

DEP BWSC RAO LEVEL 1 AUDIT FORM

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Lead RTN:			
SUBMITTAL TYPE Class: A B C 1 2 3 4 Partial Revised AUL Other: Related RTNs:		OHM description: (Source, Type of OHM, Media Affected) Site Use:	
		Date RAO Rcvd ____/____/____ Date Screened ____/____/____	
Town:		Site Name:	
Address:		LSP Name/#:	
PRP/OP:		Consulting Firm:	
Based upon conditions at time of RAO submittal			
I. SITE CONDITIONS			
A. Air		Yes	No
1. <input type="checkbox"/> Applicable GW-2 standard exceeded @ residence/school with no soil gas/indoor air sampling		<input type="checkbox"/>	<input type="checkbox"/>
2. <input type="checkbox"/> Site contaminants impacting indoor air		<input type="checkbox"/>	<input type="checkbox"/>
B. Drinking Water/Groundwater		Yes	No
1. <input type="checkbox"/> More than 0.5" NAPL observed in any monitoring well		<input type="checkbox"/>	<input type="checkbox"/>
2. Site within potential drinking water source area (PDWSA)		<input type="checkbox"/>	<input type="checkbox"/>
3. Site located within IWPA/mapped Zone II		<input type="checkbox"/>	<input type="checkbox"/>
4. Private/Non-municipal public well(s) (i.e. TNC, NTNC) located within 500 feet of site		<input type="checkbox"/>	<input type="checkbox"/>
5. Municipal well(s) located within 1000 feet of site		<input type="checkbox"/>	<input type="checkbox"/>
6. <input type="checkbox"/> Private well contaminated as a result of site, still in use (no filter, no public water, etc.)		<input type="checkbox"/>	<input type="checkbox"/>
7. <input type="checkbox"/> Public water supply contaminated as a result of site, no filters or other mitigation.		<input type="checkbox"/>	<input type="checkbox"/>
C Contaminated Soil At a School or Residence		Yes	No
1. EPC in S-1 soil exceeds Method 1 Standard		<input type="checkbox"/>	<input type="checkbox"/>
2. Bioaccumulating compounds (i.e. Hg, Pb, PCBs, etc.) detected less than 1 foot deep		<input type="checkbox"/>	<input type="checkbox"/>
3. IH compounds (arsenic, cadmium, chrome VI, cyanide) detected less than 1 foot deep		<input type="checkbox"/>	<input type="checkbox"/>
D. Environmental Concerns		Yes	No
1. Site within 500 feet of surface water and/or wetlands		<input type="checkbox"/>	<input type="checkbox"/>
2. Endangered species habitat, ACEC and/or certified vernal pool within 500 feet		<input type="checkbox"/>	<input type="checkbox"/>
3. Confirmed contamination of surface water, sediments and/or wetlands with site contaminants		<input type="checkbox"/>	<input type="checkbox"/>
E. Site & Area Use – Check All That Apply		Yes	No
1. Industrial use or public Right of Way (no children likely to be present)		<input type="checkbox"/>	<input type="checkbox"/>
2. Commercial (limited presence of children)		<input type="checkbox"/>	<input type="checkbox"/>
3. School/Institution (pre-K through high school, not college/university)		<input type="checkbox"/>	<input type="checkbox"/>
4. Residential		<input type="checkbox"/>	<input type="checkbox"/>
F. Released OHM (Primary Contaminant Type[s])		Yes	No
1. Petroleum fuel oils (e.g. #2, #4, #6, JP-4, JP-8, kerosene, lube oil, MODF, etc.)		<input type="checkbox"/>	<input type="checkbox"/>
2. Gasoline, waste oils, Aviation Fuel (AVGAS, Jet A, etc.)		<input type="checkbox"/>	<input type="checkbox"/>
3. Metals, coal tar, PCBs, pesticides/herbicides, asbestos, cyanide		<input type="checkbox"/>	<input type="checkbox"/>
4. Chlorinated solvents, perchlorate, or other organic compounds		<input type="checkbox"/>	<input type="checkbox"/>
G. Site Complexity		Yes	No
1. Co-mingled plumes (i.e., from different sources, one or more releases co-mingled)		<input type="checkbox"/>	<input type="checkbox"/>
2. Bedrock contamination		<input type="checkbox"/>	<input type="checkbox"/>
If <input type="checkbox"/> conditions currently exist, see supervisor to discuss.			

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II. TECHNICAL ADEQUACY		Citation(s)	Yes	No	?	NA	Page
A. Remedial Response Actions:							
1. Documentation (BOL, HWM, etc.) of removal/treatment of contaminated soil was provided	40.0030	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Remediation waste properly managed (Air [95%], GW [permit], SW [NPDES])	40.0031-40.0049	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
B. Source/Extent Investigations:							
1. History of OHM use/storage/disposal at the site included	40.0405(1), 40.0835(4)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Potential source(s) identified, characterized, or abated (septic leach field, floor drain, AST, etc.)	40.0923(2), 40.1003(5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. All migration pathways evaluated (soil, groundwater, surface water, air, sediment, food)	40.0904(2)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Extent of contamination defined in all media (including downgradient)	40.0904(2)(a), 40.1003(5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Potential or actual OHM analyzed for and/or evaluated (metals, VPH, VOCs, etc.)	40.0904(3)(a), 40.0926(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6. Proper sample collection technique/preservation//holding times/surrogate recovery, etc.	40.0017(2-3), 40.1056(1)(j)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
C. Risk Characterization:							
1. Correct risk characterization method used (relative to indoor air, surface water, sediment, etc.)	40.0941, 40.0942	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2. Background identified or characterized	40.0904(2)(b), 40.1020	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3. All receptors accounted for (human, environmental) or AUL applied	40.0920-40.0922	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4. Site activities and uses identified (current, future, any limitations that were assumed)	40.0923	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5. Exposure points identified (GW & soil for all RC Methods, other media for Methods 2 & 3)	40.0924	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6. All exposure pathways identified and evaluated (inhalation, ingestion, dermal, etc.)	40.0925	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
7. Hot Spot(s) addressed, identified (as Hot Spot) and not added in to other EPCs	40.0924(4), 40.0926(5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8. EPC calculation(s)/equations provided (including spatial and/or temporal, Hot Spots, etc.)	40.0926	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
9. EPC properly calculated (maximum concentration, 75%/10x, upper confidence limit)	40.0926(3)(a),(b),(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10. Soil/groundwater categories properly identified	40.0930	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11. Applicable soil and/or GW standards not exceeded (Method 1 or 2) or AUL applied	40.0973(7), 40.0988(2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
12. Characterization of Risk to Safety is included (all methods)	40.0960	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13. Method 3 Public Welfare Risk Characterization is included	40.0994	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14. Method 3 Environmental Risk Characterization – Stage 1 or 2 was completed, if applicable	40.0995	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
15. Method 3 Human Health: Non-Cancer Risks < HI of 1, ELCR < than 1x10 ⁻⁵	40.0993(6),(7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

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III. Response Action Outcome Statement (RAO):		Yes	No	?	NA	Page
1. Correct RAO Class was selected	40.1030 – 40.1050	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. RAO boundaries delineated and referenced to permanent landmarks or surveyed boundaries	40.1003(4), 40.1056(2)(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Relationship of this RAO to other RAOs for the property has been defined	40.1056(1)(d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Data Usability Assessment (scien. valid & defensible, precise, accurate, complete) is included	40.1056(1)(j), 40.1056(2)(k)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Data Representativeness Evaluation (adequate spatial and temporal data) is included	40.1056(2)(k)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A. CLASS A – Permanent Solutions:		Yes	No	?	NA	Page
1. A background feasibility evaluation is included	40.1020(3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. A Permanent Solution has been achieved	40.1035(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. All sources have been eliminated or controlled	40.1035 (2)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Phase IV, Phase V, or Post-RAO O&M, where required, were completed	40.1036(6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A-1. CLASS A-1:		Yes	No	?	NA	Page
1. The level of OHM at the site <i>has been</i> reduced to background	40.1036(1)(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Threats of Release Only: all TORs were eliminated, and a release of OHM has <i>not</i> occurred	40.1036(1)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A-2. CLASS A-2:		Yes	No	?	NA	Page
1. An AUL is <i>not</i> required to maintain a condition of No Significant Risk	40.1036(2)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A-3. CLASS A-3:		Yes	No	?	NA	Page
1. An AUL has been implemented to maintain a condition of No Significant Risk	40.1036(3)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Groundwater or Soil OHM concentrations do <i>not</i> exceed UCLs	40.1036(3)(d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
A-4. CLASS A-4:		Yes	No	?	NA	Page
1. An AUL has been implemented to maintain a condition of No Significant Risk	40.1036(4)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. OHM in soil that exceeds UCLs is beneath engineered barrier or >15 feet below ground surface	40.1036(4)(d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. UCL Feasibility Evaluation conducted and shows that achieving UCLs is not feasible	40.1036(4)(e), 40.1056(2)(f)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

B. CLASS B – Permanent Solutions:		Yes	No	?	NA	Page
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1. A condition of No Significant Risk exists	40.1045(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Remedial actions have <i>not</i> been conducted	40.1045(2), 40.1046(6)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Where GW-1 applies, groundwater does <i>not</i> exceed an applicable or analogous standard	40.1046(5)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B-1. CLASS B-1:		Yes	No	?	NA	Page
1. One or more AULs are <i>not</i> necessary to maintain a level of no significant risk	40.1046(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B-2. CLASS B-2:		Yes	No	?	NA	Page
1. An AUL has been implemented to maintain a condition of No Significant Risk	40.1046(2)(a), 40.1056(2)(g)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. OHM in groundwater or soil does <i>not</i> exceed UCLs	40.1046(2)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B-3. CLASS B-3:		Yes	No	?	NA	Page
1. An AUL has been implemented to maintain a condition of No Significant Risk	40.1046(3)(a), 40.1056(2)(g,h)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. EPC in soil exceeds UCLs; however:		---	---	---	---	
a. OHM is located >15 feet below ground surface, AND	40.1046(3)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. UCL Feasibility Evaluation shows that achieving UCLs is not feasible	40.1046(3)(c)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C. CLASS C – Temporary Solutions:		Yes	No	?	NA	Page
1. A condition of No Substantial Hazard exists	40.1050(1)(a), 40.1051(1, 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. ID, characterization, elimination, and control or mitigation of OHM release has been demonstrated	40.1050(1)(b), 40.1056(2)(d)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Soil and/or groundwater concentrations exceed applicable or analogous standards or UCLs	40.1050(2)(a, b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Phase II and Phase III reports were submitted, or DPS Opinion was submitted	40.1050(3), 40.1050(4)(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. A plan with definitive and enterprising steps toward a Permanent Solution has been submitted	40.1051(3)(a), 40.1051(4)(a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C-1. Class C-1:		Yes	No	?	NA	Page
1. Valid feasibility evaluation - Permanent Solution currently cannot be achieved.	40.1051(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C-2. Class C-2:		Yes	No	?	NA	Page
1. Site has a valid Tier I Permit, Permit Extension, or Tier 2 status	40.1051(4)(b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	