NJDEP Technical Guidance Document Review Form with Responses

Committee: Capping Committee

Document: TECHNICAL GUIDANCE ON THE CAPPING OF SITES UNDERGOING REMEDIATION

The Department appreciates the time and effort taken by the commenters. While all comments are important to the success and preparation of this document, comments that were primarily editorial in nature are not referenced below. Many, but not all, editorial changes were made to the document as a result of those comments. The comments below are those received that involve technical issues.

Comment	Page	Section	Subsection	COMMENTS	RESPONSES
1	1	1	1	The introduction to the Cap Guidance (page 1, paragraph 3) states that "This guidance supersedes previous Department guidance issued on this topic." Later on, the guidance notes that "The intent of this document is to provide guidance on the selection and use of caps for receptor groups other than those covered in the Presumptive Remedy Guidance Document." We recommend clarifying the statement on page 1 to add that the Cap Guidance is intended for receptor groups not covered by the Presumptive Remedy Guidance and does not supersede the Presumptive Remedy Guidance.	Your comment was evaluated and no change was deemed necessary.
2	2	1	1.1	Paragraph beginning, "Please note that this technical guidance typically represents…" This language seems unnecessary and is inconsistent with language in other NJDEP guidance documents. It is unclear by what is meant by the Department reserving their right to asssert their position. Recommend this paragraph be stricken.	Your comment was evaluated and no change was deemed necessary. Since this document is being released by the Department, the Department reserves the right to make the ultimate decision on conflicting issues.
1	2	1	1.2	Forth Paragraph: while discussing what capping "primarily precludes" should the prevention of stormwater infiltration through contaminated media also be included?	Your comment was evaluated and no change was deemed necessary.
2	3	1	1.2	Seventh Paragraph: should a Risk Assessment be included in the Conceptual Site Model? It may already be included. If so disregard.	Your comment was evaluated and no change was deemed necessary. The Department does not use RA.
3	2	1	1.2	Consider changing "to be considered in selecting a particular cap" to "to be considered in designing a cap."	Your comment was evaluated and no change was deemed necessary. This document was not intended to be a capping design document.

4	5	1	1.5	The paragraph describing United States Army Corps of Engineers is not clear/accurate Consider the following alternate wording, "capping activities in or adjacent to navigable waters (including wetlands) pursuant to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act may require a Nationwide or Individual Permit."	Your comment was evaluated and no change was deemed necessary.
	5	1	1.5	Rather than "…under certain site specific conditions, permits may be required", almost invariably permits will almost certainly be required. RCRA requirements are not listed, nor are the ARRCS permit requirements under 7:26C-7 et al.	Your comment was evaluated and no change was deemed necessary.
1	5	1	5	Para. #3 - ODST also isues Acceptebale Use Determinations (AUDs) for dredged material used for capping purposes.	Comment accepted and revision made.
2	5	1	5	"State Permits" - please add Clean Water Act Section 401 Water Quality Certificate (WQC) when capping contaminated sediment.	Comment accepted and revision made.
5	5	1	1.5	The bullets regarding freshwater wetlands, waterfront development and CAFRA permits are not logically listed by program. Consider listing, as separate bullets: "• Freshwater Wetlands Permits (General or Individual), N.J.A.C. 7:7A"; "• Coastal Permits (General or Individual), N.J.A.C. 7:7 and 7:7E". Strike the CAFRA bullet as it is included under the Coastal Permits.	Your comment was evaluated and no change was deemed necessary.
6	6	1	1.5	Consider replacing bullet, "Additional land use regulation permits and others" with "Highlands Water Protection and Planning Act approval, N.J.A.C. 7:38.	Comment accepted and revision made.
2	6	1.6		In paragraph 1, It is stated, "Deed notices are required whenever soil left in place exceeds the unrestricted-use standards." Is more explanation needed here regarding the applicability or non-applicability of IGWSRS?	Your comment was evaluated and no change was deemed necessary.
3	6	1.6		In the first paragraph, at the first use of N.J.A.C. 7:C it is suggested that the full name of Administrative Requirements for the Remediattion of Contaminated Sites be used.	Comment accepted and revision made.
7	6	1	1.6	In third paragraph, consider changing "a list of contaminants required in the deed notic to "a list of contaminants that exist above applicable standards below the cap".	Comment accepted and revision made.
8	8	2	2.1.1	This subsection states that the objective, extent, and components of a cap are based primarily on the types of contaminants present, their distribution, and the concentration those contaminants. While the contaminants are very important, end-use/users of the site are equally important in the cap design. Consider rewording to state, "The types of contaminants present, their distribution, and the concentration of those contaminants are a key consideration in cap design."	Comment accepted and revision made..
9	8	2	2.1.1	In the second paragraph list of contaminant transport mechanisms, consider adding "(3) Erosion via stormwater runoff or wind".	Your comment was evaluated and no change was deemed necessary. Erosion and stormwater runoff would only occur if the cap is breached.
3	11	2	2.1	Table 1 - separate the dermal contact and ingestion exposure pathways into separate columns in the table. "Food Chain" (and perhaps "Groundwater") should not be a dermal contact exposure point.	Your comment was evaluated and no change was deemed necessary.
4	11	2	2.1	Para. #1 - revise to read "Exposure pathways should be evaluated for all media and potential receptors (human and ecological) at each capped area."	Comment accepted and revision made.

10	12	2	2.2.1	In the first sentence of the first paragraph, "ESNR" should be replaced with the more generic "location" as a flood plain in itself does not constitute an ESNR.	Cannot find paragragh that speaks to floodplain/ESNR
7	11	2.2	2.2.1	Paragraph one begins, "Receptors are defined in N.J.A.C. 7:26E as “any human or other ecological component which is or may be affected by a contaminant from a contaminated site.” This is not the Tech. Regs. definition (Sect. 1.8) of receptor and I could find no such definition in the quotations anywhere in the Tech. Rules. What is the correct source?	Comment accepted and revision made.
10	12	2.2	2.2.1	Paragraph two refers to capping historic fill. It is suggested that the historic fill guidance be cited and a URL to it provided.	Your comment was evaluated and no change was deemed necessary.
11	12	2	2.2.2	Capping guidance defines the non-residential exposure as involving adult outdoor workers for an 8-hour day, 225 days per year across 25 years. We recommend adding an exception for urban sites where there is essentially no outdoor employment.	Your comment was evaluated and no change was deemed necessary. The exposure scenario provided is from a NJAC 7:26E citation and cannot be changed.
11	12	2.2	2.2.2	In the fourth paragraph the "other" exposure scenarios are briefly mentioned. Perhaps a sentence should be added to indicate that a deed notice is required whenever residential SRS are exceeded.	Your comment was evaluated and no change was deemed necessary.
	14	2	2.3.2	7:26C-5.3'Determination of remediation funding sources and financial assurance amounts'	Comment accepted and revision made.
12	17	3	3.1	10-5 – 10-7 cm/sec is not “low permeability.” Upper range should be 10-6 cm/sec and lower range is 10-8 cm/sec.	Comment accepted and revision made.
13	17	3	3.1	Geosynthetic clay liners – recent research (Craig Benson) has shown that GCL clay mats are influenced by soil chemistry – dissolved salts in ground / infiltration cause cation exchange in bentonite clay filler. Should this be noted in guidance?	Your comment was evaluated and no change was deemed necessary. This is beyond the intended scope of this guidance.
14	18	3	3.1	The discussion of permeable caps notes that they should not be used when impact to ground water screening levels are exceeded. It is assumed that this statement can also include site-specific impact to ground water standards developed by an LSRP. However, this statement implies that permeable caps (such as clean soil, gravel areas or vegetation) should not be used for historic fill where metals and PAHs typically exceed impact to ground water standards. Many historic fill sites are, in fact, capped with permeable materials. How would one address this issue in a biennial protectiveness evaluation? Note that the Historic Fill Guidance specifically mentions clean soil fill capping as an option (page 10).	Your comment was evaluated and no change was deemed necessary. Historic fill is not mentioned in this paragraph.
15	18	3	3.1	Consider adding to the second sentence In the fourth paragraph, "or are otherwise demonstrated to be immobile."	No change made. Sentence in question cannot be located.
16	18	3	3.1	It is stated, "Porous pavement (a permeable cap) may be an acceptable cap if levels of contamination in the soil or waste do not exceed NJDEP impact to ground water guidance concentrations." I think more direction is needed here since this is far to restrictive. As is, having beryllium at 0.8 ppm or lead at 100 ppm miight be considered as IGW problems and negate a porous cap. Need more guidance on migration to GW, SPLP, using existign GW results...	Comment accepted and revisions made.

17	19	3	3.1	Under Exposed Geomembranes, item (b), why would you allow placement of other contaminated material under such a cap? May want to refer to Alternative Fill guidance if this is to be kept. Also under (c), is there any link that can be provided for the photovoltaics?	Comment accepted and revision made.
16	20	3	3.1	The second sentence under the "Operations and Maintenance" bullet is vague. Consider changing sentence to, "Because a low-permeability cap may alter the elevations of the ground at the site, and its stormwater runoff characteristics, monitoring of the surrounding areas for adverse impacts such as erosion and/or flooding should not be neglected.	Comment accepted and revision made.
17	21	3	3.1	Could the guidance include a statement about how an investigator should address protectiveness when doing a biennial protectiveness certification for caps that preceded the Capping guidance? Can those caps be considered “grandfathered” or must they be upgraded to meet new standards? As an example, if a cap for volatile organic compounds was not demonstrated to have a permeance of less 0.1 perms or less would that cap have to be considered non-protective?	Your comment was evaluated and no change was deemed necessary. If an existing cap is not protective pursuant to this guidacne, then it would have to upgraded.
18	21	3	3.1	Consider adding the following language to the end of the first sentence after the list of post-construction conditions, "as well as the end use of the cap area".	Comment accepted and revision made.
4	18	3	3.1	Section Components - Second Paragraph - Third Sentence: include geocomposite layer as an option to replace granular soil above the low-permeability liner to remove excess water.	Comment accepted and revision made.
6	19	3	3.1	Section Design Considerations and Data Needs - Second Paragraph: include as letter i) Storm water management both runoff and infiltrated water along collection layers.	Comment accepted and revision made.
7	19	3	3.1	Section Design Considerations and Data Needs - Third Paragraph: include performing a global and veneer slope stability analysis as a suggestion/requirement?	Comment accepted and revision made.
8	20	3	3.1	Section Operations and Maintenance - Third Paragraph: add "causing stormwater ponding" to the end of letter d)	Comment accepted and revision made.
9	21	3	3.1	Section Operations and Maintenance - Third Paragraph: add letter j) Excessive or trapped underlying gas?	Comment accepted and revision made.
19	23	3	3.1	Clarification item on cap design - When does the 3' frost depth above the impermeability layer apply?	Your comment was evaluated and no change was deemed necessary. There is no requirement in the draft guidance for a 3' cover above a low permeability liner. Guidance states that "the soil cover overlying the low permeability layer is typically up to2' thick and may inlude the drainage layer." NJDEP Solid Waste Regulations (NJAC 7:26A) states that "the impermeable cap shall be located wholly below the average depth of frost penetration in the area as determined by USDA and mapping." This was meant to apply to clay liners. Variance are often given for geomembrane liners.
10	25	3	3.1.1	Section Construction - Second Paragraph: is letter j) considered a Site Waste Management Plan? If not - add this to the list.	Your comment was evaluated and no change was deemed necessary.

11	26	3	3.1.1	Section Cost - Second Paragraph - Second Sentence: add "…geomembrane cost will vary with the price of oil and labor for installation [and quantity of material ordered]"?	Your comment was evaluated and no change was deemed necessary.
12	26	3	3.1.1	Section Cost - Second Paragraph - Forth Sentence: add "…and extreme hot weather" to the end of the sentence?	Your comment was evaluated and no change was deemed necessary.
13	26	3	3.1.1	Section Cost - Third Paragraph - Second Sentence: it should be shared that while connections are "greatly simplified" the GCL material is much heavier, harder to manuver in place, and have less material on each roll so the installation is still labor intensive and less efficient in some ways.	Your comment was evaluated and no change was deemed necessary.
6	52	3	3.1	Another good, general reference: Naval Facilities Engineering Command, 2003. Implementation guide for assessing and managing contaminated sediment at Navy facilities. NFESC User's Guide UG-2053-ENV, March 2003, 153 pp.	Your comment was evaluated and no change was deemed necessary. The recommended reference was not specific to capping
20	25	3	3.1	There is no difference between RCRA/Solid & Hazardous waste caps in NJ. The subtitle C program is fully delegated.	The NJDEP regulations for solid waste caps (NJAC 7:26-2A) include the requirementts of RCRA Sub Title D, however, NJDEP has additional requirements beyond what is require by the Federal Regulations. The NJDEP regulations for Hazardous Waste, RCRA Sub Title C caps (NJAC 7:26G) incorporate the RCRA Federal Regulations by reference, therefore are equivalent.
23	29	3	3.1.3	Capillary Break cap discussion is more prescriptive with regard to the individuals involved in the design and construction of these caps than it is for other cap types. The Capillary Break discussion requires a "qualified professional engineer," a licensed surveyor and construction oversight/documentation by "qualified professionals." Why is this section more prescriptive than others with regarding to an individual's qualifications?	This guidance merely suggests the use of qualified professional when addressing the design/implentation of a complex feature such as a CB.
24	30	3	3.1.3	Geocomposite drainage nets can perform as capillary break only if they are placed horizontal, or sheltered from infiltration flow-through. Gravel layers, which have greater thickness can perform as a capillary break, but will also allow contaminant transport due to infiltration if soils at the base of the capillary break are low to moderate permeability. Infiltration entering the capillary break, build up on the underlying soil, and flow down slope. Thin capillary break layers will become saturated where moisture is built up over large surface areas and transported down slope. Thick gravel layers will become moistened due to infiltration, and also flow down slope at the base due to gravity. This moisture will dissolve the salt crystals / minerals which come out of solution due to vapor phase transformation in the capillary break, and carry the minerals to other locations. Capillary break layers are best applied below a membrane or other surface covering such as a structure cap.	Your comment was evaluated and no change was deemed necessary. The existing language "wide range material" addresses this comment.
7	52	3	3.2	Para #3 - revise to read "In addition, a cap may be designed to provide treatment and/or increased sequestration of contaminants (enhanced or amended cap).	Comment accepted and revision made.
14	33	3	3.1.4	"foundations" should be revised to "floor slabs"	Your comment was evaluated and no change was deemed necessary.
15	36	3	3.1.4	Section Construction - Third Paragraph - Third Sentence: replace "cap" with "material" or "membrane" for clarity.	Comment accepted and revision made.

15	37	3	3.1.4	Where landfills produce gas with decomposition, vapor will build up beneath a synthetic membrane cap, and should be vented collected for disposal.	Your comment was evaluated and no change was deemed necessary.
16	43	3	3.2.1	Section 3.2.1 discusses vegetative/landscape caps and notes that “vegetative caps are generally 2 feet thick but can vary based on site specific considerations.” It should be noted that the Presumptive Remedy Guidance specifies 6” of clean fill for a barrier plus 6” of clean fill for a buffer (i.e. 12” total) for Childcare, School and Residential Type II Lawns (Table, page 20). If a 12” cover is acceptable for these scenarios, would it not also be acceptable for non-residential settings?	Your comment was evaluated and no change was deemed necessary. We state that you can vary from 2' based on site-specifics. Two feet may be required based on the type of vegetation planted.
17	43	3	3.2.1	First paragraph, third sentence, "Vegetative caps are generally 2 feet thick but can vary based on site specific conditions." This statement is applicable to presumptive remedies but is not necessarily appropriate or required at other sites dependent on receptors and contaminants. Consider changing sentence to "Vegetative caps generally may vary between 6 inches and 2 feet thick based on site specific conditions such as receptors, end use of site, accessibility, other engineering controls and nature contamination. The Department's Presumptive and Alternate Remedy Guidance should be consulted for caps in locations planned for residential purposes, child care centers and/or schools." Similar to comment above, but slightly different way to address 2' stipulation in guidance document.	Your comment was evaluated and no change was deemed necessary. Existing language allows this.
18	43	3	3.2.1	Second sentence under "Components" bullet, consider changing to "The vegetated top soil layer is typically 4 to 6 inches thick but should be thick enough to support the vegetation." See comment above.	Your comment was evaluated and no change was deemed necessary.
19	43	3	3.2.1	Second paragraph, first sentence under "Components" bullet, consider changing to "Tl clean fill layer is usually zero to 18 inches thick." See above two comments.	Your comment was evaluated and no change was deemed necessary. Surface topsoil layer is needed to support vegetative growth.
20	47	3	3.2.2	Third paragraph under bullet titled "Design Considerations and Data Needs" - additiona discussion should be included upfront regarding overall water budget (of which climate is a critical component). The overall water budget is the single most important ET cap design factor. Water budget components include the climate variables listed, soil charateristics (e.g., water holding capacity), stormwater runoff, ET rates specific to the vegetation being planted, and interception rates.	Your comment was evaluated and no change was deemed necessary. The intent of this section was to introduce the major components/features of an evapotranpiration cap, but not go into the detail requested by the commentor.
21	47	3	3.2.2	Under "Design Conditions and Data Needs", in the four technical requirements for ET covers, letter b) is "Adequate soil thickness to store water derived from a “critical-event” storm". The soil should be of sufficient thickness and characteristics to satisfy the site-specific water budget requirements (and to support healthy vegetation cover). However, management of "critical-event" storms will not generally occur via storage within the soil profile. Dependent on the antecedent soil moisture condition, there will be some amou of infiltration and storage within the soil profile; however, larger or "critical-event" storms will result in surface runoff. Generally, additional measures such as grading for positive drainage and/or the introduction of other traditiona/structurall surface water conveyance features are used to manage larger storm events. Consider changing bullet to: "b) Adequate soil thickness to meet the requirements of the site-specific water budget requirements".	Your comment was evaluated and no change was deemed necessary. The intent of this section was to introduce the major components/features of an evapotranpiration cap, but not go into the detail requested by the commentor.
22	50	3	3.2.2	Under "Operations and Maintenance", another performance monitoring method that may be utilized is monitoring of groundwater levels, particularly in response to precipitation events over time.	Comment accepted and revision made.

23	51	3	3.2.3	In Section 3.2.3 – Phytoremediation, there is a table that references TPH contaminatio Should that be changed to EPH?	Your comment was evaluated and no change was deemed necessary. The table is an USEPA reference.
24	51	3	3.2.3	Consider adding to Table 2: Mechanism - Constructed Wetlands; Process Goal - sedimentation, filtration, adsorption, volatilization, precipitation, adsorpiton, hydrolsis, oxidation/reduction, bacterial metabolism, natural decay; Media - surface/storm water and groundwater; Contaminants - organic and inorganic compounds; Plants - cattails, Phragmites; Status - field application.	Your comment was evaluated and no change was deemed necessary as the table included in the guidance was taken from a USEPA reference and therefore cannot be modified. Additionally, constructed wetlands are not typically phytoremediation based, and therefore were not included in the table.
16	60	3	3.3.5	First Pargraph - Second Sentence: replace "in-situ" with "sediment" for clarity.	Comment accepted and revision made.
8	58	3	3.4	See attachment for some additional suggested language (pulled out of ODST draft dredging guidance documents).	Comment accepted and revision made.
9	59	3	3.4.1	Para. #1 states "Chemical isolation is often not a primary design parameter …" I disagree - when capping contaminated sediment (even with a conventional cap), chemical isolation is always a primary design parameter, determining cap thickness ar the cap materials to be used. If a conventional cap of acceptable thickness is determined to be not effective in isolating the contaminants, the next step in the design process is to consider the use of an amended cap.	Comment accepted and revision made.
10	60	3	3.5	Monitoring of suspended sediment levels in the water column during cap construction/placement operations may be required to ensure compliance with the applicable federal Clean Water Act Section 401 Water Quality Certificate and New Jersey Water Quality Standards.	Comment accepted and revision made.
21	64	3	3.3.6	General issue has been addressed related to the ownership of the sediments, need for and state acceptance of non-permanent remedies such as caps and establishment of deed notice per N.J.A.C. 7:26C-7.2 (b). What about signatories on remedial action permits since the state in many cases "owns" the sediment and the owner & RP are supposed to sign the RAP?	This guidance does not supercede or negate any of the administrative requirements (i.e. signatories) associated with establishment of a deed notice or Remedial Action Permit.
10	69	5	App A	“Slurry wall” should be revised to “slurry trench,” which is the standard industry term.	Comment accepted, revision made.
11	69	5	App A	Suggested revision to the slurry trench paragraph: Slurry trenches generally start as a 2 to 4 foot wide trench filled with a bentonite and water slurry. The trench typically to close with an underlying a confining layer (usually no more than 50 100 ft deep). The bentonite mixture slurry inhibits groundwater movement and maintains the trench configuration wall stability. The slurry also produces a low-permeability zone (filter cake) by filling the voids and in the walls of the trench. A thick mud-like soil and bentonite mixture is then prepared and poured carefully placed into the trench in a manner that does not mix with the slurry. This displaces the water-bentonite slurry mixture and forms the slurry wall. Cement can be used as an additive to enhance the strength and load-bearing capacity, but much care must be taken with the backfill placement. Alternatively, a cement-bentonite slurry can be used to support the excavation and allowed to “self harden” to create the low permeability barrier. Grout curtain systems are installed by injection of particulate grouts (like cement-bentonite slurries) or chemical grouts that involve a chemical base (e.g. sodium silicates), a catalyst, and water or another solvent. Cement-bentonite grout can be mixed in the ground by Augering in a pattern of overlapping columns to create a barrier in situ.	Comment accepted, revision made.

36	69		App A	Consider including the use of phytoremediation species (e.g., hybrid poplars) as a lateral barrier and/or as en enhancement to an other technology (e.g., cutoff wall). The use of phytoremediation species will provide additional interception, evaporation and transpiration of precipitation, thus helping to preserve and increase the performace of other lateral controls.	Your comment was evaluated and no change was deemed necessary. The suggested language is too specific.
11	81			A major contaminated sediment capping operation has been conducted by the USACE-New York District and USEPA Region 2 at the Historic Area Remediation Site (HARS). As of December 2008, approximately 36 million cubic yards (MCY) of dredged material from NY-NJ Harbor has been beneficially used at the HARS. Additional information about these capping operations at the HARS can be found at the following web site: http://www.nan.usace.army.mil/Missions/Navigation/HistoricAreaRemediationSite(HARS).aspx	Your comment was evaluated and no change was deemed necessary. Committee feels that enough case examples are provided.
12	81			Aso consider discussing the Passaic River RM 10.9 TCRA work.	Your comment was evaluated and no change was deemed necessary. Since work has not been completed, it is not appropriate for inclusion as a case study.
39	86	7	App C	Page 86 (Appendix C – Cost and Discount Rate) notes that “a longer duration may be warranted” (referring to the standard 30-year horizon) for projects anticipated to continue for more than 30 years. However, page 2 (“Calculating Financial Assurance”) of the Remedial Action Permit for Soils Guidance stipulates a 30-year horizon. Is an LSRP allowed to apply a timeframe longer than 30 years for calculating FA?	Comment accepted and revision made.
			Appx E	The reference to 7:26C-7.10 should be revised as above. There are a few important distincitions between RFS and FA. You can draw down on RFS to investigate/construct the remedy, while FA cannot. Self guarantee is allowable under RFS, but not under FA.	Your comment was evaluated and no change was deemed necessary.
13	93	10	App F	The Capping guidance provides example costs for construction of various types of caps (page 92 and occasionally within the text discussion). It would be helpful to add typical operation and maintenance costs, as these would also factor into a design selection.	Your comment was evaluated and no change was deemed necessary. These costs would vary greatly given the type, size, and use of caps. An attempt to provide specific costs would not be helpful.
14	na		general	The document does not cover drainage of caps. The following is suggested: Caps which include low permeability layers should be designed to include a drainage layer above the low permeability layer (synthetic liner or clay) to provide adequate structural performance of the cover soil. Without adequate drainage cover soils will rut and damage the underlying systems by mechanical means. Also, drainage layers collect infiltration over large areas, and carry the infiltration away by gravity flow. Drainage transmission efficiency is greatly influenced by the slope of the drainage laye Failures have occurred where drainage layers change from steep slope to shallow slope with a lower flow capacity, causing water to back up in the steep slope; the increase in head can create an artesian condition which destabilizes the cover soil above. Also, high velocity flow on steep slopes will create an erosion potential at the exit, which requires a graded aggregate filter to retain soil in place.	Comment accepted and revision made.

15	na		general	Cover soils protect the cap remedy layers against mechanical and physical damage. Cap thickness should consider the depth of freeze and thaw, desication, and root depth.	These concerns were addressed within the document.
17			general	General comment: Should "Floating" Caps be included in this document? Meaning caps over very soft material (various sludges or saturated wastes/ash) that are not under water?	Your comment was evaluated and no change was deemed necessary.