C.M. CHRISTIANSEN CO., INC.

MILWAUKEE:

5501 NORTH SANTA MONICA BLVD. MILWAUKEE. WI 53217

TEL: (414) 963-9211

EMAIL: eric.r.christiansen@gmail.com

P.O. Box 100

PHELPS, WI 54554 TEL: (715) 545-2333

PHELPS:

FAX: (715) 545-2334

October 15, 2010

SENT BY ELECTRONIC MAIL

Mr. Chris Saari Wisconsin Department of Natural Resources Ashland Service Center 2501 Golf Course Road Ashland, Wisconsin 54806

Re: Your August 27, 2010 letter

Dear Mr. Saari:

Your referenced letter lists a number of concerns with the proposed concept remediation plan for the section of Military Creek near the Phelps former pole yard property. This concept plan was outlined by NRT in correspondence dated February 24, 2010. You further asked for a response by October 15, 2010, which is provided herein.

In 2007, CMC Co. was on a path to determine site-specific risks for dioxins in the sediments based on a conference call on February 9, 2007. We provided a conceptual site model (CSM) to support this activity. DNR and DHFS were to provide comments to this and we would prepare a work plan for additional sediment investigation and risk characterization.

In a letter dated March 3, 2009 you acknowledged that the DNR had not yet provided comments on the CSM. You proposed instead that we "simply proceed with a sediment removal action." Your proposal included the following, that:

- The stretch of Military Creek proposed for sediment removal would represent a relatively limited volume of sediments.
- Removal technologies exist.
- Treatment and disposal options exist.

We agreed to proceed along this path and a concept plan was initially discussed as part of our meeting on June 9, 2009 at NRT's offices. Following that meeting, CM Christiansen Co., Inc. indicated by email to the Department that we were committed to advancing the discussions begun at our June 2009 meeting to achieve final resolution of open matters and obtain closure of the pole yard property. This commitment was given with the understanding that, in light of the open issues discussed, the uncertainties involved, and the need to control costs, it is important to define an endpoint to this project such that we can embark on the appropriate remediation steps with reasonable expectation that our goal of closure can, and will, be obtained within the parameters we all agree to in advance of beginning those remediation steps.

On October 29, 2009 we met again, and our follow-up to that meeting was to submit the conceptual plan for addressing Military Creek Sediments. Although the concept plan was submitted in good faith toward resolution of environmental issues, a number of issues

Mr. Chris Saari, WDNR October 15, 2010 Page 2 of 2

are now being raised which if factored into a remedial approach would put us far in excess of the volumes discussed at our earlier meetings. It was our intent with the concept plan to put forth a pragmatic and reasonable approach that would achieve the most environmental benefit within limitations of the resources available to this project. It appears we are no closer to our mutual goal.

At this juncture we feel that the constraints put on a removal action put us back to original approach of assessing potential risk in Military Creek. We propose the following steps to move this forward:

- 1. You mention the "Consensus Based Sediment Quality Guidelines as well as the target site sediment concentration of 15 nanograms per kilogram." Our consultant understands the "guideline" document and its limitations. In your September 9, 2009 correspondence you indicate this target concentration is based on protection of aquatic resource, namely trout fry. You offered to provide specific references or information that supports this dioxin value. We would appreciate receiving the scientific documentation that you previously offered.
- 2. We would like your review on the conceptual site model as that will assist us in looking at potential risk pathways that the sediments may pose.
- 3. From there we will be able to determine whether a site-specific risk evaluation should be performed.
- 4. Regarding the question of contamination to the banks of Military Creek. As you know, a portion of the bank, closest to the former wood treating operations, has already been remediated for pentachlorophenol, which would address any co-occurring contaminants. Much of the remaining shoreline/bank area of Military Creek is heavily vegetated and stable. We in turn would have a concern about removing an arbitrary 2-foot section when it may be better to leave it intact and stabilized.

While we can answer and/or resolve some of the other technical concerns outlined in your letter, these issues have a major impact on defining the scale and endpoint for addressing the Creek. It is important that we resolve these issues, before expending further resources on refining the technical aspects of a conceptual removal plan. The overriding issue of requiring a clean-up to an extremely low target concentration that is not tied to site-specific conditions is simply an unachievable endpoint.

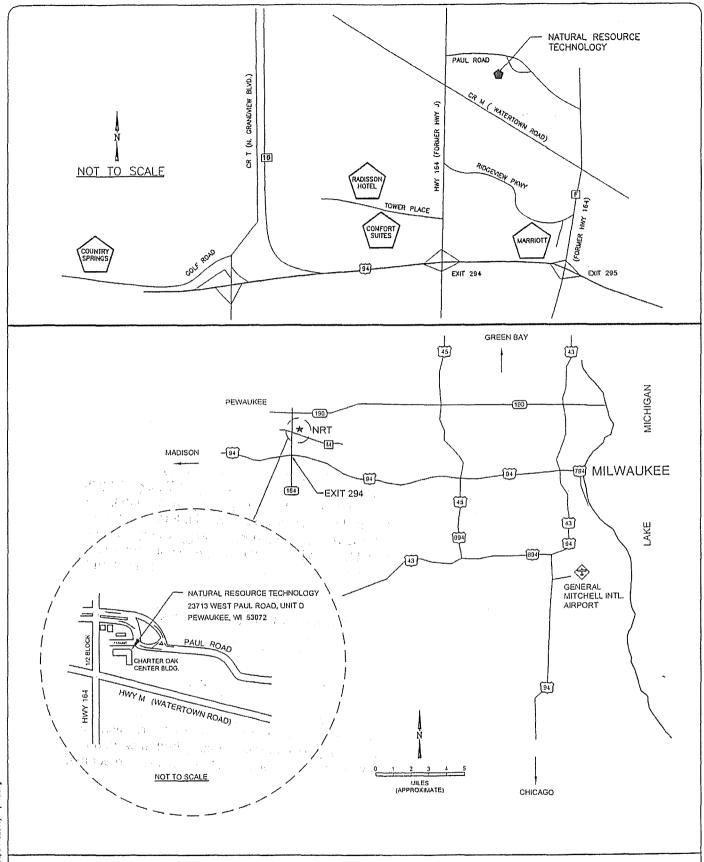
We look forward to receiving further information from you on this matter after which we work toward identifying a mutually agreeable approach for conducting further work on Military Creek sediments. If you have any questions, please don't hesitate to contact me.

Very truly yours,

C.M. CHRISTIANSEN CO., INC.

by: /s/ Eric R. Christiansen, President

cc: P.C. Christiansen
Laurie Parsons, NRT
Richard Fox, NRT
Elizabeth Gamsky Rich, Esq.





HOW TO FIND US-

NATURAL RESOURCE TECHNOLOGY 23713 W. PAUL ROAD, UNIT D PEWAUKEE, WISCONSIN (262) 523-9000 Please visit our web site at www.naturalrt.com

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3	Submittal to DNR of a Proposed Groundwater Monitoring Plan MW-17 MW-3, MW-4 west, MW-5, MW-6,	Within 30 days after the effective date of this agreement
4	Military Creek Sampling Start	On or before May 30, 1998, unless an extension is granted by DNR because of adverse weather, or within 30 days after CMC receives DNR comments on the Updated Military Creek Sediment Sampling Plan, whichever is later

Partially Completed by DNR Sept 03

5 X	Submittal to DNR of Soil Remediation System Design that complies with the requirements of ss. NR 724.09 and 724.11 and the relevant requirements of 724.13, Wis. Adm. Code, and application for any permits, variances and other approvals required from DNR	Within 60 days after the effective date of this agreement
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STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Leone & Meyer, Secretary

C.M. CHRISTIANSEN CO., INC., a Michigan corporation

10/22/10 CM Christiansen call Bill Fitzpatrick Tom Sartola Jim Kolloan Every hong we worked forwards to this point has been to They don't want to sample, but want to go which - Could we do fox tests, build them into this - Give them option to continue down path of removal
after sampling to better detine limits of
well push this to enforcement
I'll sheek "Course A, see how long JR will be out, then check in W/Don Graff. Try to talk again ~ 11/3

Saari, Christopher A - DNR

From:

eric christiansen [eric.r.christiansen@gmail.com]

Sent:

Friday, October 15, 2010 2:14 PM

To:

Saari, Christopher A - DNR

Cc:

Parsons, Laurie L.; Fox, Richard G.; Rich, Elizabeth

Subject:

Response to Aug 27 Letter

Attachments: CMC Inc Response to WDNR 101015.pdf

Chris:

Response to your letter of Aug 27 attached -- please contact me if there are any problems in transmission.

regards,

Eric

Eric Christiansen, President

C.M. Christiansen Co., Inc.

oci, Laurie Parsons, Rick Fox, Elizabeth Rich by email; PCC by regular mail

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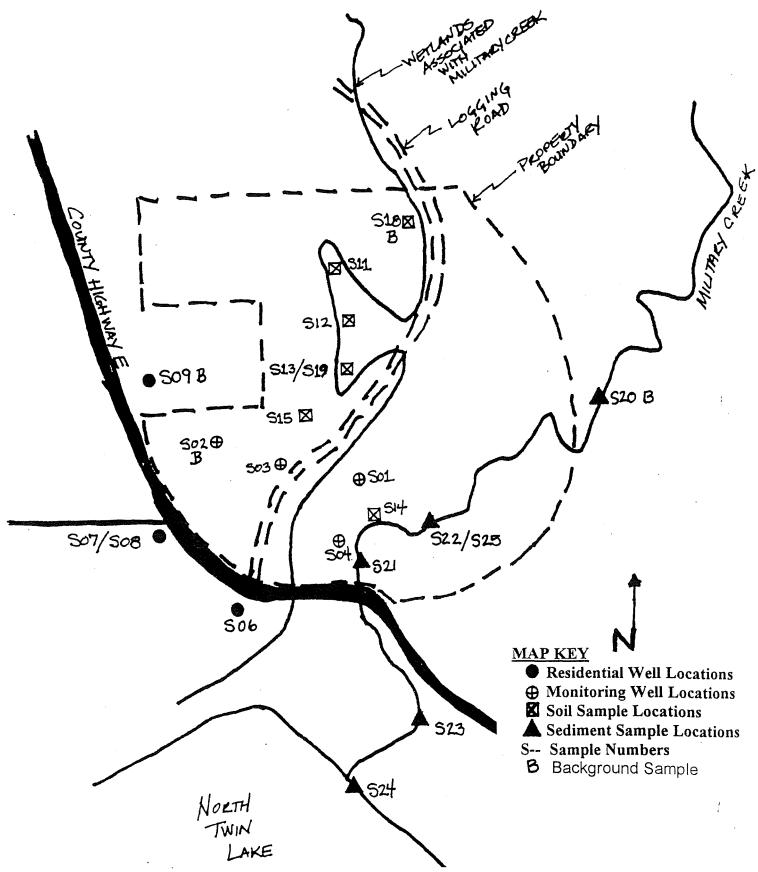
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C.M. Christiansen Company Site, Phelps, Wisconsin



Based on a 185% enlargement of 165% enlargement of 200% enlargement of Phelps, Wisconsin USGS Topographic Quadrangle Maps, 1981, 1:24 000.



23713 W. PAUL ROAD, SUITE D PEWAUKEE, WI 53072 (P) 262.523.9000 (F) 262.523.9001

Mr. Chris Saari Wisconsin Department of Natural Resources 2501 Golf Course Road Ashland, WI 54806 February 24, 2010 (1226)

RE:

C.M. Christiansen Co., Inc. (CMC), Former Pole Treatment Facility, Phelps, Wisconsin

BRRTS Activity #02-64-000068

Conceptual Plan for Addressing Military Creek Sediments

Dear Mr. Saari:

On behalf of C.M. Christiansen Co., Inc. (CMC), Natural Resource Technology, Inc. (NRT) is providing a Conceptual Plan to address sediments in Military Creek adjacent to the former Pole Yard property in Phelps, Wisconsin. CMC agreed to provide this Conceptual Plan at a meeting in Stevens Point with WDNR and NRT on October 29, 2009.

PURPOSE

The purpose of this Conceptual Plan is to address Military Creek sediments where polycholorinated dibenzo-p-dioxins and polychlorinated dibenzofurans (PCDD/PCDF) were detected in previous investigations conducted by WDNR. In meetings and correspondence on this project, we have discussed the ongoing concern over limited available resources and the desire to close out environmental issues efficiently, with as little cost uncertainty as possible. The soil and groundwater investigation and remediation work completed in the past 15 years required significant financial resources of the company. Therefore, it is important to CMC that any further efforts or expenditures be focused on achieving a closure/no further action end point. As such, CMC is seeking concurrence from the WDNR that the Concept Plan described below will satisfy CMC's obligation for addressing Military Creek sediments.

BACKGROUND

Contaminated sediment sites can be complex and as such, the risk assessment process is designed to facilitate and inform the decision making process. Originally NRT suggested that a risk assessment process would better define potential risk and facilitate an evaluation of the cost/benefit of any remedial action. However, in our most recent meeting on October 29, 2009 it was agreed that CMC would move ahead with a conceptual remedial plan in lieu of a risk evaluation process. To that end, this proposed plan was developed to remove potential risk pathways rather than spending limited, available resources in determining whether the risk actually exists. Further, it was agreed that the Conceptual Plan would be developed based on existing sediment analytical data only, to avoid the substantial cost of additional PCDD/PCDF analysis.

In WDNR's March 3, 2009 letter to Eric Christiansen, the concept of proceeding with a limited sediment removal action was proposed. At that time, it was WDNR's position that a limited sediment removal action is appropriate, although no site-specific risk information is available. We convened a meeting at NRT on June 6, 2009 to discuss in more detail WDNR's thoughts on the proposed limited removal action. WDNR issued a September 9, 2009 letter that further defines WDNR's position on a proposed removal action. The content of this letter was reviewed and discussed with WDNR in subsequent meetings. Certain aspects of the proposed plan were of concern to NRT/CMC. In our October 29 meeting, it was agreed that NRT would prepare this alternative Conceptual Plan.

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Mr. Chris Saari, WDNR February 24, 2010 Page 2



CONCEPTUAL PLAN

This Conceptual Plan for addressing Military Creek sediments is shown on attached Figure 1 and includes:

- Removing a limited volume of sediment from Military Creek containing highest likely impacts along a stretch of the creek adjacent to the site and ending just upstream of the County Highway E bridge.
- Placing a sand cover on the dredged section to sequester any residual contaminants.
- Placing additional sand cover on the stretch downstream from the Highway E bridge to further sequester contaminants in an area of the creek where a gravel bed is present and soft sediment deposits are thinner and/or discrete.

We feel that this plan meets standards or protectiveness that WDNR is requesting and it focuses the use of available resources on remediation rather than further studies. Site specific conditions that were considered in developing this Conceptual Plan included the following:

- <u>Site Access Constraints and Limitations</u>: Military Creek is surrounded by heavy vegetation and wetlands. As such, access to the creek would require additional measures or precautions to minimize disturbance to the wetlands during remediation of the creek sediments. In addition, remediation activities must be conducted from the top of bank (i.e., no equipment in the creek) due to the nature and thickness of the soft sediments in the creek. The Conceptual Plan includes access to the creek from the existing access road to the former 1999 excavation area located adjacent to the creek using a combination of crane mats and existing access road.
- Creek Water Management During Remediation: To assist with creek water management, temporary dams would be needed upstream and downstream from the sediment removal area using large sand bags to protect and facilitate the remediation work. Water upstream would be re-routed to downstream of the dammed section using pump(s) and hoses. The contribution of groundwater discharges to the creek is unknown. The Conceptual Plan includes minimal dewatering of the creek and treatment of the water during remediation.
- <u>Limited Sediment Analytical Data:</u> As stated above, this Conceptual Plan is based on existing sediment analytical data only and that no pre-remediation sampling is required.

The primary remedial activities assume:

- The project permitting and related requirements for design and implementation of this Conceptual Plan can be collaborative, focused and streamlined, with agency assistance as appropriate.
- Clearing and grubbing vegetation, as necessary to facilitate remediation.
- Temporarily re-routing the creek water from the remediation area using temporary dam, pump(s), and hoses.
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- Dewatering sediment removal area, as necessary to facilitate the work. Treatment of the wastewater is assumed necessary using bag filters and carbon absorption to meet Wisconsin Pollutant Discharge Elimination System general requirements. Treated water would be discharged via seepage cell similar to the one constructed during the 1999 remediation at the site.
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- Covering remaining sediments within the dredged area with 1 foot of locally available sand. The final covered surface would be placed to match the existing sediment depositional surface, to reduce potential scouring of the cover. No additional sampling during the course of the remediation work.
- Transporting excavated sediments to a Subtitle D landfill approximately 60 miles away as non-hazardous special waste.
- Covering sediments downstream of County Highway E with 6-inch layer of locally, available sand. This cover would sequester the contaminants from entering the stream water column. This cover area is estimated to be 20 feet wide and 375 feet long.
- Restoration of disturbed bank areas with topsoil, seed and mulch.

The estimated cost to implement this Conceptual Plan is summarized below:

Cost Category		Item Qty/Cost
	Total Removal	300 (cy)
	Total Sand Cover Area	7500 (sf)
Consulting - Design, Permitting, Bidding, Oversight		\$70,000
Site Preparation		\$81,000
Excavation, Disposal, and Dewatering		\$49,000
Site Restoration		\$34,000
,	Subtotal	\$234,000
	10% Contingency	\$23,000
	Total Estimated Cost	\$257,000

In correspondence with WDNR, NRT was also asked to provide an opinion of cost for a sediment removal-focused option. Due to the limited sediment quality data that is available and undetermined risk criteria, removal boundaries can not be estimated and a "full dredge" option for Military Creek can not be estimated. However, based on the estimates developed for the Conceptual Plan presented herein, site-specific conditions and our experience on other projects we estimate a unit cost in the range of \$400 to \$500 per cubic yard of material removed. This assumes a corresponding total project area similar to that shown on Figure 1, with a two-foot sediment removal thickness or more, and post-dredge sand cap placement. Of note unit costs for a smaller area could be substantially higher due to fixed costs involved in accomplishing this type of remediation work.

Mr. Chris Saari, WDNR February 24, 2010 Page 4



If you have any questions concerning this letter or the cost estimate, please do not hesitate to contact us. We look forward to moving forward on this phase of the project.

Laurie L. Parsons, PE

Principal Engineer

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Heather M. Simon, PE

Environmental Engineer

Richard G. Fox Principal Scientist

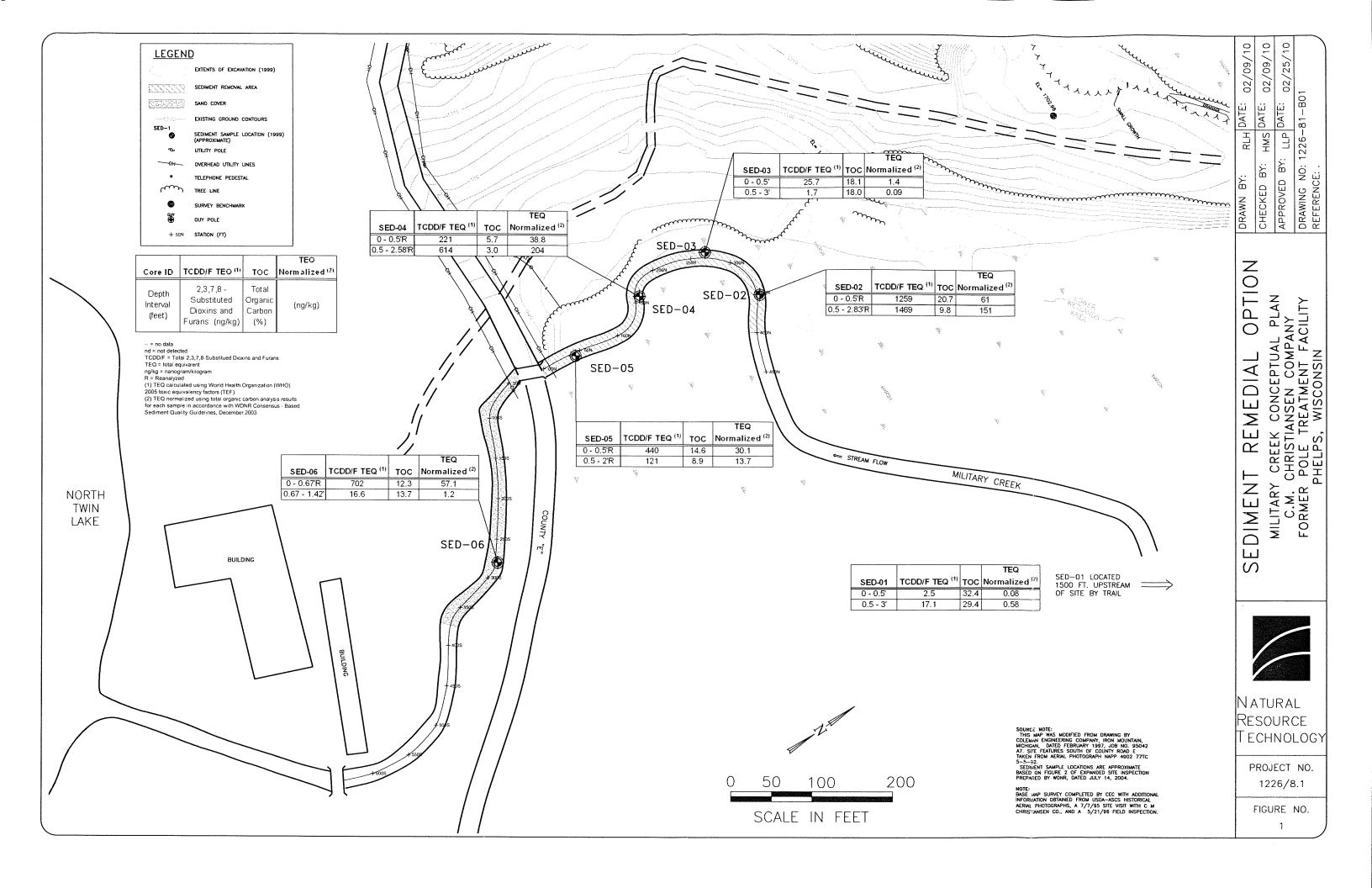
Cc:

Attachment: Figure 1 – Sediment Remedial Option

Mr. Eric R. Christiansen, C. M. Christiansen Co., Inc.

Mr. John Robinson, WDNR Mr. James Killian, WDNR Mr. William Fitzpatrick, WDNR

[\Pewfle\projects\1200\1226\Sediment Remediation\Concept Plan 2010\1226 CMC Concept Plan Feb 2010.doc]





ENVIRONMENTAL CONSULTANTS

23713 W. PAUL ROAD, SUITE D PEWAUKEE, WI 53072 (P) 262.523.9000 (F) 262.523.9001

Mr. Chris Saari Wisconsin Department of Natural Resources 2501 Golf Course Road Ashland, WI 54806 February 24, 2010 (1226)

RE:

C.M. Christiansen Co., Inc. (CMC), Former Pole Treatment Facility, Phelps, Wisconsin

BRRTS Activity #02-64-000068

Conceptual Plan for Addressing Military Creek Sediments

Dear Mr. Saari:

On behalf of C.M. Christiansen Co., Inc. (CMC), Natural Resource Technology, Inc. (NRT) is providing a Conceptual Plan to address sediments in Military Creek adjacent to the former Pole Yard property in Phelps, Wisconsin. CMC agreed to provide this Conceptual Plan at a meeting in Stevens Point with WDNR and NRT on October 29, 2009.

PURPOSE

The purpose of this Conceptual Plan is to address Military Creek sediments where polycholorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (PCDD/PCDF) were detected in previous investigations conducted by WDNR. In meetings and correspondence on this project, we have discussed the ongoing concern over limited available resources and the desire to close out environmental issues efficiently, with as little cost uncertainty as possible. The soil and groundwater investigation and remediation work completed in the past 15 years required significant financial resources of the company. Therefore, it is important to CMC that any further efforts or expenditures be focused on achieving a closure/no further action end point. As such, CMC is seeking concurrence from the WDNR that the Concept Plan described below will satisfy CMC's obligation for addressing Military Creek sediments.

BACKGROUND

Contaminated sediment sites can be complex and as such, the risk assessment process is designed to facilitate and inform the decision making process. Originally NRT suggested that a risk assessment process would better define potential risk and facilitate an evaluation of the cost/benefit of any remedial action. However, in our most recent meeting on October 29, 2009 it was agreed that CMC would move ahead with a conceptual remedial plan in lieu of a risk evaluation process. To that end, this proposed plan was developed to remove potential risk pathways rather than spending limited, available resources in determining whether the risk actually exists. Further, it was agreed that the Conceptual Plan would be developed based on existing sediment analytical data only, to avoid the substantial cost of additional PCDD/PCDF analysis.

In WDNR's March 3, 2009 letter to Eric Christiansen, the concept of proceeding with a limited sediment removal action was proposed. At that time, it was WDNR's position that a limited sediment removal action is appropriate, although no site-specific risk information is available. We convened a meeting at NRT on June 6, 2009 to discuss in more detail WDNR's thoughts on the proposed limited removal action. WDNR issued a September 9, 2009 letter that further defines WDNR's position on a proposed removal action. The content of this letter was reviewed and discussed with WDNR in subsequent meetings. Certain aspects of the proposed plan were of concern to NRT/CMC. In our October 29 meeting, it was agreed that NRT would prepare this alternative Conceptual Plan.

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Mr. Chris Saari, WDNR February 24, 2010 Page 2



CONCEPTUAL PLAN

This Conceptual Plan for addressing Military Creek sediments is shown on attached Figure 1 and includes:

- Removing a limited volume of sediment from Military Creek containing highest likely impacts along a stretch of the creek adjacent to the site and ending just upstream of the County Highway E bridge.
- Placing a sand cover on the dredged section to sequester any residual contaminants.
- Placing additional sand cover on the stretch downstream from the Highway E bridge to further sequester contaminants in an area of the creek where a gravel bed is present and soft sediment deposits are thinner and/or discrete.

We feel that this plan meets standards or protectiveness that WDNR is requesting and it focuses the use of available resources on remediation rather than further studies. Site specific conditions that were considered in developing this Conceptual Plan included the following:

- Site Access Constraints and Limitations: Military Creek is surrounded by heavy vegetation and wetlands. As such, access to the creek would require additional measures or precautions to minimize disturbance to the wetlands during remediation of the creek sediments. In addition, remediation activities must be conducted from the top of bank (i.e., no equipment in the creek) due to the nature and thickness of the soft sediments in the creek. The Conceptual Plan includes access to the creek from the existing access road to the former 1999 excavation area located adjacent to the creek using a combination of crane mats and existing access road.
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The primary remedial activities assume:

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If you have any questions concerning this letter or the cost estimate, please do not hesitate to contact us. We look forward to moving forward on this phase of the project.

Principal Engineer

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Heather M. Simon, PE Environmental Engineer

Richard G. Fox Principal Scientist

Cc:

Attachment: Figure 1 – Sediment Remedial Option

Mr. Eric R. Christiansen, C. M. Christiansen Co., Inc.

Mr. John Robinson, WDNR Mr. James Killian, WDNR Mr. William Fitzpatrick, WDNR

[\Pewfle\projects\1200\1226\Sediment Remediation\Concept Plan 2010\1226 CMC Concept Plan Feb 2010.doc]

Saari, Christopher A - DNR

From:

Laurie L. Parsons [lparsons@naturalrt.com]

Sent:

Wednesday, February 24, 2010 5:41 PM

To:

Saari, Christopher A - DNR

Cc:

Richard G. Fox; Eric Christiansen; Robinson, John H - DNR

Subject:

Military Creek Concept Plan

Attachments: 1226 CMC Concept Plan Feb 2010.pdf

Chris, attached is the concept plan developed on behalf of CMC. Signed copy with final version of the drawing will by forthcoming to the distribution list by mail.

Laurie L. Parsons, PE

President/Principal Engineer
Natural Resource Technology, Inc.
23713 W. Paul Road, Suite D
Pewaukee, WI 53072
262.522.1193 direct | 262.719.4502 mobile
262.523.9000 phone | 262.523.9001 fax
Iparsons@naturalrt.com | www.naturalrt.com



23713 W. PAUL ROAD, SUITE D PEWAUKEE, WI 53072 (P) 262.523.9000 (F) 262.523.9001

Mr. Chris Saari Wisconsin Department of Natural Resources 2501 Golf Course Road Ashland, WI 54806 February 24, 2010 (1226)

RE:

C.M. Christiansen Co., Inc. (CMC), Former Pole Treatment Facility, Phelps, Wisconsin

BRRTS Activity #02-64-000068

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The purpose of this Conceptual Plan is to address Military Creek sediments where polycholorinated dibenzo-p-dioxins and polychlorinated dibenzo-p-dioxins (PCDD/PCDF) were detected in previous investigations conducted by WDNR. In meetings and correspondence on this project, we have discussed the ongoing concern over limited available resources and the desire to close out environmental issues efficiently, with as little cost uncertainty as possible. The soil and groundwater investigation and remediation work completed in the past 15 years required significant financial resources of the company. Therefore, it is important to CMC that any further efforts or expenditures be focused on achieving a closure/no further action end point. As such, CMC is seeking concurrence from the WDNR that the Concept Plan described below will satisfy CMC's obligation for addressing Military Creek sediments.

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Mr. Chris Saari, WDNR February 24, 2010 Page 2



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Mr. Chris Saari, WDNR February 24, 2010 Page 4



If you have any questions concerning this letter or the cost estimate, please do not hesitate to contact us. We look forward to moving forward on this phase of the project.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Heather M. Simon, PE Environmental Engineer

Richard G. Fox Principal Scientist Laurie L. Parsons, PE Principal Engineer

Attachment:

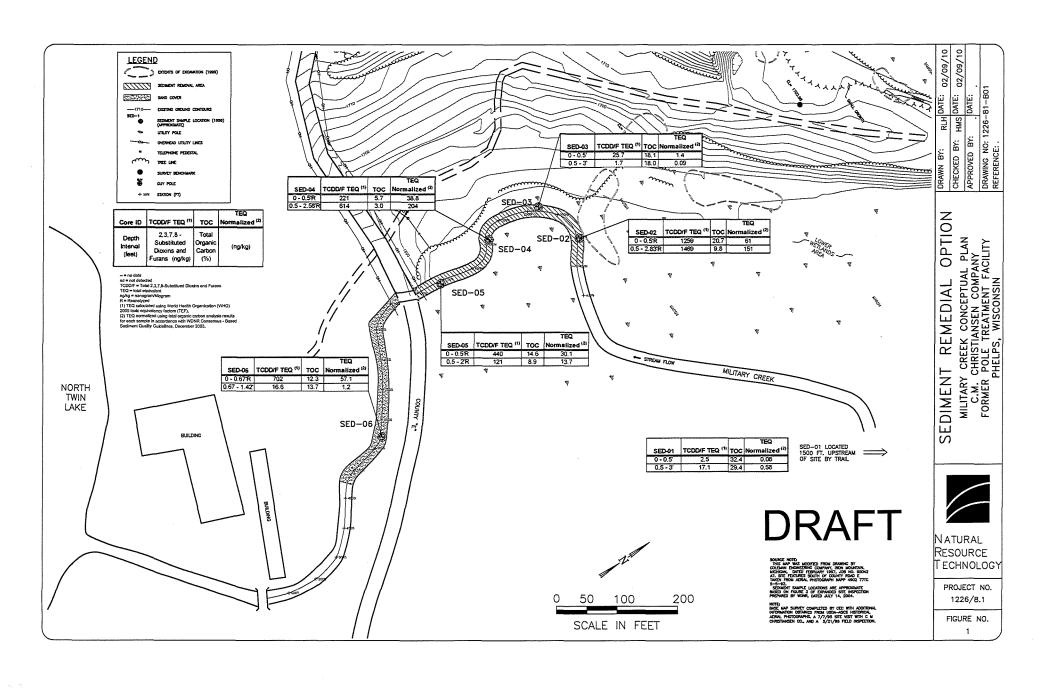
Figure 1 – Sediment Remedial Option

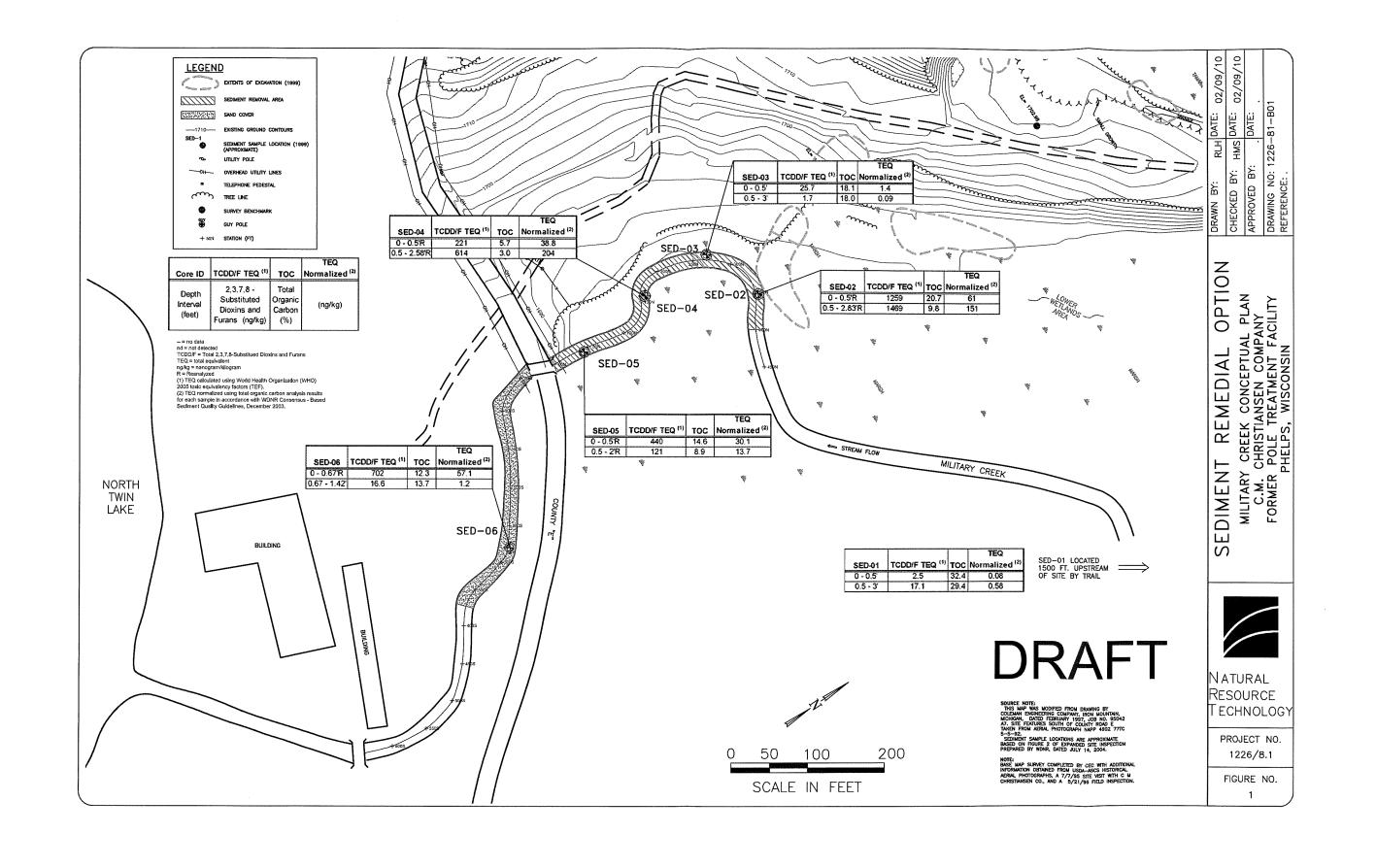
Cc:

Mr. Eric R. Christiansen, C. M. Christiansen Co., Inc.

Mr. John Robinson, WDNR Mr. James Killian, WDNR Mr. William Fitzpatrick, WDNR

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Saari, Christopher A - DNR

From:

eric christiansen [eric.r.christiansen@gmail.com]

Sont:

Friday, October 15, 2010 2:14 PM

To:

Saari, Christopher A - DNR

Cc:

Parsons, Laurie L.; Fox, Richard G.; Rich, Elizabeth

Subject:

Response to Aug 27 Letter

Attachments: CMC Inc Response to WDNR 101015.pdf

Chris:

desponse to your letter of Aug 27 attached -- please contact me if there are any problems in transmission.

egards,

ric

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ric Christiansen, President

Mr Christiansen Co., Inc.

Laurie Parsons, Rick Fox, Elizabeth Rich by email; PCC by regular mail

C.M. CHRISTIANSEN CO., INC.

MILWAUKEE:

5501 NORTH SANTA MONICA BLVD.

MILWAUKEE, WI 53217 TEL: (414) 963-9211

EMAIL: eric.r.christiansen@gmail.com

PHELPS:

P.O. Box 100

PHELPS, WI 54554

TEL: (715) 545-2333

(715) 545-2334 FAX:

October 15, 2010

SENT BY ELECTRONIC MAIL

Mr. Chris Saari Wisconsin Department of Natural Resources Ashland Service Center 2501 Golf Course Road Ashland, Wisconsin 54806

Re:

Your August 27, 2010 letter

Dear Mr. Saari:

Your referenced letter lists a number of concerns with the proposed concept remediation plan for the section of Military Creek near the Phelps former pole yard property. This concept plan was outlined by NRT in correspondence dated February 24, 2010. You further asked for a response by October 15, 2010, which is provided herein.

In 2007, CMC Co. was on a path to determine site-specific risks for dioxins in the sediments based on a conference call on February 9, 2007. We provided a conceptual site model (CSM) to support this activity. DNR and DHFS were to provide comments to this and we would prepare a work plan for additional sediment investigation and risk characterization.

In a letter dated March 3, 2009 you acknowledged that the DNR had not yet provided comments on the CSM. You proposed instead that we "simply proceed with a sediment removal action." Your proposal included the following, that:

- The stretch of Military Creek proposed for sediment removal would represent a relatively limited volume of sediments.
- Removal technologies exist.
- Treatment and disposal options exist.

We agreed to proceed along this path and a concept plan was initially discussed as part of our meeting on June 9, 2009 at NRT's offices. Following that meeting, CM Christiansen Co., Inc. indicated by email to the Department that we were committed to advancing the discussions begun at our June 2009 meeting to achieve final resolution of open matters and obtain closure of the pole yard property. This commitment was given with the understanding that, in light of the open issues discussed, the uncertainties involved, and the need to control costs, it is important to define an endpoint to this project such that we can embark on the appropriate remediation steps with reasonable expectation that our goal of closure can, and will, be obtained within the parameters we all agree to in advance of beginning those remediation steps.

On October 29, 2009 we met again, and our follow-up to that meeting was to submit the conceptual plan for addressing Military Creek Sediments. Although the concept plan was submitted in good faith toward resolution of environmental issues, a number of issues

Mr. Chris Saari, WDNR October 15, 2010 Page 2 of 2

are now being raised which if factored into a remedial approach would put us far in excess of the volumes discussed at our earlier meetings. It was our intent with the concept plan to put forth a pragmatic and reasonable approach that would achieve the most environmental benefit within limitations of the resources available to this project. It appears we are no closer to our mutual goal.

At this juncture we feel that the constraints put on a removal action put us back to original approach of assessing potential risk in Military Creek. We propose the following steps to move this forward:

- 1. You mention the "Consensus Based Sediment Quality Guidelines as well as the target site sediment concentration of 15 nanograms per kilogram." Our consultant understands the "guideline" document and its limitations. In your September 9, 2009 correspondence you indicate this target concentration is based on protection of aquatic resource, namely trout fry. You offered to provide specific references or information that supports this dioxin value. We would appreciate receiving the scientific documentation that you previously offered.
- 2. We would like your review on the conceptual site model as that will assist us in looking at potential risk pathways that the sediments may pose.
- 3. From there we will be able to determine whether a site-specific risk evaluation should be performed.
- 4. Regarding the question of contamination to the banks of Military Creek. As you know, a portion of the bank, closest to the former wood treating operations, has already been remediated for pentachlorophenol, which would address any co-occurring contaminants. Much of the remaining shoreline/bank area of Military Creek is heavily vegetated and stable. We in turn would have a concern about removing an arbitrary 2-foot section when it may be better to leave it intact and stabilized.

While we can answer and/or resolve some of the other technical concerns outlined in your letter, these issues have a major impact on defining the scale and endpoint for addressing the Creek. It is important that we resolve these issues, before expending further resources on refining the technical aspects of a conceptual removal plan. The overriding issue of requiring a clean-up to an extremely low target concentration that is not tied to site-specific conditions is simply an unachievable endpoint.

We look forward to receiving further information from you on this matter after which we work toward identifying a mutually agreeable approach for conducting further work on Military Creek sediments. If you have any questions, please don't hesitate to contact me.

Very truly yours,

C.M. CHRISTIANSEN CO., INC.

by: /s/ Eric R. Christiansen, President

cc: P.C. Christiansen
Laurie Parsons, NRT
Richard Fox, NRT
Elizabeth Gamsky Rich, Esq.



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Matthew J. Frank, Secretary John Gozdzialski, Regional Director Ashland Service Center 2501 Golf Course Road Ashland, Wisconsin 54806 Telephone 715-685-2900 FAX 715-685-2909

August 27, 2010



MR ERIC R CHRISTIANSEN 5501 N SANTA MONICA BLVD MILWAUKEE WI 53217

Subject: Environmental Contamination at the C.M. Christiansen Company Pole Yard Site, Phelps, Wisconsin (WDNR BRRTS Activity #02-64-000068)

Dear Mr. Christiansen:

The Department of Natural Resources' Remediation and Redevelopment program has received the correspondence entitled *Conceptual Plan for Addressing Military Creek Sediments*, prepared for the above named site by Natural Resource Technology and dated February 24, 2010. This conceptual plan was prepared in response to discussions we had at an October 29, 2009 meeting in Stevens Point regarding the sediment contamination associated with your site. The sediments are impacted with polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (PCDD/PCDF) resulting from the former wood treating activities at the site.

Department staff recently discussed the conceptual plan and how it compared with our thoughts regarding the sediment contamination. This submittal helps to provide a basis for continuing the discussion on a sustainable remedy to address the contaminated sediments.

Unfortunately, we would be unable to approve a remedial action based solely upon this conceptual plan, due to several inter-related concerns. Our concerns include the proposed dredge depth, potential overbank deposition to the bank/flood plain, future channel stability, and post-remediation sampling and monitoring. We also have concerns about the assumptions/information used to develop the proposal as it relates to the stretch of Military Creek downstream of the bridge on County Highway E. We therefore cannot provide you with concurrence that the conceptual plan will meet regulatory standards and fulfill your obligations to address the sediment contamination in Military Creek.

- The proposed dredge depth of 1 foot does not appear to be adequate to address the contaminated sediments that have been identified in Military Creek. Sediment samples collected by the Department at depths greater than 1 foot exceeded probable effects concentrations found in the Consensus Based Sediment Quality Guidelines as well as the target site sediment concentration of 15 nanograms per kilogram ($\eta g/Kg$) that we referred to in our September 9, 2009 letter.
- We have concerns about the potential for transfer of sediment contamination to the banks of Military Creek through overbank deposition during flood events. This area of the site has not been characterized for PCDD/PCDF during previous investigative efforts. That is a major reason why the Department included removal of two feet of bank material as part of the conceptual restoration sketch included with the aforementioned September 9, 2009 letter.

- We are also concerned about the stability of the creek channel in the future; it will likely not stay in the same location indefinitely. What effect, if any, will this have on post-remedial distribution of residual contaminated sediments?
- The lack of post-remediation monitoring in the conceptual plan is a major concern for the Department. Long term effectiveness and stability of the sand cover cannot be determined without monitoring.
- We view the lower segment of Military Creek downstream of the County Highway E bridge as a big unknown in terms of the degree and extent of sediment contamination. What information was used by NRT to develop their proposed downstream extent of sand cover? How is bed stability affected by a 6-inch rise in grade due to sand cover? How do we know the sand cover will remain stable, without monitoring?

We request that you get back to us by **October 15, 2010** to let us know how you intend to proceed. If we are unable to reach an agreement on the approach to the sediment cleanup the Department will evaluate whether to conduct the work through the environmental repair fund under s. 292.31 of the Wis. Stats. or pursuing other enforcement options.

If you have any questions concerning this letter or the project in general, please do not hesitate to write or call me at 715-685-2920. I can also be reached by e-mail at Christopher.Saari@Wisconsin.gov.

Sincerely,

Christopher A. Saari

Hydrogeologist

cc: Laurie Parsons – NRT

John Robinson – DNR Rhinelander

Tom Aartila – DNR Park Falls

Bill Fitzpatrick – WT/3

Jim Killian – WT/3

Michelle Debrock-Owens - DNR Rhinelander

Henry Nehls-Lowe - DHS