federal Code of Regulations and are the standards a lab should be able to achieve, however, we must have the actual lab's data. Submit this information when a lab is chosen.**

Section 4.2.3 (page 4-22) has been revised to state that the quantitation limits provided in Table 4-2 are the regulatory standards required by SW-846, Third Edition, Revision 1. Upon selection of an analytical laboratory, such quantitation data will be obtained and submitted to U.S. EPA and SCDHEC for approval. Since this project must accommodate Federal Acquisition Regulations which must be followed in awarding contracts for the various activities, it is impossible to select a laboratory at this time.

28. Section 4 **The Closure Plan must address investigation derived waste (IDW) management procedures.**

Section 4.4 (page 4-41) has been added to address management of IDW. Additionally, Appendix S has been added to provide specific IDW management procedures.

29. Section 4.2.4, page 4-21 **Propose a time frame for taking the samples for the background well. Because groundwater is a mobile medium, several samples should be taken over a period of time. Samples taken quarterly over a year would be preferable.**

Section 4.2.4 (page 4-37) has been revised to address the time frame for taking background groundwater samples. Quarterly sampling over a one-year period does not appear feasible since it will result in the closure schedule being extended by 365 days. However, in order to determine any possible fluctuations in background levels over time, Section 4.2.4 now states that monitoring well NWS-SWMU18-6 will be sampled both following well installation and during the primary sampling activities. According to the closure schedule in Section 6.0, there will a period of approximately 2 months between these sampling evolutions. If there is greater than a twenty percent disparity between levels for any constituent, three additional background wells will be installed per the procedures described in Section 4.2.1. The locations of the additional background wells will be determined by the project manager based upon existing site conditions and flow

direction. If necessary to further resolve background fluctuations, sampling will also be conducted during the secondary sampling period during Step II of the project.

30. Section 4.3, page 4-35 **Do not allow run-off from excavation activities to enter the Goose Creek Tidal Marsh. Propose specific precautions which will capture run-off from excavated areas since it is not yet known how contaminated it might be.**

The heavy vegetation currently at the unit makes it difficult to adequately evaluate its current runoff characteristics. For this reason, along with the fact that the extent of contamination has not yet been determined, it is not possible to design a specific surface water collection system at this point in the investigation/corrective action process. However, it is anticipated that the entire unit will be bermed to prevent both runon into and runoff from the area. A collection pond will be installed with appropriate drainage. Section 4.3 (pages 4-39 to 4-41) has been revised to describe this process. Prior to any correction action excavation activities, a Storm Water Pollution Prevention Plan will be developed and submitted to USEPA and SCDHEC for approval. Appropriate NPDES permitting requirements will be followed, as described in Section 4.3 (pages 4-39 to 4-41).

31. Section 4.3, page 4-35 **Provide the radius of each pit in the text and on the site map provided in the previous comment. The Work Plan states that "...only one grab sample will be collected from each pit due to the limited depth and radius of the pits." There is no mention of what the radii of the pits are. Since this information is a basis for the number of samples to be taken, it should be provided in the Work Plan.**

Two former demolition pits are known to exist within the unit. These units are shown in Figure 4-2 (page 4-8). The pits have radii of fourteen feet and ten feet, as shown in Figure 4-1 and described in Section 4.3 (page 4-39).

32. Section 4.6, page 4-39 **Explain the statement "The lower detection limits for all contaminants analyzed per the procedures in the USEPA Publication SW-846, Test Methods for Evaluating Solid Waste, Third Edition, shall be corrected for the Practical Quantitation Limit (PQL)." The detection limit and the PQL are not the same thing. Plus, both of these limits depend upon the laboratory equipment and expertise of the analysts. Explain how they can be corrected.**

Section 4.6 (pages 4-43 and 4-44) has been revised to clarify the discussion of the QA/QC program. Quality assurance and quality control objectives are used to provide analytical data of known, consistent, and defensible quality. Data quality objectives are the qualitative and quantitative statements reflecting the requirements for precision, accuracy, completeness, representativeness, and comparability. Specific activities to accomplish these objectives include the use of blanks, spikes, duplicates, laboratory control samples, and calibration verification standards.

For this project, all soil and water analyses will be performed in accordance with the procedures listed in Tables 4-1 and 4-2. For all parameters, the laboratory-established method detection limits must be lower that the Practical Quantitation Limits (PQLs) designated in USEPA Publication SW-846, Test Methods for Evaluating Solid Waste, Third Edition. PQLs are the normal reporting limits for routine environmental samples; for samples which are highly contaminated or contain interfering substances, the PQLs may be elevated by a dilution factor. A copy of the laboratory QA/QC plan will be submitted to USEPA Region IV and SCDHEC for review upon selection of an analytical laboratory.

Analytical Quality Assurance and Quality Control will be confirmed through analysis of two matrix spikes, two matrix spike duplicates, and two laboratory blanks for both soils and groundwater. In accordance with the ECBSOPQAM (Section 4.3.3) Data Quality Objective Level III (included in Appendix M of this plan), a minimum of one *equipment rinse blank* per week will be collected and analyzed for the appropriate analytes. A *preservative blank* will be collected and analyzed for the appropriate analytes prior to the beginning of and at the end of the study. In addition, one *field blank* per week will be collected and analyzed for the constituents of concern for that week. A *trip blank* will accompany all shipments containing VOC samples.

33. Section 4.11, page 4-42 Include a contingency plan if no hot water is available for field decontamination.

Section 4.11.3 (pages 4-47 and 4-48) has been revised to state that if hot water or high pressure steam is not available, the decontamination procedure described in Section 4.11.4 (page 4-48) will be used for decontamination of non-sampling equipment. If this is not feasible, field activities shall be suspended until hot water or high pressure steam is restored.

34. Section 6.0, page 6-1 **Submit the Closure Plan to both SCDHEC and the U.S. EPA for approval.**

Section 6.0 (page 6-1) has been revised to incorporate both regulatory agencies.

35. Section 6.0, page 6-2 **The RCRA Facility Investigation (RFI) activities should not affect the closure schedule. The OB/OD unit is a regulated unit and not part of the RFI. The standard time frame for clean closure activities is 180 days. Provide justification for the requested 465-day extension.**

Section 6.0 and the schedule in Figure 6-1 (page 6-2) have been revised to remove all references to RFI activities.

36. Section 7.0, page 7-1 **Submit the Certification of Closure to both SCDHEC and the U.S. EPA.**

Section 7.0 (page 7-1) has been revised to incorporate both regulatory agencies.

37. Section 8.0, page 8-1 **Submit Closure/Post Closure plans to both the EPA and SCDHEC, however, approval will be granted by the EPA. All post closure activities must be in accordance with the appropriate 40 CFR §265 regulations. If clean closure cannot be achieved, the NWS must prepare a post closure plan in accordance with 40 CFR §265.118.**

Section 8.0 (page 8-1) has been revised so that plans are submitted to both regulatory agencies. Section 8.1 has also been revised in its entirety to address both federal 40 CFR 265 regulations as well as the South Carolina Hazardous Waste Management Rules. If clean closure cannot be achieved, the NWS will prepare a post closure plan in accordance with 40 CFR §265.118, as shown in Section 8.0, page 8-1.

38. Section 8.2, page 8-4 **Correct or explain the statement: "If clean closure cannot be achieved within 60 days of completing cap construction, NWS will submit a survey**

plat to the local zoning authority..." A clean closure means no waste is left is place and therefore, a cap would not be needed.

Section 8.2 (page 8-4) has been revised to state that if *certification of closure* cannot be achieved within 60 days of completing cap construction, NWS Charleston will submit a survey plat to the local zoning authority...

39. Appendix O **When more information on the actual lab procedure is available (this will depend on the chosen lab) please submit this information for review. The information submitted was not sufficient to make a determination on the acceptability of the procedure.**

Further information on the laboratory procedure in Appendix O will be submitted when developed by the chosen analytical laboratory. Since this project must accommodate the Federal Acquisition Regulations which must be followed in awarding contracts for the various activities, it is impossible to select a laboratory at this time.