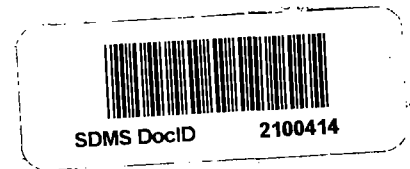




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029



April 9, 2008

Dr. Rainer Domalski
RUTGERS Organics Corporation
201 Struble Road
State College, PA 16801

Re: Conditional Approval of Response Action Design Report, Centre County Kepone Site, State College, PA

Dear Dr. Domalski:

EPA has completed review of the Response Action Design Report (RADR) for sediment removal submitted by Golder Associates on October 22, 2007 and are pleased to conditionally approve it. Approval is conditional upon your agreement with the following recommendations contained in the attached comments:

- 1) Vacuum dredging will be the method for removal of sediments in the Thornton Spring Channel (TSC). Embedded materials that exceed the remediation goal will be loosened with hand equipment and removed by vacuum hose;
- 2) No rock filters will be used in the TSC. Only biodegradable materials (e.g. coir logs, compost filter socks) will be used to control flow and collect sediments within the TSC;
- 3) Geotextile and rip rap materials will not be used along the TSC. Only biodegradable materials (e.g., jute, coir, or straw matting and logs, compost filter socks) will be used for bank stabilization;
- 4) The use of backfill material in the excavated channels will be minimized and avoided as much as possible; and
- 5) Only native plants will be seeded underneath the biodegradable matting on the restored areas of the TSC. The seed mix will be shade tolerant and include an annual cover crop (e.g., annual ryegrass) for quick stabilization.

Please notify me once a contract has been awarded for this project so that I may plan for appropriate oversight at the Site during the removal activities. If you have any questions or concerns, please call me at (215) 814-3218.

Sincerely,



Frank Klanchar
Project Manager
Western PA and MD Remedial Branch (3HS22)

encls.

cc: L. Dietz (3HS22)
S. Finn (Golder)
M. Hartle (PFBC)
B. Pluta (BTAG)
C. Sinclair (PADEP)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

November 7, 2007

SUBJECT: Response Action Design Report, Sediment Removal Action; Centre County
Kepone, State College, Pennsylvania; October 2007

FROM: Bruce R. Pluta, Coordinator
Biological Technical Assistance Group

TO: Frank Klanchar (3HS22)
Western PA / Maryland Remedial Branch

In response to your request, representatives of the BTAG have reviewed the subject documents and offer the comments presented below. We appreciate this opportunity to provide comments prior to implementing the removal action.

2.2 Sediment Removal & Drawings 3 & 6

The statement that "traditional excavation methods may also be required in areas of restricted access" is counterintuitive. Vacuum hoses can be taken into areas which are inaccessible with conventional equipment. Vacuum dredging reduces the need for clearing vegetation and minimizes the damage to the habitat, which is why BTAG and the Pennsylvania Fish and Boat Commission (PFBC) recommended using this technology. Conventional equipment should not be used in TSC as damage to the surrounding habitat will be unacceptable. Embedded materials that exceed the remediation goal should be loosened using hand equipment and removed with the vacuum hose.

Rock filters should not be used in TSC. Only biodegradable materials (e.g., coir logs, compost filter socks) should be used to control flow and collected sediments within TSC. Stacked coir logs or filter socks are frequently used as filters in small channels and trap sediments better than rock filters.

The report indicates that sediment samples may be centrifuged prior to analysis. It is unclear whether the supernatant will also be included for analysis. Please clarify.

2.3 Channel Lining, Drawing 5 & Sections 02274 & 02595

It is unclear why a channel lining will be used following the removal of the contaminated sediment. This would appear to be unnecessary if the removal action eliminates the contamination; very little residual contamination should be left following vacuum dredging. The channel lining also would likely prohibit the reestablishment of vegetation in the channels as well as future excavation (if required or needed), especially with the placement of rip rap on top. It is

also unclear whether the proposed liner/rip rap remedial action will increase water flow velocity in both the FWDD and TSC leading to increased erosion at the discharge points in Spring Creek.

Geotextile and rip rap should not be used along the TSC. Only biodegradable materials (e.g., jute, coir, or straw matting and logs, compost filter socks) should be used for bank stabilization.

Technical Specifications Section 02223 & 02233

Neither backfill nor aggregate should be used in TSC. Backfill is not necessary in the FWDD. Sediment accretion allowed to occur overtime will be more stable than material placed in the ditch.

Technical Specifications Section 02936

The definition of weeds must include all Pennsylvania Department of Agriculture Noxious Weeds (<http://www.agriculture.state.pa.us/agriculture/cwp/view.asp?q=127683>) and the Invasive Plant Species of the Mid-Atlantic Region (<http://www.nps.gov/plants/alien/list/midatlantic.htm>).

Only native plants should be seeded underneath the biodegradable matting on the restored areas along TSC. The seed mix should be shade tolerant to improve its success under the existing tree canopy and include an annual cover crop (e.g., annual ryegrass) for quick stabilization. Fertilizer, seeding techniques, and mulching should be according to vendor guidelines for native seeds mixes which differ considerably from landscaping fescue mixes. As native plants can take longer to develop, the performance criterion for reseeding should be extended to three years after seeding.

Thank you for the opportunity to review this document. Please contact me at x2380 or Kathy Patnode at 304-234-0238 if you have questions or wish to discuss these comments.



established 1866

Pennsylvania Fish & Boat Commission

Bureau of Fisheries
Division of Environmental Services
450 Robinson Lane
Bellefonte, PA 16823
814-359-5237
March 26, 2008

Distributed via e-mail

Mr. Frank Klanchar (3HS22)
U.S. EPA Region 3841 Chestnut Bldg.
Philadelphia, PA 19107-4431

Re: October 2007 Response Action Design Report
Sediment Removal Action
Centre County Kepone Site

Dear Mr. Klanchar:

The Pennsylvania Fish and Boat Commission appreciates your efforts to receive input from us regarding the subject plan. We have reviewed the sediment removal action plan, as well as the BTAG comments of November 27, 2007 and would like to add the following comments, which are organized in a topical fashion.

Possibility of continuing inputs from remediated OU-1 and relevant safeguards

Understanding that the greatest reservoir of kepone and mirex at contaminated sites is soil, we have concerns associated with the finding expressed on Section 1.1, page 2 of the report that "mirex and kepone are currently present in the FWDD and TSC at concentrations comparable to previous sampling results." One would expect that soil washing from the remediated OU-1 would have lower concentrations of mirex and kepone that would cause Fresh Water Drainage Ditch (FWDD) samples in particular to decline. This does not appear to be the case. A provision in an OU-2 ROD is recommended to create a sedimentation basin to capture fine material until kepone and mirex are at levels more protective of the environment. This provision would function to interrupt the soil transport pathway to Spring Creek and reduce the mass balance of kepone and mirex in Spring Creek over time.

We understand that this is not the focus of this particular plan, but nevertheless, is a relevant comment. Sediment kepone and mirex concentrations over time from the delta which sometimes exists at the mouth of the FWDD and in Spring Creek downstream of Thornton Spring and the FWDD would be instructive in tracking contaminant inputs to the creek over time.

Erosion and Sediment Control

Report Section 1.2 specifies that an Erosion and Sediment Control Plan required by the 2007 Administrative Settlement and Order on Consent will be submitted to the Centre County Conservation Office prior to commencement of work. We emphasize that due to the

Mr. Frank Klanchar
March 26, 2008
Page 2

contamination associated with soil and sediment, more robust controls than the norm are important with this removal action.

Sediment removal

We agree with use of vacuum dredging, particularly in the Thornton Spring Channel (TSC), since it disturbs surrounding habitat less than with use of heavy equipment.

Report Section 2.2 describes provisions for reducing the amount of water in the FWDD. It is our experience that removing soil/sediment in the absence of flow is critical to prevent mobilization of fine material and to allow effective removal. We believe isolation of fine material from flow to be more critical than the plan language, which states, "the contractor *may* (emphasis added) setup a piping system to divert flow around the section of channel where sediment is being removed." We are not sure that rock filters placed as outlined in standard PA DEP guidance will accomplish the degree of sediment interception we propose in the E & S control paragraph.

Channel Lining

Sediment removal will increase the bank angle and increase erosion. We see provisions to use rip rap to armor erodable banks as important in the FWDD. A channel liner over residual soil will be difficult to maintain in the high gradient FWDD channel. We agree with the November 7, 2007 BTAG comments that coir logs and matting, which allow establishment of vegetation, should be used in the Thornton Spring channel. A rock-lined channel severely limits ecological function in the present and the future after sediment removal has occurred. We note that Technical Specification Section 02272, Section 3.01 A. indicates vegetation growth is to be minimized through stone rip rap. We believe rip rap is undesirable in TSC.

Construction Schedule

Removal before September 1 is desirable to allow growth of vegetation to stabilize disturbed areas.

Thank you for the opportunity to provide input. If you have comments or questions, please contact Heather Smiles, who is now our contact in this case. Heather's phone number is (814) 359-5194 and her e-mail is hsmiles@state.pa.us.

Sincerely,

Mark A. Hartle, Chief
Aquatic Resources Section
Division of Environmental Services

c: PFBC – H. Smiles
EPA Region III BTAG – B. Pluta, K. Patnode

EPA Comments

- 1) Section 2.1, 3rd paragraph: In preparation for removal activities in the Thornton Spring channel, the Groundwater Treatment Plant (GWTP) should be operating to assist in substantially reducing or even temporarily eliminating surface water flow from Thornton Spring. Golder Associates should explore the possibility of increasing the pumping rates in extraction wells EW-5 and EW-6. The GWTP should be able to handle higher flow rates.
- 2) Section 2.2 and Drawing 6: The R-2 rip rap in detail #4 may not meet DEP standards for all proposed locations along each channel. R-3 rip rap is required for channel locations that are between two to three feet deep measured from the bottom of channel to the top of bank.
- 3) Section 2.3, 1st paragraph, last sentence: EPA recommends that natural stream channel lining (e.g. coir fiber matting, coir logs) be employed for the Thornton Spring channel segment. The use of rip rap in this channel is highly discouraged.
- 4) When it is available, a copy of the Erosion and Sediment Control Plan should be provided to the Centre County Conservation District. The POC at the Centre County Conservation District is Mr. Jim Coslo. His phone number is (814) 355-6817.



"Hartle, Mark"
<mhartle@state.pa.us>
04/10/2008 03:24 PM

To Frank Klanchar/R3/USEPA/US@EPA
cc
bcc
Subject RE: Centre County Kepone Site - Removal Order

Thanks Frank,

Looks more eco-friendly than RN's original proposal.

Mark

-----Original Message-----

From: Klanchar.Frank@epamail.epa.gov
[mailto:Klanchar.Frank@epamail.epa.gov]
Sent: Wednesday, April 09, 2008 11:55 AM
To: Pluta.Bruce@epamail.epa.gov; mhartle@state.pa.us;
csinclair@state.pa.us
Cc: Tom.Conway@usace.army.mil; kathleen_patnode@fws.gov
Subject: Centre County Kepone Site - Removal Order

FYI. Removal work at Centre County to begin later this month. See forwarded message.

I granted conditional approval to the design report this week. You will be receiving a copy of my letter. Approval was conditional to ROC's agreement to the following comments:

- 1) Vacuum dredging will be the method for removal of sediments in the Thornton Spring Channel (TSC). Embedded materials that exceed the remediation goal will be loosened with hand equipment and removed by vacuum hose;
- 2) No rock filters will be used in the TSC. Only biodegradable materials (e.g. coir logs, compost filter socks) will be used to control flow and collect sediments within the TSC;
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- 4) The use of backfill material in the excavated channels will be minimized and avoided as much as possible; and
- 5) Only native plants will be seeded underneath the biodegradable matting on the restored areas of the TSC. The seed mix will be shade tolerant and include an annual cover crop (e.g., annual ryegrass) for quick stabilization.

I haven't looked at my schedule yet, but I am planning to go up to the Site during a portion of the removal activities.

Call me if you have any questions.

Frank Klanchar, RPM
EPA Region III

215-814-3218

----- Forwarded by Frank Klanchar/R3/USEPA/US on 04/09/2008 11:15 AM

"Rainer
Domalski"
<RDomalski@ruetgers-organics-corp.com>
04/09/2008 10:46 AM

To
<csinclair@state.pa.us>, Frank
Klanchar/R3/USEPA/US@EPA
cc
"Finn, Steve"
<steve_finn@golder.com>,
"McCullen, Kevin"
<Kevin_McCullen@golder.com>

Subject
Centre County Kepone Site -
Removal Order

Dear Cheryl and Frank:

RUETGERS Organics Corporation has awarded the contract to perform the work under the 2007 Removal Order to Panther Technologies, Inc.

Since ROC wants to get the work done as soon as possible, we have established the following time schedule:

Week of April 21, 2008:

Set-up of equipment (sediment storage/dewatering, water transfer to treatment plant, etc.) at the former ROC Plant Site, ground preparation for sediment removal at Thornton Spring, sediment sampling for waste characterization, increased groundwater pumping at the GWTP to decrease or eliminate water flow in Thornton Spring.

Week of April 28, 2008.

Removal of sediments at Thornton Spring
Removal of sediment at lower Freshwater Drainage Ditch along Route 26 (during the removal the GWTP will be shutdown).

Golder will provide the appropriate oversight for the field activities. Contact person is Kevin McCullen.

AR100315

I assume that you inform the other agencies like US Fish and Wildlife and PA Fish and Boat. If I should do that please let me know.

If you have further questions or comments, please do not hesitate to call me or Kevin McCullen from Golder.

Best regards.

Dr. Rainer F. Domalski
President & CEO
RUTGERS Organics Corporation
201 Struble Road
State College, PA 16801
Tel.: 814-231-9200
Cell: 814-880-6142
Fax: 814-238-1567
Email: rdomalski@ruetgers-organics-corp.com

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