

Message

---

**From:** McKenzie, Jill [Jill.McKenzie@dep.nj.gov]  
**Sent:** 6/22/2017 6:40:34 PM  
**To:** Donovan, Betsy [Donovan.Betsy@epa.gov]  
**CC:** Byrnes, Steve [Steve.Byrnes@dep.nj.gov]; VanEck, David [David.VanEck@dep.nj.gov]  
**Subject:** RE: Rolling Knolls - proposed RAOs and Remedial Alternatives

Betsy – Below please find the NJDEP’s response to your June 12<sup>th</sup> email regarding proposed changes to the Remedial Action Objectives and Remedial Alternatives for the site. Let me know if this email is sufficient, or if you would prefer the response in a more formal, letter format. - Jill

The New Jersey Department of Environmental Protection (NJDEP) has completed its review of the proposed modifications to the Remedial Action Objectives and Remedial Alternatives from what were previously presented in the March 2017 DSRA Technical Memo. These proposed modifications were forwarded, via email, to the NJDEP on June 12, 2017. THE NJDEP offers the following comments on the proposed changes:

1. Remedial Action Objectives (RAOs)

- a. Item #2 should state “Control or remove source areas”....

2. Remedial Alternatives

- a. Soil (no future use scenario):
- The term “site controls” should be replaced with more specific actions such as deed notice and access restriction.
  - Consolidation of select materials should stipulate that the consolidated materials will be placed under a cap.
- b. Soil (residential future use scenario): The term Developable Area is somewhat subjective. Perhaps a more specific description of this term, as well as an indication as to what areas are being considered as Developable, is warranted.

---

**From:** Donovan, Betsy [mailto:Donovan.Betsy@epa.gov]

**Sent:** Monday, June 12, 2017 10:55 AM

**To:** Vaughn, Stephanie <Vaughn.Stephanie@epa.gov>; Griffiths, Rachel <griffiths.rachel@epa.gov>; Sivak, Michael <Sivak.Michael@epa.gov>; Fajardo, Juan <Fajardo.Juan@epa.gov>; Clemetson, Michael <Clemetson.Michael@epa.gov>; McKenzie, Jill <Jill.McKenzie@dep.nj.gov>; Hagerman, Paul <HagermanPR@cdmsmith.com>; Darpinian, Amy F NWK (Amy.F.Darpinian@usace.army.mil) <Amy.F.Darpinian@usace.army.mil>; George Molnar (George\_Molnar@fws.gov) <George\_Molnar@fws.gov>

**Cc:** Carpenter, Angela <Carpenter.Angela@epa.gov>

**Subject:** FW: Rolling Knolls - proposed RAOs and Remedial Alternatives

Rolling Knolls Reviewers – Please see the following message with the PRPs proposed Remedial Action Objectives (RAOs) and Remedial Alternatives which will be included in the Feasibility Study. Please provide comments by June 26<sup>th</sup>. If you would like to discuss any comments prior to submitting a response, please let me know. Thank you for your assistance.

---

**From:** John Persico [mailto:JPersico@Geosyntec.com]

**Sent:** Monday, June 12, 2017 8:15 AM

**To:** Donovan, Betsy <Donovan.Betsy@epa.gov>

**Cc:** Ricci, Richard F. <RRicci@lowenstein.com>; mfaigen@issuesllc.com; Richman-La Londe, Alexa <ALALONDE@RIKER.com>; 'Fisher, Gary (Nokia - US/Murray Hill)' <gary.fisher@nokia.com>; Brian Bergeron <pete.bergeron@chevron.com>; Richard T. Hughes <rhughes@jw.com>; Irvin M. Freilich <IFreilich@gibbonslaw.com>; Jim O'Meara <james.omeara@novartis.com>; Michael Draikiwicz <MDraikiwicz@enviro-sciences.com>; Nancy Eichinger <nancy.eichinger@novartis.com>; Robb Truedinger <robb.truedinger@novartis.com>; Robert A. Malinoski <RMalinoski@chevron.com>; Shawn LaTourette <SLaTourette@gibbonslaw.com>; Sofina Mirza-Reid <sofina.mirza-reid@novartis.com>; Goldfarb, Steven <steven.goldfarb@novartis.com>; Adame Winningham, Nikki <nadame@lowenstein.com>; Steven Poirier <SPoirier@Geosyntec.com>

**Subject:** Rolling Knolls - proposed RAOs and Remedial Alternatives

Betsy, as I indicated in my email on June 8, 2017, we are providing new proposed Remedial Action Objectives (RAOs) and Remedial Alternatives for review by USEPA. These are based on your comments on the RAOs and Remedial Alternatives in the Development and Screening of Remedial Alternatives Technical Memorandum (DSRA Tech Memo) and on subsequent discussions between USEPA and the Rolling Knolls Group.

### **RAOs**

1. Prevent or minimize current and potential future unacceptable risks to human and ecological receptors through direct contact or ingestion of contaminated soil.
2. Control source areas to prevent or minimize impacts to groundwater.
3. Prevent or minimize current and potential future unacceptable risks to human receptors through ingestion of contaminated groundwater.
4. Restore groundwater to its expected beneficial use to the extent practicable by reducing contaminant concentrations below the more stringent of federal MCLs and NJ GWQS.

### **Remedial Alternatives**

#### **Soil (no future use scenario)**

1. No Action
2. Site Controls
3. Site Controls and Capping of Selected Areas to Reduce Overall Risk
4. Site Controls, Consolidation of Selected Materials, and Capping of Selected Areas to Reduce Overall Risk
5. Site Controls, Excavation, and Off-Site Disposal of Selected Areas to Reduce Overall Risk

#### **Soil (residential future use scenario)**

1. Site Controls and Capping of All Landfill Material in the Developable Area of the Site
2. Excavation and Off-Site Disposal of All Landfill Material in the Developable Area of the Site

#### **Groundwater**

1. No Action
2. Monitored Natural Attenuation (MNA) with Source Control
3. Biological Treatment and MNA with Source Control
4. In-Situ Chemical Oxidation and MNA with Source Control
5. Containment Using a Permeable Reactive Wall and MNA with Source Control

Note that by “source control” in the groundwater remedial alternatives, we are referring to the buried materials observed at Test Pit TP-09, upgradient of well MW-3, or similar buried source materials.

Please let me know if you have any questions or want to discuss these.

John L. Persico, P.G.  
Principal  
609 493 9008 (office)  
609 903 6227 (cell)

**Geosyntec**<sup>®</sup>  
consultants

engineers | scientists | innovators