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MCAS EL TORO
SSIC #5090.3

County of Orange
California

Gary Simon
Executive Director

MCAS El Toro
Local Redevelopment
Authority

March 1, 2001

Mr. Dean Gould
BRAC Environmental Coordinator
MCAS El Toro
P.O. Box 51718
Irvine, CA 92619-1718

Subject: Draft Responsiveness Summary – Final Proposed Plan for Operable Unit 3B Site7, Drop Tank Drainage Area No. 2 and Site 14, Battery Acid Disposal Area

Dear Mr. Gould:

Last year, the Department of Navy/United States Marine Corps (DON/USMC) issued two documents: 1) Phase II Remedial Investigation Report, Attachments O and P, Operable Unit-3B, Sites 7 and 14 dated March 2000, and 2) Draft Proposed Plan for Operable Unit 3B, Sites 7 and 14 dated September 2000 for the former MCAS El Toro.

On November 8, 2000, the MCAS El Toro Local Redevelopment Authority (LRA) transmitted to DON/USMC a written Memorandum prepared by the LRA's technical consultant in which a number of issues were raised concerning the DON/USMC's proposed No Further Action at these Sites.

In January of this year, DON/USMC issued a responsiveness summary to comments received from the LRA and the public. After reviewing the DON/USMC's responsiveness summary, we felt that we may have not been clear on some of the questions we raised in our November 8, 2000 letter. As such, the LRA's consultant prepared the attached Memorandum to clarify those questions and added a few questions regarding issues discussed in the DON/USMC's responsiveness summary. Obtaining a response to our questions will help us in planning the reuse of the MCAS El Toro.

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Thank you for the opportunity to review the responsive summary. Should you have any questions concerning this letter or the attached Memorandum, please feel free to call Polin Modanlou of my staff at (714) 834-3156.

Sincerely,

Gary Simon
Executive Director

Attachment

cc: Members, Board of Supervisors
Michael Schumacher, Ph.D, CEO
Nicole Moutoux, USEPA
Triss Chesney, DTSC
John Broaderick, CRWQCB
Michael Wochnick, CIWMB
Steve Sharp, HCA

M E M O R A N D U M

TO: Polin Modanlou, MCAS El Toro Master Development Program

FROM: Bertrand S. Palmer, Ph.D., P.E., GeoSyntec Consultants
Bob Demott, Ph.D., GeoSyntec Consultants

DATE: 1 March 2001

SUBJECT: **Review of Draft Responsiveness Summary**
Final Proposed Plan for Operable Unit 3B
Site 7, Drop Tank Drainage Area No. 2 and
Site 14, Battery Acid Disposal Area.
Marine Corps Air Station, El Toro
Orange County, California

INTRODUCTION

Last year, the Department of Navy/United States Marine Corps (DON/USMC) issued two documents regarding Site 7, Drop Tank Drainage Area No. 2 and Site 14, Battery Acid Disposal Area. These two documents are the "Phase II Remedial Investigation Report, Attachments O and P, Operable Unit-3B, Sites 7 and 14, Marine Corps Air Station (MCAS), El Toro, California" (RI), dated March 2000 and the "Proposed Plan for Operable Unit 3B, Sites 7 and 14 at Marine Corps Air Station El Toro" (Proposed Plan), dated September 2000. The RI provides a summary of the nature and extent of contamination at Operable Unit (OU)-3B, Sites 7 and 14, and provides fate-and-transport and human health risk assessment for chemicals of potential concern at these sites. The RI also includes recommendations for future work and potential remediation at these sites. The Proposed Plan is a summary of the work performed in the RI and is designed to be given to the public for comments before publication of the Record of Decision (ROD).

The Local Redevelopment Authority (LRA) performed a review of the RI and the Proposed Plan and prepared written comments, which were provided to DON/USMC in a letter and a memorandum dated 8 November 2000.

In response to the comments received from the LRA and the public, DON/ USMC issued a Responsiveness Summary (RS). GeoSyntec Consultants (GeoSyntec) has performed a preliminary review of the RS. The purpose of this memorandum is to summarize GeoSyntec's comments, issues, and questions regarding the RS and to provide additional follow-up questions regarding the RI and the Proposed Plan.

DISCUSSION

Based on GeoSyntec's review of the RS, it appears that DON/USMC may not have completely understood some of the questions or issues raised by the LRA in its letter and memorandum dated 8 November 2000. The purpose of this memorandum is to reformulate or clarify some of these questions. In addition, GeoSyntec has added a few questions regarding issues discussed in the RS. Obtaining a response to these questions will help the LRA in planning the reuse of MCAS El Toro. The following is a description of issues and questions identified by GeoSyntec:

Response to Comments 2B

In response to GeoSyntec's comment, DON/USMC indicates that the soil would effectively neutralize acid wastes disposed at Site 14 and, therefore, DON/USMC did not test the soil for pH. GeoSyntec is aware of the soil's general buffering ability. However, considering the substantial volume of battery acid (sulfuric acid) disposed at the site (210 gallons) (see RI at page P1-2), the soil may have gradually lost its ability to neutralize the acid. This would have resulted in potentially low pH in the soil and increased mobility of other contaminants (such as metals) in the vadose zone and possibly the groundwater. Considering that a soil pH test is a very cost-effective manner to definitively determine whether soil buffering capability has been sufficient for the volume of waste discharged (less than $15/test), GeoSyntec believes that DON/USMC should have tested the soil, rather than speculate as to the potential for these soils to neutralize acid wastes. Such speculation increases the uncertainty in the risk characterization of the soils, weakening the Point-of-Departure evaluation provided

by DON/USMC. Since DON/USMC must convince risk managers and potential future users of the protectiveness of their preferred remedial strategy through such a Point-of-Departure evaluation (i.e., the quantitative risk estimates in and of themselves do not rule out potential risks), readily available measurements should be incorporated instead of speculative hypotheses.

Response to Comment 2C

DON/USMC's response to this comment does not adequately address the significant issues raised. In its response, DON/USMC confirms that sampling locations were randomly positioned at each site to produce an "unbiased configuration" of sampling locations. Thus, this sampling methodology does not target known chemical discharge points. Considering that DON/USMC has discharged chemicals at discrete points during operations at MCAS El Toro, DON/USMC should have sampled at locations that were known discharge points (directed sampling), in addition to randomly-selected locations. While random sampling is the correct approach for determining ***overall*** concentrations at a site, directed sampling is specifically required to characterize known discharge or disposal locations. This is significant to risk managers who want to know not only the risks over an entire area, but also whether certain locations ("hotspots") present a specific risk issue.

Also, the use of overall site representations as exposure concentrations is only appropriate where the same types and levels of exposures are anticipated to occur across the entire site. In other words, random sampling of an area is applicable where exposure is anticipated to occur randomly across the same area. We do not believe that the overall (average) concentrations are sufficient to characterize all potential risks at Site 7 and 14 given the potential future uses of these sites. For example, a small park would be substantially smaller than the area that was randomly sampled. Accordingly, the overall concentration cannot be assumed to be representative for each potential lot. This is a well known issue in developing Conceptual Site Models that represent potential exposures at a site, and USEPA guidance directs that similar spatial scales be considered between potential exposure areas and sampling locations.

Where a randomly sampled area is substantially larger than the area over which exposure is anticipated, a further level of analysis is required prior to accepting the overall concentrations as appropriate for evaluating receptor risks. Such analysis can take the form of a statistical demonstration that the overall site concentrations are substantially homogeneous (i.e., that particular sub-areas with substantially higher concentrations are not anticipated). However, in our experience, where specific waste disposal locations have been identified, sampling and determination that these areas do not represent hotspots typically is required, in addition to the determination of the overall (average) concentration.

The risk estimates used by DON/USMC are based on average (specifically, 95% upper confidence limits of the mean) concentrations determined at randomly selected sampling locations. The inability of DON/USMC to identify localized areas (due to the lack of sampling) with potentially much higher concentrations (as suggested by their identification of specific disposal locations) is a substantial limitation with regard to determining actual human health risk and the appropriateness of future land uses at particular locations on a given IRP site. As an example, DON/USMC has not considered the highest soil lead concentration (931 mg/kg observed at Site 7 or 923 mg/kg observed at Site 14) as an indicator of the need for further evaluation or remediation. Dismissing such levels is premature in light of the uncertainty as to whether the lead concentrations in the specific locations where batteries were drained have been characterized. Presuming a reuse scenario where exposure of children to lead in soil would be most relevant, it is not the average concentration across several acres that is relevant, it is the potential concentration in a given area. There is inadequate delineation to confidently conclude that some particular area would not end up with lead levels in the 900 mg/kg range instead of the overall average range. In short, a more appropriate approach would include remediation of hotspots to reduce potential human health risk at Sites 7 and 14.

Response to Comment 2D

GeoSyntec is aware of the differences between Total Petroleum Hydrocarbon (TPH) and Total Recoverable Petroleum Hydrocarbon (TRPH). GeoSyntec is also aware of the approach used by DON/USMC to base the need for site remediation solely on a human health risk-based assessment. However, GeoSyntec's comment still has not been addressed by DON/USMC and is further explained hereafter:

TRPH and TPH (as diesel) concentrations measured at Site 7 are 32,091 mg/kg and 426 mg/kg, respectively (Sample No. 07_GN1 at 0-foot depth). This data indicates that Petroleum Hydrocarbon present at the site is likely to be fairly "heavy" (consistent with the fact that jet fuel and lubricating oil were discharged at the site). (DON/USMC indicates that this difference could be due to the presence of non-petroleum hydrocarbon. It is possible, but far from certain, at a site where 22,000 gallons of jet fuel and/or lubricating oil have been disposed). At Site 14, TPH concentrations (as diesel) exceed 11,000 ppm in a sediment sample collected in the catch basin.

This data and the results of human health risk assessment do not mean that leaving the Petroleum Hydrocarbon in place at Site 7 or 14 is adequately protective of human health and the environment. On the contrary, Regulatory Action Levels typically used by The Orange County Health Care Agency (OCHCA) for clean-up of sites contaminated by heavy hydrocarbons ranges from 100 to 1000 PPM by Method 418.1 (i.e. TRPH). The existing TPH or TRPH concentrations at Sites 7 and 14 are greater than action levels used in Orange County. Thus, Petroleum Hydrocarbon should be remediated by DON/USMC at Sites 7 and 14.

Response to Comment 2E

DON/USMC states in the RI that arsenic is responsible for a large part (50 percent at Site 7 and 40 percent at Site 14) of the carcinogenic risks at Sites 7 and

14 (see RI at pages O7-5 and P7-2). DON/USMC adds that the arsenic concentrations at Site 7 are not attributable to known historical site activities, and that Sites 7 and 14 may have background concentrations in the upper part of the range of statistically characterized background concentrations of arsenic for MCAS El Toro.

While this is one possible interpretation of the analytical results, additional information and identifiable alternative interpretations need to be specifically considered. Just because the reported values fall within the background concentrations does not necessarily support the position that there was no site-related contribution. Historical site usage and the potential for such activities to result in discharges should have been discussed to clearly establish that no identifiable site contributions would be anticipated to supplement whatever background concentration of arsenic may be present.

DON/USMC has stated that the potential for arsenic to be present at elevated concentrations was evaluated through the RI sampling evaluation. Yet having emphasized its reliance on random sampling and not sampling of the specific locations where waste was discharged, it is unclear how DON/USMC expects the sampling results to address the questions that were raised. For example, if DON/USMC has only evaluated the potential for arsenic to originate from alloy additives used in battery grids (see Hawley's Condensed Chemical Dictionary, 11th Edition at page 98) by making reference to the random sampling results, then such an approach is not adequate to address the concern that battery waste disposal could have lead to enriched arsenic concentrations in the specific area where such disposal occurred. Similarly, DON/USMC cannot reasonably evaluate the potential for the presence of arsenic in the pesticides and herbicides used at MCAS El Toro as part of base operations by reference to the results of the random RI sampling.

DON/USMC also states in the RI (see RI at page O7-6) that manganese is responsible for the hazard index (HI) being greater than 1 at Unit 1, Site 14. However, DON/USMC states that manganese is naturally present in soils and is not attributable to MCAS El Toro activities. Again, it is not the consistency of the reported values with

the high end of the background range that we have questioned. Rather, it is whether DON/USMC was given adequate consideration to site activities that might have supplemented background concentrations of manganese? The question remains, has DON/USMC considered that the presence of manganese could be associated with aviation activities, because manganese is present many metal alloys used in aviation and in welding and cutting torches used in repair or maintenance shops? While there may be an elevated ambient level of manganese in the area, the significance of potential contributions from various sources needs to be characterized.

Finally, with regard to potential risk-based remedial strategies overall, the source of the arsenic and manganese is not relevant. While naturally occurring metals concentrations are not typically targeted for remedial action, this does not mean that their contribution to overall risks is subtracted from the potential risks related to the site. For example, were the arsenic and manganese concentrations shown to be naturally occurring, they would not be identified as COCs requiring remedial attention. The contribution of these constituents to the overall risks (approximately 50%) would simply not be a controllable portion of such risks. However, where this background contribution added to other COCs results in significant overall risks (which appears to be potentially the case at Sites 7 and 14), then remedial strategies aimed at other COCs would still be needed.

Response to Comment 2F

The DON/USMC's response to this comment has not addressed the significant point raised in the comments. GeoSyntec acknowledges the need for differing criteria upon which to base a decision to remediate versus remedial goals for a required cleanup. However, in the two sets of sites characterized, risks within the range requiring further consideration were estimated. As discussed above, GeoSyntec has identified concerns with DON/USMC's conclusion that there is adequate certainty in the risk estimates for Sites 7 and 14 to determine that remedial action is not needed. The lack of certainty that the highest risks in particular areas have been adequately identified, and the inconsistency of the spatial scale of the assessments for all potential

future uses, are the two major factors leading to our conclusion that the uncertainties appear too high for DON/USMC to rely on a no-action approach where the risks calculated are in the highest third of the USEPA risk range. The alternative decision, where estimated risks within the range requiring further evaluation were determined to be most appropriately addressed by risk reduction (i.e., Sites 8, 11, and 12), is pointed out as a more definitive way to ensure that risks are maintained within an acceptable range. The application of a 10^{-6} target level in conjunction with specific COCs for remediation would meet this goal of reducing the uncertainty that risks were adequately controlled.

Response to Comment 2G

The DON/USMC's response to this issue presumes that future pathways for groundwater exposure are not complete. GeoSyntec concurs both that complete pathways for groundwater exposure currently do not appear to exist and that enforceable, properly noticed and implemented, and durable prohibitions on groundwater extraction and use could preclude completed exposure pathways in the future. However, the RI for Sites 7 and 14 do not appear to explicitly address such prohibitions in these particular areas. The RIs discuss only the evaluation of groundwater through other investigations and reports. Since the risk assessment estimates are dependent on excluding any contribution from groundwater and the risk assessment results are relatively close to the high end of the risk management range (i.e., even moderate contributions from groundwater would result in clearly significant risks), the need to preclude groundwater extraction throughout the Site 7 and 14 or specifically evaluate such exposure should be discussed. Further, uncertainties associated with ensuring a lack of groundwater exposure should be directly addressed in the Point-of-Departure evaluation.

While the potential groundwater issues may be adequately covered and discussed in association with other sites, and this may be clear to the BCT and stakeholders during the BRAC process, the link between Sites 7 and 14 and groundwater risks from a plume originating from other sites will not necessarily be clear

to others considering separate, subsequent redevelopment plans in the future. While the source of the plume underlying Sites 7 and 14 is not relevant to the potential risks at these specific locations, the local concentrations and time to achieve compliance with remediation targets are. There are means of ensuring that future site users are aware of the need to prohibit groundwater exposure in order for the risk assessment results to remain relevant. First, the risks from the directly underlying groundwater should be assessed, which would potentially allow for future uses; second, the need for continuous prohibition of groundwater use until such time as relevant concentrations are met. Both options need to be explored and discussed by DON/USMC.

Response to Comment 2H

The DON/USMC's response to this issue does not address the importance of considering a relevant spatial scale in reaching risk assessment conclusions related to lead. The response refers back to a previous response (2C) in which DON/USMC presents the results of the USEPA methodology for evaluating potential lead risks based on average site concentrations. The use of overall average concentrations from sites of this size does not adequately characterize the potential for substantially higher risks in particular locations. This is particularly pertinent in this instance because of the number of measurements of substantially higher lead levels and the lack of a directed delineation of areas where battery wastes were known to be disposed.

More relevant than the potential risks from the average concentration is a comparison between the remedial goal calculated using CAL-EPA's LeadSpread model. As previously noted by GeoSyntec, DON/USMC reports that a soil exposure concentration of 290 mg/kg is the remedial goal based upon the model. Since 30% of the areas sampled exceed this goal (by as much as 3-fold), it is not reasonable for DON/USMC to conclude that there are no localized areas of sufficient size to be relevant for future receptors, where such receptors could be anticipated to realize blood lead levels greater than USEPA limits. In fact, it is clear that there are substantial "hot" areas of lead impacts in soil (e.g. 931 mg/kg). Since relevant-sized exposure areas for children could occur within such areas, there is no reasonable basis for DON/USMC not

delineating lead-impacted areas and applying the remedial goal calculated by DON/USMC to any areas large enough to result in significant exposure.

Response to Comment 2I

The RI and related information reviewed by GeoSyntec did not make it clear that any samples for Sites 7 or 14 had been considered in the basewide evaluation of hexavalent to trivalent chromium ratios. The specific number of such samples available should be made clear. Further, as previously noted, it would appear that there are obvious potential site-related contributions from tank washout and battery disposal areas. While specific chromium use/disposal may not have been noted at these sites, enriched chromium levels are found in many types of metals sites.

Especially notable is the potential for atypical redox conditions in areas where battery acid was released, resulting in hexavalent to trivalent chromium ratios that are higher than usual. DON/USMC has noted that there is typically a relatively rapid reduction of hexavalent to trivalent chromium in soils. However, this presumes typical soils characteristics. Redox potential of battery acid-impacted soils is readily foreseeable to be substantially oxidizing (limiting reduction to trivalent chromium). Further, DON/USMC does not complete the discussion to note that there is, under many conditions, a substantial degree of cycling between reduced and oxidized chromium as the metal moves between various environmental compartments. Again, information on hexavalent to trivalent chromium ratios that is demonstrably site-related should be used to support DON/USMC's failure to complete risk assessment calculations for chromium. Furthermore, the uncertainties associated with any such ratios (e.g., samples not from battery acid-impacted soils) needs to be acknowledged by DON/USMC as being relevant to risk assessment conclusions.

Response to Comment 2J

In response to GeoSyntec's quantitative representation of the underestimation of risks from potential soil exposures, DON/USMC has indicated that

the order of magnitude of the risk estimates would not be different if current surficial soil had been considered. GeoSyntec concurs that the potential uncertainty is probably less than 10-fold. However, considering that the risk estimates for some of the sub-areas were less than 3-fold below the top end of the USEPA target risk range, such a degree of uncertainty would appear to be significant to the confidence of remaining within target risks.

Rather than presenting the potential risks from the current surficial soil to residential receptors, DON/USMC has maintained that such receptors should only be evaluated after assuming future mixing of the soil down to 10 feet. The 0-10 ft depth interval is frequently recommended and used for evaluating potential future risks where the exposure scenario can only reasonably occur subsequent to the disturbance and mixing of the surficial soil (as in regrading and excavating foundations and basements). However, since there is no reason to anticipate that soils in all areas would be mixed down to 10 ft prior to the occurrence of exposures other than industrial, the evaluation of a 0-10 ft depth interval alone does not fully characterize potential future risks. Therefore, DON/USMC should also consider residential exposure scenarios for the upper 2 feet of the soil horizon

Additional Comment 1

On page 3 of the RS, DON/USMC indicates that many of the concentrations detected at Sites 7 and 14, while being greater than the statistically-determined background value, still fall within the range of the concentrations detected during the DON/USMC's "background" study and, therefore, do not exceed background. Statistical studies involve collecting and analyzing a large number of samples and calculating a statistical average value which represents "background." However, because of the large number of samples collected at various locations (sometimes in areas which may be impacted), it is typical that some samples may, in fact, not represent true naturally-occurring background conditions. Therefore, the "high" concentrations in the population collected for background concentration determination do not necessarily

represent natural background conditions, even though the samples were collected as part of the background study. Such samples are not representative of background and should not be considered to be part of the acceptable background concentrations.

In light of this, DON/USMC should not consider high concentrations detected at Site 7 and 14 as being acceptable simply because they are within the range of the concentrations measured during the background study. Statistical derivations of background allow for a statement of the confidence associated with concluding that any particular value falls within the background distribution. DON/USMC should indicate how likely it is that each of the noted elevated concentrations falls within the background distribution (present the relevant percentiles of the background distribution). Also, as discussed above, consistency with a given background range does not necessarily mean that concentrations in a particular location have not been enriched above natural background by site impacts. Areas with low background concentrations may remain within the background range even if some site-related impacts have occurred. This is the reason that specific consideration of identifiable sources of a particular metal must be discussed in detail. To further evaluate the issue of background concentration determination, GeoSyntec would appreciate the opportunity to review the background study prepared by DON/USMC for MCAS El Toro.

Additional Comment 2

DON/USMC indicates that the fact that PAH present at Sites 7 and 14 are not mobile supports its no-action recommendation. While off-site migration is always a concern, the presence of the contaminants at Sites 7 and 14 is of similar concern. Thus, if the contaminants at Site 7 and 14 are a threat to public health and safety and the environment if they migrate off site, they remain an equal or greater threat if they remain on site.

Additional Comment 3

DON/USMC acknowledges that a number of lead concentrations are greater than 290 mg/kg (which could cause an excessive risk by their own modeling of remedial goals). Yet, because the average concentration does not result in an excessive risk, DON/USMC asserts that no remediation is necessary. While an overall site remediation may not be necessary, DON/USMC should consider performing remediation of "hot spots" at Sites 7 and 14. Such a focused remediation approach would reduce risks to health and safety and the environment to acceptable levels and would not result in excessive costs.

Additional Comment 4

DON/USMC states that a least 22,000 gallons of jet fuel and/or lubricating oil were discharged in the area of Site 7 (see Phase II RI at page O1-2). Has DON/USMC reconciliated the quantity of jet fuel and oil discharged at Site 7 with the observed soil concentrations and the aerial extent of impacted soil?

Additional Comment 5

A sediment sample collected in the catch basin at Site 14 (Sample 14_CBBE) exhibited a concentration of TPH (as diesel) equal to 11,100 mg/kg and a concentration of TRPH of 7,364 mg/kg (see RI at Page P4-13). DON/USMC indicates that this catch basin did not receive surface-water runoff from the Battery Acid Disposal Area (see RI at Page P-3). Could DON/USMC provide information regarding the origin of the hydrocarbon found in the catch basin? As hydrocarbon concentrations are greater than the typical OCHCA-recommended action levels, DON/USMC should remediate the catch basin at Site 14.

CONCLUSION

The ultimate conclusion of the RI (see RI at pages O7-9 and P7-8) and the Proposed Plan (see Proposed Plan at page 5) is that no further action is required at either

Site 7 or 14. This conclusion appears to be based, in part, on the following assumptions by DON/USMC:

- the excess cancer risk is less than 10^{-4}; and
- arsenic and manganese are naturally occurring.

A no-further-action approach at Sites 7 and 14 would leave a residential excess cancer risk greater than 10^{-5} for some areas where exposure is assumed to occur only to soils mixed from 0-10ft. If current surficial conditions are considered, future residential risks could readily exceed 10^{-4}. A number of factors that contributed significant uncertainty to the estimated risks have been identified, including the failure of DON/USMC to match the spatial scale of potential exposure areas with the derivation of exposure point concentrations, the failure of DON/USMC to quantitatively estimate risks from any environmental media other than soil, and the potential presence of hotspots. The Point-of-Departure evaluation used by DON/USMC to reach the conclusion that risks nearing the top of the USEPA target risk range do not require controls does not take into account these, or any significant, sources of uncertainty that could result in the calculated risks being underestimated.

In addition, one of the risk drivers, arsenic, may not be naturally occurring at Sites 7 and 14 as asserted by DON/USMC. Further, non-cancer risks were above the threshold HI of 1 that is typically the trigger for further evaluation or remediation. And, there were clearly areas of lead contamination substantially exceeding both the default CAL-EPA residential criterion and the remedial goals calculated in the site-specific risk assessment. The limitations and readily identifiable factors that may result in the reported risk estimates underestimating potential risks for these sites under certain future uses means that any future risk management decisions should make use of DON/USMC's risk assessment conservatively. Finally, it appears that concentrations of TPH well in excess of typical action levels are present at Sites 7 and 14. In light of these factors, DON/USMC's conclusion that no remediation of Sites 7 and 14 is required does not appear to be valid and, therefore, must be re-evaluated.

IIR0198-01/EL101-06.MEM

Some additional work which should be considered by DON/USMC at Sites 7 and 14 include:

- evaluation and delineation of hot spots;
- remediation of hot spots; and
- remediation of TRHP and TPH to OCHCA-recommended action levels.

Such action would be protective of human health and the environment and facilitate reuse of Sites 7 and 14.

* * * * *