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LETTER REGARDING REGULATORY REVIEW AND COMMENTS ON DRAFT SAMPLING AND ANALYSIS PLAN FOR FORMER CARR POINT SHOOTING RANGE AND STORAGE AREA NS NEWPORT RI
1/10/2013
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

10 January 2013

Ms. Maritza Montegross
NAVFAC MIDLANT (Code OPTE3)
Environmental Restoration
Building Z-144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Draft Sampling and Analysis Plan
Former Carr Point Shooting Range (MRP Site 01, OU9)
Former Carr Point Storage Area (IR Site 22, OU10)
Naval Station Newport, Newport, Rhode Island

Dear Ms. Montegross,

The Office of Waste Management at the Rhode Island Department of Environmental Management has conducted a review of the *Draft Sampling and Analysis Plan* dated November 2012 for MRP Site 01- Former Carr Point Shooting Range and IR Site 22 - Former Carr Point Storage Area, Naval Station Newport, located in Portsmouth, RI. As a result of this review, this Office has generated the attached comments on the *Draft Sampling and Analysis Plan*.

If you have any questions in regards to this letter, please contact me at (401) 222-2797, extension 7020 or by e-mail at pamela.crump@dem.ri.gov.

Sincerely,

Pamela E. Crump, Sanitary Engineer
Office of Waste Management

cc: Matthew DeStefano, RIDEM
Richard Gottlieb, RIDEM
Gary Jablonski, RIDEM
Ginny Lombardo, USEPA Region I
Darlene Ward, NETC, Newport, RI
Melissa Cannon, Resolution

30% post-consumer fiber

RIDEM Comments (January 10, 2013)
Draft Sampling and Analysis Plan (November 5, 2012)
Former Carr Point Shooting Range (MRP Site 1, OU9)
and Former Carr Point Storage Area (IR Site 22, OU10)
Naval Station (NAVSTA) Newport, RI

General Comments:

1. Please cite all references in the main body of the report that were used in generating the report. (References are included in Appendix C, but not in the main text of the SAP.)

2. Please indicate in this SAP if the Navy plans to use existing historical data in combination with the data proposed to be collected in the risk assessment evaluations. The risk assessments should take into account all available data from both of the Sites.

Specific Comments:

1. **p. 43 (MRP Site 1), Operational History.**

   Does the size of the target area and overshoot area take into account contaminant transport via tidal movement of sediment? It would seem that tidal action could potentially expand these areas. Please discuss this potential tidal influence in the document. This comment also applies to Figure 5.

2. **p. 43 (MRP Site 1), Operational History.**

   Please provide a separate figure showing the locations and configuration of the three firing arcs, as well as the three firing fans, showing the overlap of the firing fans. Also, please provide an additional large fold-out figure summarizing all previous activities at this Site, including all sample locations, test pits, associated sampling results which exceeded criteria, all former structures, pipes, outfalls, storage areas, etc. drawn on the figure. To ensure accuracy, the locations of the former structures, outfall, etc. should be based upon information obtained from historical plans and aerial photographs in conjunction with the figures from the previous Site Inspection Report.

3. **p. 43 (MRP Site 1), Operational History.**

   Please provide a more detailed discussion of the uses of the Site buildings and how they may have or have not contributed to contamination at the Site. This discussion should note the function of the buildings, if they were serviced by underground storage tanks or leach fields, if there were any transformers located in the buildings, etc. Also, please review any existing condition maps, engineering plans and/or aerial photographs which may contain information concerning the locations of drainage structures, underground pipes, transformers, USTs, scrap yards, areas of disturbed soil, etc. These sources of information should be included in an appendix for review. If this review provides information concerning potential additional sources of contamination, it is recommended that appropriate samples be proposed for these additional areas.

4. **p. 45 (MRP Site 1) and p. 55 (IR Site 22), Hydrology and Hydrogeology.**

   Please provide additional discussion as to why bedrock groundwater is assumed to be unimpacted, to justify excluding bedrock groundwater sampling from the SAP. This comment also applies to p. 70 (MRP Site 1) and p. 84 (IR Site 22), Spatial Boundaries.

5. **p. 47 (MRP Site 1), Nature and Extent of Contamination.**

During the Site Investigation, propellants were detected above screening levels but, as part of this SAP, they are excluded from being constituents of potential concern (COPCs) due to the assumption that they are limited to the clay pigeon launching area and firing arcs that are planned for remediation. However, it is unclear as to whether post-excavation soil samples will be analyzed for propellants or if areas outside the excavation area that are proposed to be sampled will be analyzed for propellants. Please add propellants to be analyzed in all proposed soil samples and evaluated through the COPC-selection process in the risk assessment.

6. **p. 48 (MRP Site 1) and p. 58 (IR Site 22), CSM Summary, Receptors and Exposure Pathways.**

Please include shellfish consumption as a relevant exposure pathway for the hypothetical future site resident. This comment also applies to Figure 2 (MRP Site 1); Figure 7 (IR Site 22); and Section 3.3.1 of Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

Another pathway to consider is exposure to sediment by the utility worker or on-site worker. Are there currently any discharge outfalls located at either of the Sites? Is it possible that an on-site worker or utility worker could maintain or repair existing discharge outfalls and thereby be exposed to COPCs in sediment? Please discuss this in the document. This comment also applies to Figure 2 (MRP Site 1); Figure 7 (IR Site 22); Section 3.3.1 of Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

7. **p. 49 (MRP Site 1) and p. 58 (IR Site 22), CSM Summary, Receptors and Exposure Pathways, Future On-site Worker.**

If groundwater is identified as being potable, please quantitatively evaluate ingestion of groundwater as drinking water for the future on-site worker, in order to derive cumulative hazard and cancer risk estimates for all complete exposure pathways. This comment also applies to Section 3.3.1 of Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

8. **p. 51 (MRP Site 1) and p. 60 (IR Site 22), CSM Summary, Receptors and Exposure Pathways.**

Please provide a discussion as to the size of the Sites and whether consideration of more than one exposure area within each Site is appropriate for the hypothetical future on-site resident. In other words, could each Site be divided up into multiple residential lots whereby multiple discrete exposure points would exist? If so, these exposure points should be evaluated separately for the hypothetical future on-site resident, or an alternate approach to derive a conservative EPC (for the RME scenario) should be contemplated. Please consider typical lot sizes of nearby homes in the town.

Please ensure that all of the risk assessment default parameters meet both RIDEM Regulatory Criteria and USEPA guidance values.

9. **p. 53 (IR Site 22), Operational History.**

This SAP does not specify what types of materials were stored on the Site. Please provide a detailed discussion of what constituents were stored in the drums, the materials storage areas, and the scrap yard. Furthermore, please provide a more detailed discussion of the uses of the Site buildings and how they may have or have not contributed to contamination at the Site.

10. p. 53 (IR Site 22), Operational History.

Please review the existing condition maps, aerial photos, etc. to ensure that all previous structures are included on the figures in this SAP. For example, Building 186, the scrap yard and the scrap bins (a possible PCB source) in between the rail line and the drum storage area are not shown on the figures in this SAP. Please update the figures as necessary, and include an additional large fold-out figure summarizing all previous activities at this Site, including all sample locations, test pits, associated sampling results which exceeded criteria, all former structures, pipes, outfalls, drain pits, and storage areas drawn on the figure.

11. p. 57 (IR Site 22), Nature and Extent of Contamination.

The SAP proposes to analyze petroleum hydrocarbons by volatile petroleum hydrocarbon (VPH) carbon ranges and extractable petroleum hydrocarbon (EPH) carbon ranges by the Massachusetts Department of Environmental Protection (MassDEP) methods. However, the RIDEM Direct Exposure Criteria (DEC) is for total petroleum hydrocarbons (TPH). Because the criterion of 500 mg/kg is for TPH as opposed to individual carbon ranges, please explain how Navy will use the VPH/EPH data to compare to the RIDEM TPH standard. The concentrations of individual fractions will need to be summed to calculate a total TPH concentration. The laboratory TPH range will need to extend to C-44 and be capable of detecting all of the fuel oils that may have been used on the site including Navy Special. This comment also applies to p. 167, Table 15-1, Project Action Limits (PALs) – Soil.

12. p. 63, Table 10-2, Summary of Potential Exposure Assumptions – Current/Future Trespassing Teenager.

There is an inconsistency between exposure durations for the different pathways. The age range of 7 < 16 is 9 years, yet the duration used for the (outdoor air) inhalation pathway is 10 years. This also applies to Table 3 in Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

13. p. 63, Table 10-2; p. 64, Table 10-3; and p. 66, Table 10-4; Summary of Potential Exposure Assumptions.

The proposed sediment adherence factors represent EPA-recommended adherence factors for soil, and may potentially underestimate dermal adherence from sediment. Sediment adherence factors are provided in the 2011 Exposure Factors Handbook (EFH). The 2011 EFH provides updated body part-specific sediment adherence factors as well as surface areas in Table ES-1. Additionally, surface areas should be consistent with the body parts exposed as well as the age range of the receptor. This comment also applies to p. 154 (MRP Site 1) and p. 162 (IR Site 22), Risk Assessment, Derivation of Human Health Screening Levels for Sediment; p. 173, Table 15-2, Project Action Limits (PALs) – Sediment; and Tables 3 and 4 of Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

14. p. 69 (MRP Site 1) and p. 83 (IR Site 22), Step 3 – Information Inputs.

Please discuss in more detail how the Tetra Tech NUS, Inc. Basewide Background Study Report (October, 2007) will be used in the background comparison. This comment also applies to Section 2.2 of Appendix C - Risk Assessment Work Plan Technical Memorandum, NAVSTA Newport.

15. p. 74 (MRP Site 1) Soil Sampling.

In addition to soil borings, RIDEM strongly recommends the installation of a number of test pits to fully evaluate the potential contamination near known structures of concern at this Site (i.e., oil/water separator, drum storage area, scrap bins). The use of test pits can be extremely useful in determining the best locations for sampling as it allows one to observe any staining, product, etc. Also, please ensure that any locations where test pits have previously been dug along with any associated sampling results above criteria are shown on a figure in this SAP.

16. p. 74 (MRP Site 1) and p. 88 (IR Site 22), Groundwater Sampling.

Because hydraulic flow direction has yet to be determined, a true upgradient groundwater monitoring well location will be uncertain at each site. Please install additional monitoring wells at the southwest and northeast boundaries and center of the MRP Site 1 and at the south boundary of IR Site 22. These additional wells would also help identify possible off-site migration. This comment also applies to Figures 4 and 9.

17. p. 77, Sediment Sampling.

The proposed reference station at Newport Harbor is adjacent to a heavily used harbor and a former DOD facility (Fort Adams). The location on Prudence Island is also adjacent to a former DOD facility. In addition to munitions concerns, Prudence Island Ammunition Depot was also known to contain a disposal area and TPH contaminated sediments in the vicinity of the T-wharf. Considering the location of Carr Point Site in the bay, it is recommended that the reference samples be taken from the Jamestown reference stations. Please provide details on the approach used in selecting reference locations for bay sediment and evaluate the use of the Jamestown stations.

18. p. 77 (MRP Site 1) and p. 90 (IR Site 22), Table 11-1 (MRP Site 1) and Table 11-2 (IR Site 22), Sampling Rationale Table.

Considering that the source of contamination is surficial in many areas of both Sites, subsurface soil sample depths should be contiguous from top surface interval (0 to 1 feet) to the subsurface (up to 12 feet). Please either collect subsurface samples from the 2 to 3 feet range or expand the surface and subsurface intervals to include soils from 2 to 3 feet below ground surface.

19. p. 145 (MRP Site 1) and p. 156 (IR Site 22), Drilling Soil Sample Collection and Monitoring Well Installation.

This SAP notes that a surface soil sample will be collected in the 0-1 foot interval. Please be advised that if an ELUR is to be placed on the site, the 0-2 foot soil interval must be sampled and the results must meet appropriate RIDEM Regulation Criteria. Sampling of this interval can either be conducted during the RI stage or in the FS stage if ELURs are proposed.

20. p. 146 (MRP Site 1) and p. 157 (IR Site 22), Monitoring Well Development.

The SAP notes that the monitoring wells will be developed in accordance with RIDEM Regulations. Please modify the SAP to specify that the wells will also be installed in accordance with RIDEM regulations, including provisions that the filter packs are sized in consideration of the Site's geology and to allow for free movement of contaminants into the wells. In order to avoid cost and time delays associated with not having the correct size filter pack sand onsite, it is recommended that more than one size of filter pack sand be available onsite during monitoring well installation.

21. p. 146 (MRP Site 1) and p. 157 (IR Site 22), Groundwater Quality Monitoring and Sample Collection.

Please include a provision for both LNAPL and DNAPL testing prior to purging the wells. It is recommended that an oil/water interface probe and bailer be employed for these tests. If NAPLs are encountered, please include a provision for the collection of a NAPL sample for analysis. The low flow sample should be collected in the zone which exhibits the highest level of contamination. This can be determined by taking PID readings from purge water as the purge pump is raised in the screen interval noting changes in conductivity values, as well as other field observations such as the presence of NAPL, odors, discoloration, etc.

22. p. 149, Sediment Coring.

The text states that sediments will be sieved and rinsed with seawater in order to separate out lead pellets and larger material. This process would remove many of the fines, which could potentially under-quantify the concentration of contaminants in a sample. It is not stated in the text whether sieved samples be allowed to settle prior to decanting rinse water; however, this is recommended to the extent practical to allow for settling of fines and small suspended particles.

In addition to the sieved samples, whole sediment samples (non-sieved samples) should be analyzed for both the human health and ecological risk assessments in order for the samples to be representative of actual conditions of the site.

23. p. 149, Toxicity Testing.

The Navy proposes to conduct sediment toxicity testing using only one species, the amphipod (*Leptocheirus plumulosus)*. RIDEM suggests that the Navy consider conducting toxicity testing using two species, with the amphipod and a more sensitive species, possibly the mysid (*Hemimysis anomala)*. This would provide a more robust set of toxicity data to compare to chemical data and may help avoid any difficulties in correlating chemistry to toxicity as was experienced with Gould Island.

24. p. 149, Toxicity Testing.

This SAP notes that toxicity testing will be conducted to evaluate risk to invertebrate receptors. RIDEM concurs with the logic associated with the testing; however, in order to ascertain the risk at this Site, the test must be conducted on whole sediment samples in which the lead pellets have not been removed as a result of the sieving process. Since macro invertebrates as well as all of the other marine life on the sea floor will be exposed to an environment in which lead pellets are present, the toxicity testing should be representative of this environment. Please revise the SAP to meet this condition.

25. p. 150, Macroinvertebrate Sampling.

Macroinvertebrate analysis will be conducted to ascertain the available biota and as an indication of the overall environmental health of the area. Please include macroinvertebrate analysis of the reference stations. Depending upon the compatibility of the reference stations this may allow for either a qualitative or quantitative comparison and may serve as either a measureable ecological endpoint or as an additional line of evidence in the overall analysis.

26. p. 151, Macroinvertebrate Sampling.

Please consider collection of macroinvertebrates (e.g., mussels, clams) for tissue chemistry analysis. The SAP currently proposes modeling tissue contaminant concentrations from sediment chemistry data, for use in the risk assessment. Use of empirical data, rather than modeled concentrations, reduces uncertainty regarding bioaccumulation in both the human health and ecological risk assessment.

27. p. 154, Risk Assessment.

During previous investigations, clay fragments and what appeared to be pellets were found on the beach. Please indicate whether samples will be collected from the beach. If not, it is recommended that samples be collected from the beach. Please indicate whether these sample locations will be treated separately from those sample locations which are always below water in terms of adherence factor, exposure frequency, etc. It would seem that individuals, especially children, would be exposed at different rates for sample locations which are always submerged as compared to sample locations which are not submerged or are periodically submerged. It would therefore seem prudent to have a different risk assessment for these areas.

28. p. 154-155, Evaluation of Ecological Risks due to Lead Pellets.

Both upland and aquatic birds may ingest lead shot, and different species of birds are expected to have a different ingestion rate. It is unclear in this section whether the benchmark of 10 pellets/square foot will be applied only to diving ducks or to other types of birds. Please note that there are other studies indicating unacceptable risk for some species of birds at a much lower density of lead pellets (e.g., see USFW 2004[1], which provided a remedial goal of 3 pellets/square foot.). Please provide in this section the specific plan for evaluating lead shot ingestion; this plan should include the avian species that will be evaluated, and the species-specific benchmark. Additionally, please include the assessment of lead shot ingestion in the Risk Assessment Technical Workplan (Appendix C).

29. p. 156, Summary of Project Tasks.

Information from historical site plans and aerial photographs indicates that the site contained a scrap yard, a materials storage area and potential areas of disturbed soil. Contaminated soil and buried waste has been found at similar Naval storage areas found on this base, as well as the Naval Construction Battalion Center (NCBC). As an illustration, a materials storage area which contained similar concrete storage bins located south of the Fuel Loading Area was found to contain soils contaminated with PCBs, metals, SVOCs and TPH. In addition, buried waste and scrap was also found on the site.

It is recommended that a geophysical investigation, magnetomer, ground-penetrating radar, be conducted in the materials storage area, the scrap yard, the area adjacent to the storage bins, the drum storage area, and the locations of the former dry wells, as well as the former buildings (the latter will aid in ascertaining whether they were serviced by USTs or contained discharge pipes which went to leachfields or to the bay). Test pits should be excavated in these areas and appropriate samples should be collected. Please also collect concrete chip samples from the storage bins and analyze the samples for contaminants, including PCBs.

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[1] US Fish & Wildlife, Ecological Risk Assessment for Range 17 (Trap and Skeet Range), Patuxent Research Refuge, Laurel, MD. March 2004.

It appears that the drum storage areas have been backfilled with soil and construction debris. Please propose additional investigation and sampling in this area.

Please provide additional information concerning the two drain pits (i.e., What were they used for? Where did they drain to? Did they drain to the OWS? etc.) This information may be used to modify the existing SAP. If this information is not available, please include provisions for additional investigations of the drain pits in order to address this question, which may include a geophysical survey, test pits, etc.

There are a number of buildings and fences on the site which may have been painted with lead paint. It is recommended that soil samples be collected from these locations and analyzed for lead.

This SAP proposes advancing the borings up to 16 feet. As it is known that the site was used for petroleum storage, it is recommended that all borings be advanced to a depth of three feet below the historic low water table or 16 feet, which ever is deeper.

Finally, it is recommended that some wells be drilled into bedrock in order to assess whether chlorinated solvents are present.

30. p. 156, Drilling Soil Sample Collection and Monitoring Well Installation.

This SAP proposes installing two borings at the terminus or discharge point of the discharge pipes located on the Site. RIDEM concurs with the rationale of collecting samples at the terminus of the discharge pipe. Please be advised that at other locations on the Navy base, as a result of storm action, simple decay, rerouting of the pipe, etc., the current terminus of a discharge pipe may not represent the historic or original terminus. It is therefore recommended that historical plans and aerial photographs be reviewed in an effort to ascertain the original terminus location. In addition, field efforts should be employed to locate the historic terminus, such as the use of a hand held metal detector. If as a result of this effort two different terminus points are located, then samples should be collected at each terminus point. One sample would be representative of current or recent discharge, the other would be indicative of historic discharges. Finally, prior to sample collection at the terminus it is recommend that a hand shovel be employed to probe the area for field evidence of any contamination.

31. p. 174, Table 15-3, Project Action Limits (PALs) - Groundwater.

PALs selected for volatile constituents include groundwater vapor intrusion screening levels (VISLs) based on November 2011 RSLs. Note that RSLs were recently updated in November 2012. The November 2012 update includes updated toxicity information (in particular, for tetrachloroethylene; PCE) used to derive the RSLs and VISLs. Please update the VISLs used as PALs (and therefore the VISLs used in the COPC selection process).

32. Figure 7 (IR Site 22).

Based on Site investigations to date, it is unclear if soils are impacted by VOCs. Although using groundwater data for assessment of the potential for vapor intrusion is appropriate, if VISLs are exceeded in groundwater, collection of soil vapor samples beneath pavement in the groundwater exceedance areas would provide valuable information on the vapor intrusion pathway, in addition to groundwater data. Soil vapor concentrations could then be screened against VISLs for soil gas and used in the Johnson and Ettinger model, to get a more complete analysis of the vapor intrusion pathway.

33. Figure 2.

Please include ingestion of lead shot as a potential exposure pathway for the "avian and mammalian communities" column.

34. Figure 3 and Figure 8.

Please update this SAP to include additional soil sampling locations in the southern "Target Area" of the "Firing Fan", southwest of proposed sediment sample SD124, east of samples SD103 and SD102 and northeast of proposed soil boring SB301 (shown on Figure 8). This area is shown on Figure 5 as within the Target Area, but has not previously been characterized.

35. Figure 8 (IR Site 22).

Please update this SAP to include three additional soil samples southeast of SB310, SB311, and SB312 to adequately delineate the extent of contamination in the southeastern portion of the Site.

36. Figure 10 (IR Site 22).

Please update this SAP to include additional sediment samples northeast of each of the former drain lines (i.e., northeast of SD201 and northeast of SD203) to adequately delineate the extent of contamination that may have discharged from the outfalls and may be affected by tidal action.

37. Appendix C, general.

This appendix describes the general methods that will be used to evaluate human and ecological risk at NAVSTA. Although the intent of this workplan is to set a standardized approach to evaluating risk at multiple NAVSTA sites, the utility of appending a generic workplan to a site-specific SAP is limited, because the environmental media, analytical results, receptors and exposure pathways are unique to each individual site. Therefore, RIDEM suggests that the appendix be made site-specific, or that information currently presented on the SAP worksheets be expanded to include more details on the risk assessment approach to be used specifically at the Carr Point Sites. Alternatively, if a generic risk assessment workplan is to be retained, then please expand the workplan to include all potential receptors and exposure pathways (including sediment, surface water, dietary ingestion, recreational exposures etc.). Please note that Navy policy does not supersede regulatory guidance. Please ensure that the risk assessment is performed according to EPA's guidance and RIDEM's requirements.

38. Appendix C, Section 3.3.1, p. 11.

Please include direct contact with sediment as a relevant exposure pathway for the trespasser and residential scenarios. Additionally, please include shellfish ingestion as a complete exposure pathway for the trespasser and/or residential scenarios.

39. Appendix C, p. 19.

Please include ingestion of lead pellets as a relevant exposure pathway. (This pathway should be included in other relevant sections of Appendix C).

40. Appendix C, p. 20-22. (Use of soil screening benchmarks for terrestrial wildlife.)

The table presented on p. 20 specifies the comparison of total daily dose to toxicity reference values as a measure of effect for terrestrial wildlife. However, p. 22 (first full paragraph) states that

constituents will be compared to wildlife-based soil benchmarks to evaluate whether they will be included in food chain modeling. (Table 5 of Appendix C provides these soil screening levels for birds and mammals.) This initial benchmark comparison seems unnecessary for a screening-level risk assessment, and somewhat redundant with the exposure modeling. Therefore, RIDEM recommends that either the soil benchmarks alone be used to select COPCs (site-specific modeling could then be used in Step 3a to refine COPCs), or that only exposure modeling, based on the conservative assumptions that are described in the SAP, be used in the screening risk assessment.

41. Appendix C, p. 22, Use of Bioaccumulation Factors.

Please collect site-specific tissue samples (i.e., shellfish, earthworms and/or vegetation) where possible to reduce the uncertainty associated with estimating contaminant concentrations in the diet.

42. Appendix C, p. 25, Step 3A Reevaluation.

- Background Evaluation: Please describe the statistical methods that will be used for the background comparison. In particular, describe which components of the Basewide Background Study Report (October, 2007) background datasets will be used.
- Detection Frequency. The text proposes to eliminate as COPCs constituents with a detection frequency less than or equal to 5%. Please note that this criterion should also take into consideration both spatial representation and concentration, since use of the 5% criterion alone could potentially overlook the presence of hot spots.

43. Appendix C, Table 11, Exposure Parameters for Ecological Receptors.

Dietary composition for the SRA assumes 100% of the diet is from one food source. For some receptors (particularly for the quail, who is assumed to eat only vegetation), this may not be a conservative assumption because some COPCs may preferentially accumulate in invertebrates relative to plants, and so assuming a vegetarian diet may underestimate risk. We recommend instead using the same dietary composition for both the SRA and baseline risk assessment (BERA), based on more realistic assumptions about diet, and instead modifying other exposure parameters (like BCFs, home range, exposure point concentrations etc.) for the BERA.