Saari, Christopher A

From: Egon Menker[SMTP:egonmenker@onebox.com]
Sent: Wednesday, January 10, 2001 1:45 PM
To: Saari, Christopher A
Subject: RE: Phelps Wis

Thank you for your response. It is very informative.

--
Egon Menker
egonmenker@onebox.com - email
(630) 536-2701 x4044 - voicemail/fax

---- "Saari, Christopher A" <SaariC@mail01.dnr.state.wi.us> wrote:
> Egon Menker:
>
> I am the Department of Natural Resources' project manager for the former
> C.M. Christiansen Co. facility in Phelps. This facility treated utility
> poles with a solution of pentachlorophenol and fuel oil from the 1950s
> until
> the late 1970s, and is located north of the point where Military Creek
> crosses CTH E, upstream from North Twin Lake.
>
> The DNR has reviewed reports covering the investigation of soil and
> groundwater contamination at the site, as well as sediment contamination
> in
> the portion of Military Creek adjacent to the site. The C.M. Christiansen
> Co. undertook a soil remedial action at the site in the fall of 1999,
> excavating impacted soil and transporting that soil to a landfill in
> Michigan. Subsequent plans call for ongoing groundwater monitoring
> to
> demonstrate an improvement in groundwater quality following the excavation.
> The sediments and surface water of Military Creek are also to be
> investigated.
>
> Based on the information I have reviewed to date, I am not aware of
> any
> problems with the water quality in either North Twin Lake or South
> Twin Lake
> associated with the C.M. Christiansen Co. site.
>
> Although I have heard references to other possible contamination sites
> in
> Phelps, I am not aware of other specific instances of contamination
> in that
> area. You may want to contact Chuck Weister in our Rhinelander office
> (715/365-8941) or John Sager in our Antigo office (715/623-4190, ext.
> 3125)
> if you have questions about specific sites other than C.M. Christiansen
> in
> the Phelps area. You can direct any other questions you have concerning
> the
> C.M. Christiansen Co. site to me at 715/372-8539, ext. 120.

>
> Chris Saari
> Hydrogeologist
> Department of Natural Resources
> 6250 S. Ranger Rd.
> Brule, WI 54820
>
>
>
> > ----------
> > From: Egon Menker[SMTP:egonmenker@onebox.com]
> > Sent: Saturday, January 06, 2001 10:18 AM
> > To: saaric@dnr.state.wi.us
> > Cc: cindymenker@onebox.com
> > Subject: Phelps Wis
> >
> > Chris Saaric:
> >
> > I had heard that Phelps Wis was very polluted due to a long industrial
> > history there. I noticed on a super fund cleanup website that you
> are
> > in charge of this site. Is it true that the town is in bad shape?
> I
> > have a home on South Twin lake. Is that lake affected since North
> Twin
> > drains into South Twin? Thank you for your response.
> >
> > Egon Menker
> >
> > --
> > Egon Menker
> > egonmenker@onebox.com - email
> > (630) 536-2701 x4044 - voicemail/fax
> >
>

PHONE CONVERSATION RECORD

DATE: 2/16/01
TIME: 1051 hrs.

CONVERSED WITH: Laurie Parsons
NRT
2621523-9000

SUBJECT/PROJECT: O-M Christiansen

UNIQUE ID#.: 02-64-00068

I called Parsons to check on the status of the sediment investigation plan. Parsons said they have not made progress on the sediment plan. Parsons said she had spoken with Erve Christiansen, who said that the company did not anticipate spending any money on the sediment investigation in 2001. Christiansen did ask Parsons for a budget analysis of cost differences between NRT's proposal and the items spelled out in Tom Janisch's review memo. Parsons said NRT has not yet provided the analysis to Christiansen.

I also asked Parsons about the status of the annual groundwater monitoring report, which is due. Parsons said the data has been sent to Christiansen, but Parsons hasn't received any comments back yet. My call to Parsons reminded her that Parsons needs to contact Christiansen to find out his feelings on the data. I told Parsons that I was considering writing to Christiansen to request an update. Parsons said she will contact Christiansen and get back to me within a week.

Signature: Christopher Lau
(please write legibly)

PHONE CONVERSATION RECORD

DATE: 2/23/01
TIME: 0838 hrs

CONVERSED WITH: Laurie Parsons
NRT
262/523-9000

SUBJECT/PROJECT: C.M. Christiansen

UNIQUE ID#.: 02-64-000068

Parsons called to update me on the project.

Parsons said they will be sending a draft letter to Eric Christiansen regarding the groundwater data for 2000, and the update will then be submitted to me within the next two weeks. Parsons said for the most part the perimeter wells are clean, most of the source area wells are either stable or decreasing. PZ-1 may have an increasing trend. Parsons said NRT will recommend continued monitoring of some wells, no monitoring of others, and abandonment of some outlying wells.

Parsons then discussed the sediment issue. Parsons indicated that Christiansen will likely have problems with some issues raised in Tom Tausch's review memo (pesticides, dioxins, deep cores). Parsons said Christiansen will talk to P.C. Christiansen, currently wintering in Florida, about releasing additional money for some sediment work; it looks like some type of investigation will proceed this summer.

I explained to Parsons that if the sediment work doesn't proceed

Signature: Christopher A Law
(please write legibly)

- over -

this summer, I would have no choice but to move ahead with enforcement. I reminded Parsons that Christiansen agreed to do this work in the Spill Response Agreement.

We also discussed the need for DRO analyses. Parsons said NRT has a philosophical argument with using DRO numbers to represent risk. I said my understanding is that the DRO values would be more of a screening tool, and alternative would be PAH analyses.

We then tentatively set up a conference call at 1000 hrs on April 4. I told Parsons that I would not be writing any letters to Christiansen prior to that call.

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: April 13, 2001 FILE REF:

TO: File (C.M. Christiansen Co. – BRRTS #02-64-000068)

FROM: Chris Saari – Brule CAS

SUBJECT: Notes from April 10, 2001 Conference Call

At 1540 hours on April 10, 2001, I participated in a conference call regarding the above named site. Also participating in the call were Eric Christiansen of C.M. Christiansen Co. (CMC), and Laurie Parsons and Eric Kovatch of Natural Resource Technologies (NRT).

Parsons initiated the discussion by mentioning the recently submitted groundwater sampling update. I indicated that I had received the report, but because it was a non-fee submittal, I would not be reviewing the data for approximately 6-8 weeks. Parsons said that the next scheduled sampling event is in May 2001, and only certain wells will be sampled (semi-annual basis). Other wells will then be picked up on an annual basis. The report makes recommendations for abandonment of some monitoring wells, but NRT will not proceed with the abandonments until I review and comment.

We next moved on to the sediment issue. Christiansen said that the position expressed by Phil Christiansen, President of CMC, is that CMC has done their best to address the site, they have been accommodating to DNR requirements, and they have spent more than enough money already. The resources of the company have been stretched to the point of breaking the company, and CMC will spend no more money on digging, investigating or sediment sampling. Christiansen said that if sediment remediation costs would break the company, why bother to even do the sampling? I asked if Christiansen was equating the sediment investigation to sediment remediation (in terms of not spending any more money)? Christiansen said "hypothetically yes." Christiansen continued that disturbing the sediments through remediation could potentially wreck one of the best fishing lakes in northern Wisconsin (North Twin Lake), and would lead to both an ecological and public relations disaster.

I replied that the only way the Department could even consider no remedial action for the sediments is if the necessary assessment is completed and the data supports the no remedial action option. I further said that the Department would not even consider this option without additional sampling. I told Christiansen that nature, through a storm event, could just as easily move these sediments from the creek to North Twin Lake, and then it would be the Department faced with the ecological and public relations disaster ("You knew the sediments were contaminated. Why didn't you make them do something about them?").

Christiansen then asked, hypothetically, what the Department's response would be if CMC said that they would do no further work at the site? Is said that my first response would be to talk with my supervisor, the Environmental Enforcement specialist, and probably a Department attorney. I said a probable result would be our recommendation that the site be referred to the Attorney General's office, based on CMC's failure to comply with the terms of the Spill Response Agreement. Christiansen replied that if the company will die, either from sampling and remediation costs or from a court fight, why should it matter from which method the end comes? Christiansen then said that he is not interested in further enforcement, and suggested that the "no more work" decision be put back into the hypothetical category, indicating that the Department should assume the sediment investigation would proceed this summer.

We then moved on to discuss the specific sediment investigation work plan comments provided in Tom Janisch's July 31, 1998 memo. The first item was the issue of dioxin/furan analyses. Parsons said NRT stands by their position originally stated in the work plan that there is no need for further dioxin/furan sampling, because the pentachlorophenol (PCP) results will be sufficient to delineate areas of concern. Christiansen then brought up some "inflammatory" comments about dioxins at the site made by Janisch at a public meeting. Christiansen said that CMC was blindsided by the comments, and this "really pissed me off". I replied that this issue will need to be discussed further internally, and that I would get back to Parsons once I have had these internal discussions.

We next moved to discuss the issue of DRO analyses. Parsons said that NRT was not comfortable with the reasons for DRO sampling provided by Janisch. I replied that, as I had pointed out a couple times previously, the contaminants of concern at the site are more than PCP. I tried to further explain my understanding of Janisch's reasoning, and then said that CMC's other option would be to do PAH sampling instead. Parsons replied that NRT would include DRO analyses, and this change to the work plan would be discussed in a short supplement to the work plan.

We briefly discussed Janisch's comment 4 (sampling techniques). Parsons said that NRT would do its best to meet the objectives spelled out by Janisch, but said the creek has limited access, so sampling might be difficult (i.e., using either a jon boat or a canoe). We also discussed the issue of the previously detected chlorinated pesticides. Parsons said this issue would be addressed in NRT's sediment investigation report, as suggested by Janisch.

I then said that, once I have discussed the dioxin issue with other Department staff, I would contact Parsons to arrange another conference call. Parsons said she would not be available between April 16 and May 4, and Christiansen said he would not be available from late May through early June. I said that I would try to gather the information I need so that we could discuss this issue again via conference call some time between May 7 and May 18.

Natural Resource Technology, Inc.
N R T

April 11, 2001
(1226)

Mr. Chris Saari
Northern Region - WDNR
Highway 2, PO Box 125
Brule, WI 54820

RE: Sediment Sampling and Work Plan Amendment, Former Wood Treating Facility, C.M. Christiansen Company, Inc., Phelps, Wisconsin
BRRTS #02-64-000068; Ref #WID998639035

Dear Mr. Saari:

On behalf of C.M. Christiansen Company, Inc. (CMC), Natural Resource Technology, Inc. (NRT) is providing this amendment to our May 13, 1998 sediment sampling work plan as discussed in our teleconference call on April 10, 2001.

We anticipate completing the sediment sampling outlined in the May 1998 work plan in either late July or August 2001, subject to your final approval of the work plan. Sediment sampling will be undertaken during this time because stream flow will be at its seasonal low, facilitating sampling activities. At your request, the parameter list will be expanded to include analysis for diesel range organic (DRO) compounds, although this was not part of the May 1998 work plan. DRO will serve as a reasonable indicator parameter for the fuel oil component of the wood treatment solution historically used at the property. However, by adding DRO to the sampling program we are not implying concurrence with the related discussion in the Department's July 31, 1998 memorandum regarding the applicability of DRO concentrations to risk criteria or correlation to results of the referenced Newton Creek sampling. The additional DRO analyses will be performed on a similar number of samples as the pentachlorophenol (PCP) analyses, as described in the May 1998 work plan.

We appreciate your time to participate in the teleconference call. Please do not hesitate to contact us at (262) 523-9000 with any questions. As discussed, our next teleconference will be held sometime between May 7 and 18, 2001 subject to availability.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Laurie J. Parsons, P.E.
Project Manager

Eric P. Kovatch, P.G.
Hydrogeologist

cc: Mr. Eric Christiansen, C. M. Christiansen Company, Inc.

[File:\1226WDNR-CS 01-04-11 ltr]

Saari, Christopher A

From: Janisch, Thomas P
Sent: Monday, April 30, 2001 5:27 PM
To: Saari, Christopher A
Cc: Liebenstein, Lee B
Subject: Dioxin and Furan Monitoring in Military Creek

Chris
After discussions here, we feel it is appropriate to stick with our original recommendation of the need for additional dioxin and furan analysis of sediments to better define degree and extent upstream of Co. Hwy. E. Based on looking at a number of components in the reviews we previously did (1995), one that is important is the comparison of the surface water quality values for human cancer and thrreshold vales in NR 105 with the predicted partitioning of the dioxins and furan from the sediment TOC to the pore water and then possibly by diffusion to the overlying surface waters. Comparison of the predicted pore water concentrations from the previous sediment sampling results with the criteria in NR 105 is shown below.

Sediment Sample	Total Estimated TCDD-EQ in sediment pore water pg TCDD-EQ / L (Dissolved)
S-21	0.649
S-22	2.0
S-22 (DUP)	1.4
S-23	0.01
S-24	0.02

NR 105 Criteria (pg / L) (Dissolved and Particulate)	
Human Cancer	Human Threshold
0.032	0.0041

Also, the preliminary risk assessment that was done in my July 31, 1998 memo indicates a child accessing the creek can potentially be exposed to a 1.0 x 10-4 risk level depending on the risk assumptions. All of this together weighs on the side of caution to do the additional sampling and more fully explore the potential exposure risks at the site and also the risks of downstream transport of the dioxins and furans. I have seen nothing to date from the PRP or their representatives to discuss the risk implications of the dioxin and furan levels in the creek sediments.

If it is necessary to persue enforcement, what additional data do we and DOJ need to make our case based on dioxin and furan levels? I am told we have in-house water program money of approximately $10,000 to $12,000 that could be used to do some additional dioxin and furan monitoring in the creek if it comes down to it with the condition that the money needs to be spent before the end of this fiscal year. If the PRP bulks on the additional sampling and monitoring for, we can hold this money and sampling in our hip pocket and use if need be. We may need to discuss our strategy more on the spending of this money for the sampling.

Tom Janisch

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary
William H. Smith, Regional Director

6250 South Ranger Road
Brule, Wisconsin 54820
Telephone 715-372-4866
FAX 715-372-4836

May 2, 2001

FILE COPY

MR ERIC R CHRISTIANSEN
PRESIDENT
CM CHRISTIANSEN CO INC
PO BOX 100
PHELPS WI 54554

Subject: Review of the Groundwater Monitoring Program Update: November 1999 - November 2000 Data for the Former C.M. Christiansen Company Pole Treatment Facility (BRRTS #02-64-000068)

Dear Mr. Christiansen:

The Department of Natural Resources' Remediation and Redevelopment program has received the *Groundwater Monitoring Program Update: November 1999 - November 2000 Data*, prepared for the above named site by Natural Resource Technology, Inc. (NRT) and dated March 26, 2001.

Based on a review of this document and previously submitted information, the Department concurs with the recommendations put forth by NRT in regards to future groundwater monitoring at the site, with one minor modification. The Department believes that monitoring well MW-4 should be sampled on a semi-annual rather than annual basis, due to its position downgradient from the MW-10/PMW-11 well nest. Please note also that future updates should include appropriate groundwater flow maps, and must include a completed Form 4400-194, *Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems*, as required by s. NR 724.13(e), Wis. Adm. Code.

The Department also believes it is necessary to again raise the question of whether or not the vertical extent of groundwater contamination has been defined. This issue was brought up in correspondence from the Department in August 1998 and January 1999. In response, NRT proposed a deep piezometer (PMW-15) to be installed with the MW-10/PMW-11 nest. However, this well was not installed, and NRT indicated that the need for this well would be further evaluated following receipt of the May 2000 groundwater results. The Department concurred with this approach in a letter dated March 20, 2000.

The available results indicate that since 1996, PMW-11 has consistently been the most severely impacted well on the site, despite the fact that a relatively strong upward vertical gradient exists in this area. These results indicate that the full extent of contamination at depth has not been defined, and point to a need for further investigation at depths beyond what the current monitoring network can provide. Based on this information, the Department believes that the proposed PMW-15 is indeed necessary, and should be installed prior to the November 2001 sampling round. We can discuss this issue further on the conference call we are trying to schedule during the week of May 7 or May 14, 2001.

If you have any questions concerning this letter or the project in general, please do not hesitate to write or call me at 715/372-8539, extension 120.

Sincerely,

Christopher A. Saari
Hydrogeologist

Cc: Laurie Parsons – NRT
Elizabeth Gansky Rich – Frazer Schapiro & Rich S.C.
John Robinson – DNR Rhinelander
Linda Meyer - LS/5
Michelle DeBrock-Owens – DNR Rhinelander

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: May 16, 2001 FILE REF:

TO: File (C.M. Christiansen Co. – BRRTS #02-04-000156)

FROM: Chris Saari CJS

SUBJECT: Notes from May 16, 2001 Conference Call

At 1030 hrs on May 16, 2001, I participated in a conference call regarding the above named site with Eric Christiansen of C.M. Christiansen Co. (CMC), Laurie Parsons and Eric Kovatch of Natural Resource Technologies (NRT), and Elizabeth Rich of Frazer, Schapiro & Rich.

We began the discussion by briefly going over where we left off at our April 10, 2001 conference call. I explained that I had been able to talk to Tom Janisch about the dioxin/furan issue. Janisch in turn had spoken to someone with more dioxin experience in the Bureau of Watershed Management, and those two came back to the conclusion that dioxin/furan analyses were needed. I also added that Janisch said that the company could possibly do a screening level risk assessment to argue for not running dioxin/furan analyses, but Parsons and I agreed that this would likely be more costly than doing the analyses. Christiansen said that it seems that the 2,3,7,8-TCDD congener is the most toxic, so can't they just analyze samples for that parameter? I said that I am not familiar enough with dioxin analyses to say whether or not TCDD-only analyses are performed. I also added that the calculated TCDD equivalents for previous samples at the site were actually what is causing concern. Parsons interjected that laboratories can do a screening for only TCDD, and said that the whole issue of toxicity equivalents for dioxins is still a subject of debate. Parsons also said that in terms of remediation in the creek, it would be highly unlikely that dioxins would be the driver, but rather it would be pentachlorophenol.

Christiansen then asked that if the contaminated sediments are buried, would it not be better to just leave them in place, where they will continue to be covered by more sediments and taken out of the potential exposure areas? I stated again that a large rain event could just as easily scour the creek and re-expose and/or transport those contaminants away.

We stated our agreement with the remainder of the work plan, including analyses of six sample locations. Parsons indicated that the sampling would proceed on a July/August time frame. I said I would check with Watershed Management staff on the issue of TCDD-only analyses.

Christiansen then asked about potential cost sharing with the DNR. Christiansen asked if the company could do the investigation and then seek reimbursement. I said Janisch had made mention of the possibility of his bureau having some money for investigation, but the only other thing I knew about this money is that it would have to be spent by the end of the state fiscal year (June 30, 2001). I said that I assumed the sampling would involve people from the Bureau and/or the Northern Region. I added that I was not familiar with how Watershed Management uses their funding, but I expressed doubt over the possibility of reimbursement. Parsons and I added that, due to my pending schedule, I would have very little time to try arranging sampling by the Bureau. Christiansen said his preference would be to have NRT collect the samples and have DNR conduct the analyses.

In the end, I agreed to check with Watershed Management staff on both the TCDD-only analyses and the possibility of using Bureau funds for part of the investigation. I will then get this information to Christiansen through e-mail, with a copy to Parsons.

We next moved on the need for a deeper piezometer that I brought up in my May 2, 2001 letter. Christiansen said that at this time, they are neither agreeing nor disagreeing with the need for another piezometer, but they would rather wait until the results from this month's sampling, scheduled for next week, are available before deciding on a course of action. I said that I did not expect that a new piezometer would be installed before next week's sampling anyway, so I concurred with this approach. I then spelled out my argument that the degree and extent of contamination is not defined (the deepest well is the dirtiest). Parsons said that she had three comments on this issue: 1) shallow groundwater appears to be attenuating after the soil excavation; 2) the screen elevations for PMW-17 and PMW-18 are equivalent in depth to PMW-11; and 3) PMW-18 is horizontally downgradient from PMW-11 and there are upward vertical gradients present. I responded that shallow groundwater was never that contaminated to begin with, except for the free product in MW-7 that possibly was related to the adjacent buried tank bottom. I added that even if the May 2001 results from PMW-11 indicate much less contamination, I would not be convinced this was evidence of natural attenuation rather than plume migration. We agreed to discuss this issue further once next week's sampling results are available. Parsons said that the results would include an updated table and flow map, and utilize the Form 4400-194 reporting format.

Rich then mentioned that the DNR should have at least $20,000 available for sampling, because Rich had just finished working on a settlement for the Deerskin Dam with EPA, and there was a SEP of $20,000 included in this settlement. I said I would do some checking to see if the SEP could possibly be applied to this site and let Christiansen know via e-mail if this might work.

Natural Resource Technology, Inc.

N R T

May 21, 2001
(1226)

Mr. James Hansen
Area Wastewater Specialist
Wisconsin Department of Natural Resources
875 South 4th Avenue
Park Falls, WI 54552

RE: Request for WPDES Permit Extension and Modification for Investigative Waste Treatment and Discharge
C.M. Christiansen Company, Former Wood Treatment Site, Phelps, Wisconsin
Ref: WID998639035, BRR Case # 02-64-000068

Dear Mr. Hansen:

Natural Resource Technology Inc. is requesting extension and modification to WPDES Permit WI-0046566-3 on behalf of C.M. Christiansen Co., Inc. for treatment and discharge of purge water from groundwater monitoring wells at the above referenced former wood pole treatment facility in Phelps, Wisconsin. Extension of the permit is requested through at least May 31, 2003 for discharge of purge water on an approximate semi-annual basis. The existing permit expired on March 30, 2001 and covered discharge of excavation water from the site remediation in 1998 as well as purge water. Modification of the treatment operation for purged groundwater only would include the following:

1. Oil/water separation, if any is required, will be performed in purge water drums, using manual methods. Oil/water separation is not anticipated to be necessary as free product has historically not been encountered in wells that will be purged and sampled.

2. Particulates will settle out in purge water storage drums, and water will be transferred from the storage drums to the activated carbon vessel in a way that does not agitate the settled particulates. Purge water drums are lined with plastic sleeves, in order to provide secondary containment. A minimal amount of particulates is expected, based on historical data.

3. The granular activated carbon vessel is a 200 lb liquid carbon treatment canister (specification sheet is attached). Water will be pumped into the carbon at a flow rate of no greater than 5 gallons per minute into a polyethelene tank, approximately 500 gallons in size.

4. One sample will be collected from each batch of 500 gallons of purge water at the effluent sampling point. Sampling parameters will be consistent with those required in the permit cover letter. In the case of pentachlorophenol, method detection limits for EPA method SW846-8151 have typically been 0.05 micrograms per liter.

5. Upon receipt of the analytical results confirming the concentrations are below the effluent limits, purge water will be either pumped or gravity fed into the infiltration basin previously constructed at the site.

It is our understanding that Mr. Chris Saari, the WDNR project manager for the site, has been made aware of the WPDES permit modification request. In order to perform groundwater sampling and purge water treatment and discharge in a timely manner, we would like your written approval of this request as soon as possible. Please do not hesitate to call should you have any questions or require additional information as you review this application.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Spiros L. Fafalios, P.E.
Project Engineer

Laurie J. Parsons, P.E.
Senior Environmental Engineer

Encl: Carbon Vessel Specification Sheet

cc Mr. Chris Saari, Wisconsin Department of Natural Resources, Brule Office
Mr. Eric Christiansen, C. M. Christiansen Co., Inc.

w:\permits\1226 WPDES Inv. Waste Discharge

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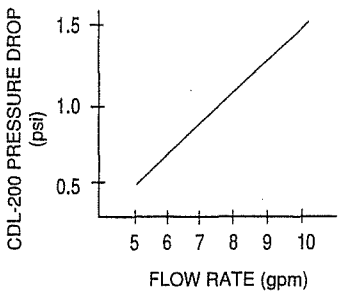
A Word About Vessel Sizing . . .

There are basically two criteria for vessel sizing: EPA empty-bed contact time (EBCT) and change-out frequency.

The EPA guidelines would determine minimum sizing according to the flow rate and contaminants to be removed. For example, with a 5-gpm flow of groundwater contaminated with gasoline, a logical choice would be a 200-lb carbon drum to meet the minimum EPA guideline of 7.5 minutes.

However if the concentrations in the groundwater were considered high—let's say 5 ppm total BTEX—a 200-lb drum might not be practical, as it might require weekly change-outs. In this situation, an 800-lb bed might be more suitable because it would only require monthly change-outs. Because of its larger size, a volume discount on the carbon would be available.

In another scenario where the concentration of contaminant is lower, but the quality of the water is poor (i.e., excessive amounts of iron, calcium and/or bacteria), a high-pressure vessel would be a wiser choice. This is because with lower concentrations, breakthrough would occur less frequently, allowing more internal pressure to accumulate between change-outs. Thus a vessel rated at 150 psi could be changed-out on the basis of actual contaminant breakthrough—as opposed to a 55-gallon drum (rated for 10 psi), which might need to be changed-out as a result of pressure build-up.



Specifications	
Dry/Shipping Weight	240 lbs
Operational Weight	440 lbs
Vessel Height	36 in
Overall Height	36 in
Vessel Diameter	24 in
Bed Surface	2.64 sq ft
Bed Depth	35 in
Bed Volume	6.67 cu ft
Inlet Size	1-in FNPT
Outlet Size	1-in FNPT
Recommended Flow Rate	5 gpm
Maximum Flow Rate	10 gpm
Hydraulic Loading Rate	1.89 gpm/sq ft (@ 5 gpm)
Empty-Bed Contact Time	9.38 min (@ 5 gpm)
Maximum Operating Pressure	10 psi
Vessel Material	Epoxy-Lined Steel
Internal Plumbing Materials	Schedule 40 PVC

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- *Speciality Design & Fabrication*

PHONE CONVERSATION RECORD

DATE: 6/1/01
TIME: 1002 hrs

CONVERSED WITH: Lee Liebenstein
WT/2
608/266-0164

SUBJECT/PROJECT: @M Christiansen Co

UNIQUE ID#.: 02-64-000068

Liebenstein returned a call to me. Liebenstein said he had talked to Tom Janisch a little about the dioxin issue at the site a few weeks ago.

I said that Janisch thought his Bureau might have some money for dioxin sampling and analyses. Liebenstein said he thought there might be money available, too, but neither Janisch nor the Section Chief are in today, and Liebenstein will be out on Monday (6/3).

Liebenstein said SLOH does not do dioxin analyses, but Liebenstein said he can check with the Technical Services section to see which labs DNR sends samples to. Liebenstein also said he would leave a message for Janisch to contact me on Monday.

I explained somewhat what @M Christiansen had suggested (they collect the samples, we pay for the analyses). I said I did not think this approach would work; Liebenstein agreed.

Signature: Christopher A Saar
(please write legibly)

OVER

PHONE CONVERSATION RECORD

DATE: 6/4/01
TIME: 0938 hrs

CONVERSED WITH: Bob Masnado & Tom Tanisch
WT/2

SUBJECT/PROJECT: CM Christiansen

UNIQUE ID#.: 02-64-000068

Masnado and Tanisch called based on a note left for them from Lee Liebenstein.

Masnado said that this fiscal year's purchasing deadline has already passed, so the Bureau couldn't pay for sampling until after July 1, 2001. Masnado also said that he had checked with the ESS program regarding analyses. Masnado said the Watershed Management Bureau could probably do 6 diuxin samples at $1,200/sample.

Masnado said their policy is to not do work that others could should do, but if the work is needed to further the project, they will do it. I said I felt that CM Christiansen should be made to prove they cannot do the work before the DNR steps in and does it. We agreed that I would keep them informed of the status of the project, and decide in the future if DNR will do the sampling.

Signature: Christopher A Saari
(please write legibly)

Saari, Christopher A

From: Janisch, Thomas P
Sent: Monday, June 04, 2001 12:33 PM
To: Saari, Christopher A
Cc: Masnado, Robert G; Liebenstein, Lee B
Subject: RE: Dioxin Sampling

Chris
We don't have provisions in the Watershed Program for cost recovery in circumstances like this as far as I know. We as a program have not done this in the past. For some of the Superfund sites I have been involved in where we have done sampling e.g. Sheboygan and Moss-American, we never pursued cost recovery. We would depend on the policies or procedures of the Program we are assisting, e.g. the R&R program in regard to initiating cost recovery.
The main question is: Is what we are requesting something that we would be expecting the RP to be doing as a standard part of their investigation for the site given information available about the site, the PCOC, and unknown toxicity and exposure risks that need to be better quantified. If the answer is yes, then we would expect the RP to do the sampling and analysis involved. If the RP cannot provide rationale why they believe the sampling and analysis is unnecessary and balk at doing it, then we would attempt to do it, limited by the resources we have available. Under these circumstances, cost recovery considerations should be looked into. What precedent is their for cost recovery based on what has been done at other R&R or RCRA sites ? I'm thinking if we can get resolution of an issue to our satisfaction by us doing the sampling ourselves and get on with it, then cost recovery becomes secondary.

If the RP is financially strapped and has no funds available, then attempts at cost recovery would not be practical.

Some flexibility related to cost recovery are:
1. We would only be looking cost recovery for sample analysis and not staff time associated with planning and preparation, travel, or field sampling time.
2. Trying for a cooperative relationship to get resolution of the dioxin/furan sediment issue, try for cost sharing whereby the Dept. and RP each pay some portion of the analytical costs and the RP's consultant provide their interpretation of the results in regard to toxicity and exposure risks to humans.
We in turn would provide our interpretation. I'm not sure of the precedence for this although this is what we did in regard to the Kewaunee Marsh arsenic site whereby cost sharing was done between the RR and Dept. in regard to aspects of monitoring and implementation of the interim remedy.

The bottom line is decisions on cost recovery are up to you.

From: Saari, Christopher A
Sent: Monday, June 04, 2001 9:58 AM
To: Masnado, Robert G; Janisch, Thomas P
Subject: Dioxin Sampling

Hi Bob and Tom:

One question that I forgot to ask on this subject - if Watershed Management does the sampling and analyses, do you (or I) have to go through a cost recovery process from the responsible party? I know that C.M. Christiansen will ask this at some point. Thanks.

Chris Saari
Hydrogeologist
WDNR - Brule
6250 S. Ranger Rd.
Brule, WI 54820-9047
Telephone: 715/372-8539, ext. 120
E-mail: saaric@dnr.state.wi.us

FIRST CLASS

Chris Saari, Hydrogeologist
WDNR - Brule
6250 S. Ranger Road
Brule, WI 54820-9047

FROM

C.M.CHRISTIANSEN CO.
(Established 1902)
1 Lake Street • P.O. Box 100
Phelps, Wisconsin 54554-0100

Phone (715) 545-2333
Fax (715) 545-2334

SUBJECT PERSONAL

FOLD HERE

20 July 2001

Dear Mr. Saari:

I guess I am now going to have to speak up.

This Pole Yard project is definitely going to break this 99 year old company. Everything three (3) generations have been able to save (after all taxes) is just being blown away with absolutely nothing to show for it and the cost not even deductible for income tax purposes. No help from anyone! Insurance used to cover such costs, but that was phased out. Government grants are for those who either have nothing or just expensive ideas. This is not the free enterprise system we were taught about. Confiscation, condemnation and new thoughts by new people have demoralized our basic society. If this keeps up, business incentives will be destroyed and all people will end up working for the government and socialism will prevail right here in the U.S.A. Nothing thereby will be efficiently accomplished, such as the way a true free enterprise society succeeds.

It is my duty to feel we are shortly going to be forced to desist from financing further development or activity on those now "hallowed grounds!" Enough is enough!

I see nothing accomplished at the end of the tunnel from nearly $900,000 of cold cash of private funds. How better all of that money could have been spent for a practical and productive cause. As it has developed, none of that can now be accomplished. It's gone forever with us!

It is very sad! The full adult business lives of a Grandfather, a Father and now an 80 year old son.

I know, to get along and to make things happen, everyone must have room to negotiate. I know about this on a first-hand basis. All forms of government, including departments, Courts, large corporations, as well as regular people like us.

Chris Saari
WDNR - Brule

FROM

C.M.CHRISTIANSEN CO.
(Established 1902)
1 Lake Street • P.O. Box 100
Phelps, Wisconsin 54554-0100

Phone (715) 545-2333
Fax (715) 545-2334

SUBJECT page 2 7/20/01

FOLD HERE

To be very practical and to reduce our costs toward an early completion and closure of the project here, allow me to suggest we monitor only those wells where PCP in the latest round of sampling (May 2001) was at one (1)ppb or higher, namely:

MW 6
MW 10
P MW 11
MW 13

4

The rest of the some 13 wells have no interest to anyone anymore today. And, certainly, no testing or monitoring of the above for anything but "Penta" (PCP). "Penta" was the only chemical we ever used in that operation. Our responsibility ends there!

Hopefully, I have honestly and correctly twisted your arm a little. Call it adult experienced understanding.

Thank you for your time!

Sincerely,

C. M. CHRISTIANSEN CO.

P. C. Christiansen
President & CEO

PCC/ms

P.S. I think you have carried the "Sisu" far enough to do all intended justices!

P.C.C.

C.M. CHRISTIANSEN CO.
P.O. BOX 100
PHELPS, VILAS CO., WI 54554

WAUSAU WI 544
PM

FIRST CLASS

PERSONAL

RECEIVED
JUL 25 2001
BRULE D.N.R.

54820/9047

Chris Saari
Just F.Y.I.
Tom
7/16/02

C. M. C. CO. - 10 YEARS

COSTS RELATED TO ENVIRONMENTAL CLEANUP
PHELPS, WISCONSIN

7/01/92 thru 6/30/2002

GRAND TOTAL 6/30/01		859,262.80
7/1/01 thru 6/30/02		
NATURAL RESOURCE TECHNOLOGY	8,270.85	
ELIZABETH GAMSKY RICH	320.00	
VON BRIESEN, PURTELL	40.00	
	8,630.85	
Miscellaneous charges (thru 6/30/02)		
Michigan Runner Service	30.00	
MI Dept Consumer/Industry	15.00	
Wipfli	1,050,00	
Postage (for above)	4.35	
	1,099.35	
GRAND TOTAL 6/30/02		868,993.00

1 year (only) total cost $9,730.20 -for what?

NOTE: No "Grants", "Loans" or Financial Assistance from any 2nd parties. No help!
All are "after-tax dollars" - savings!!

P.C.C.

C.M. CHRISTIANSEN CO.
P.O. BOX 100
PHELPS, VILAS CO., WI 54554

FIRST CLASS

WAUSAU WI 544
PM
28 AUG
2002

Chris Saari, Hydrogeologist
WDNR - Brule
6250 S. Ranger Road
Brule, WI 54820-9047

54820/9047

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES
Tommy G. Thompson, Governor
George E. Meyer, Secretary
William H. Smith, District Director

Park Falls Area Headquarters
P.O. Box 220, 875 S. 4th Ave.
Park Falls, WI 54552
TELEPHONE 715:762-3204
FAX 715:762-4348

November 13, 2001

IN REPLY REFER TO: 3430

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Eric Christiansen
C.M. Christiansen Co., Inc.
P.O. Box 100
Phelps, WI 54554

SUBJECT: **WPDES General Permit Cover Letter**

Dear Mr. Christiansen:

I have reviewed your application for a Wisconsin Pollutant Discharge Elimination System General Permit for discharge of treated water from a groundwater remediation project. This project is an extension of the permit which was issued via cover letter dated September 1, 1998. The project originally involved short-term dewatering for soil excavation, and thereby treating hydrocarbon-contaminated groundwater at the C.M. Christiansen Company, Inc. site located on County Highway E, Phelps, Wisconsin (NE1/4, SW1/4, Section 35, Township 42N, Range 11E, Vilas County). Contaminated groundwater was treated by oil/water separation, bag filtration, and carbon adsorption, and discharged to a constructed seepage cell on the Christiansen property. The new request is for treating monitoring well water generated during well purging prior to sampling. The purge water will be discharged approximately twice per year.
This discharge is hereby authorized under the attached general permit WI-0046566-3 Management of the project and control of the discharge must be done in compliance with the requirements of this permit and the additional conditions listed below.

1. Wastewater treatment plan review: The original treatment scheme included oil/water separation, bag filtration, carbon adsorption, and groundwater discharge via seepage cell. The current scheme will place the monitoring well purge water into storage drums. Manual oil/water separation will be provided if free product is encountered. The water will then be processed through a 200 lb. liquid carbon treatment canister at a flow rate of no greater than 5 gallons per minute into a polyethylene tank, approximately 500 gallons in size. Particulates, if present, will be prevented from entering the carbon treatment system by decanting the settled water from the drums.

2. Limitations and monitoring requirements: The detected contaminants as found in the information submitted in the permit application will be considered those approved for monitoring in the discharge management plan. They are as follows: ***Naphthalene, Pentachlorophenol, Arsenic and Total Recoverable Lead, and daily flow***. One sample will be collected from each batch of 500 gallons of purge water at the effluent sampling point. The water will not be discharged until sampling results have been received and it has been ascertained that effluent limitations are met. All of the concurring effluent limitations listed on page 8-9 of 13, Part E, of the attached permit apply to this discharge. The effluent limit for arsenic is equivalent to the NR140 preventive action limit of 5 ug/L under authority of Part E.1. on page 8 of 20 in the permit.

3. Alternate Effluent Limit: The alternative effluent limit for pentachlorophenol of 1 ug/L is being rescinded for this issuance due to the change in discharge procedure. The limit will be the preventive action limit as found in NR 140 (Wis. Admin. Code) of 0.1 ug/L. Per your management plan, I am requiring that you use EPA Method SW846-8151 (with a method detection limit of 0.05 ug/L) for pentachlorophenol analysis.

4. Reporting: Reporting can be accomplished by letter as outlined on page 13 of 13 of the enclosed permit. A discharge monitoring report form has been attached for your convenience. Please make as many copies as is necessary. Please attach laboratory reports of analyses, along with summaries of flow records. The report letters must be signed by the responsible agent and official representative for the project. The letters can be sent to me at the address above. Please also send the laboratory results via fax as soon as they are available. Copies should also be sent to Phyliss Holmbeck in our Superior office (1705 Tower Ave., Superior, WI 54880) for air management compliance determinations.

5. Additional treatment: If initial sampling shows that the permit limits cannot be met with the installed treatment system, the Department must be notified immediately, and the recovery project will need to be halted until additional treatment units can be approved and installed.

6. Increased effluent flow: This permit is based upon the discharge management plan, which specifies that approximately 500 gallons of water will be discharged on a semiannual basis. If this amount increases significantly, the Department must be notified.

7. Use of cleaning agents: If and when hydrochloric acid, bleach, or any other chemical, is needed to clean the treatment system, the resulting wastewater from the cleaning operation must be collected and treated at an appropriate treatment facility with the written permission of the proper authority. The treatment facility may require sampling and analysis of the effluent prior to treating the wastewater.

8. Local permission: This permit does not imply permission to use the local storm sewer system, nor does it supersede any other local requirements. This permission must be obtained from the appropriate authorities prior to discharge.

LEGAL AUTHORITIES AND APPEAL RIGHTS

Section 283.35, Stats., authorizes the Department to issue a general permit for discharges from categories or classes of point sources. The Department may withdraw a facility from coverage under a general permit if it is determined that a discharge is a significant contributor of pollutants to waters of Wisconsin, if the source is not in compliance with the permit terms and conditions, if you request it, or in certain other cases set out in s. 283.35, Stats. In lieu of general permit withdrawal, the Department may refer any violation of WPDES Permit No. WI-0046531-3 to the Department of Justice for enforcement under s. 283.89, Stats.

If you believe coverage of this facility under this permit is not appropriate, you may petition the Department for withdrawal of coverage and, where appropriate, apply for issuance of an individual WPDES permit pursuant to section 283.35(2), Stats. Issuance of such an individual permit will provide for a public comment period and, potentially, a public informational hearing and/or an adjudicatory hearing.

Alternatively, you may request judicial or administrative review of the Department's decision to cover your discharge under the enclosed general permit. Either request must be submitted no later that 30 days after this letter was mailed. To request judicial review of this decision pursuant to sections 227.52 and 227.53, Stats., a petition naming the Department of Natural Resources as respondent must be filed with the

appropriate circuit court and served on the Department. To request a contested case hearing on this decision pursuant to section 227.42, Stats., a petition for hearing must be served on the Secretary of the Department of Natural Resources. This notice is provided pursuant to s. 227.48(2), Stats.

Please review the attached Wisconsin Pollutant Discharge Elimination System (WPDES) Permit WI-0046566-3 carefully. If there are any questions concerning this letter, please call me at (715) 762-4684, ext. 120.

Sincerely;

James P. Hansen

James P. Hansen
Environmental Specialist

cc: 1. Janet Kazda - Rhinelander 2. J. Brauer - WW/2
Mr. Spiros Fafalios, P.E., Natural Resource Technology, Inc., 23713 W. Paul Rd., Pewaukee, WI 53072