Site or Facility Name: C.M. Christiansen

Location: Phelps, Vilas Co. SE SW Sec 35 T42N R11E

DNR District: NCD

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Person(s) in charge of the site or facility:

Name of Reviewer: Joan Loduha

Date: September 17, 1990

General description of the site or facility:

(For example: landfill, surface impoundment, waste pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

C.M. Christiansen Co. operated a pole-dipping business where telephone poles were treated in wood preservative. The solution was 5% PCP in a carrier of AMOCO #2 fuel oil. The site is approximately 120 feet from stream and wetland area. This operation was from 1954 - 1978.

A spill was reported by an anonymous caller. The material appears to be some type of solvent or paint. Unknown VOCs. 31 Drums were found by WDNR. There was leaking containers. Date of incident was 8/29/89. Detects of benzene, ethylbenzene, Methlethylhetone, Toluene, xylenes, lubricating oil. Soil beneat drum S-23 may contain compounds listed below according to computer identification from gas chromatography/mass spectroscopy analysis: acetone, naptilalene, methyl naphthalenes. Phelps has a population of 1200 people. Soil consists of thin lenses of sand & gravel within ore beneath till or clay. Area is mostly rolling ground moraine but includes one area of hilly moraine.

SCORES: Sm = 23.40

(Sgw = 39.56 Ssw = 8.62 Sa = 0)

EF COVER SHEET

## WORKSHEET FOR COMPUTING THE MIGRATION SCORE, Sm

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	<u> </u>	S <sup>2</sup>
GROUNDWATER ROUTE SCORE (Sgw)		
	39.56	1564.99
SURFACE WATER ROUTE SCORE (Sgw)		
	8,62	74.30
AIR ROUTE SCORE (Sa)		
		0
$Sgw^2$ + $Ssw^2$ + $Sa^2$		
		1639.29
$(Sgw^2 + Ssw^2 + Sa^2)^{0.5}$		
	4	0.48814641
(Sgw <sup>2</sup> + Ssw <sup>2</sup> +Sa <sup>2</sup> ) <sup>0.5</sup> / 1.73	Sm = 2	3.40

Ratin	g Factor	Assigned (circle	Value one)	Multi- plier	Max. Score Scor	e S	Ref. ection
[1] 0	bserved Release	0	45	1	(45)45	sub.	(1)
I	f observed release is f observed release is	given a score of given a score of	45, proceed to 0, proceed to	o line [4]. line [2].			-1
[2] R Dep	oute Characteristics th to Groundwater	0 1 2 3	l	2	6	sub.	(2)
Inf Per	iltration Potential meability of the	0 1 2 3 0 1 2 3		1	3		
Un Phys	saturated Zone ical State	0 1 2 3	5	1	3		
		Total Route Char	acteristics	icore	15		(2)
[3] C	ontainment	0 1 2 3	3	1	3	SUD.	(3)
[4] W	laste Characteristics Toxicity/Persistence Leachate Strength	0 3 6 0 2 4 6	215 18 8 10	1	- 12 18 10	sub.	(4)
	Waste Quantity/Mazar Waste Quantity	0 1 2 3	4 5 6 7	8 1	2 8		
	<u> </u>	Total Waste Char	acteristics :	core	14 26		
(5) P	Potential Impacts Groundwater Use Distance to Nearest Well/Population Served	0 1 2 3 0 4 6 8 12 16 18 20 30 32 35 40	10 24	31	6 9 40 30	sub.	(5)
		Total Potential	Impacts		36 49		
[6] 1	f line [1] is 45, mu	ltiply [1] × [4] ×	[5]				
1	f line [1] is O, mult	tip]y [2] × [3] × [	[4] x [5]	22680	- 57,330		

Figure 2 GROUNDWATER ROUTE WORKSHEET

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		Surface W	ater Route Wo	rksheet				
lati	ing Factor	Assigne (circ)	d Value e one)	Multi- plier	Score	Max. Score	Re (Sec	f. tion)
[1]	Observed Release	0	45	1	0	45	sub.	(1)
	If observed release is giv If observed release is giv	en a score o en a score o	f 45, proceed f 0, proceed	to line [4]. to line [2].				
2]	Route Characteristics Facility Slope and	0 1 2	3	1	ī	3	sub.	(2)
	Run-off Potential Distance to Nearest	0 (1) 2 0 1 2	3	1	16	3 6		
	Physical State	0 1 2 (	3	1	3	3		
	To	tal Route Ch	aracteristics	Score		15		
3]	Containment	0 1 2	3	1	3	3	sub.	(3)
4]	Waste Characteristics Toxicity/Persistence Leachate Strength	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	9 12 15 18	1	12	18	sub.	(4)
	Total Waste Quantity		5 4 5 0		2	0		
	 To	tal Waste Cha	aracteristics	Score	(14)	26		
5]	Potential Impacts Surface Water Use Distance to a	0 1 2	3 3	32	66	9 6	sub.	(5)
	Population Served/ Distance to Water Intake Downstream	0 4 6 0 12 16 24 30 32	8 10 18 20 35 40	1	0	40		
	Το	tal Potentia	1 Impacts		(12)	55		
6]	If line [1] is 45, multipl If line [1] is 0, multiply	y [1] × [4] ; [2] × [3] ×	< [5] [4] × [5]	5544	- 64	, 3 <b>50</b>		

Figure 5 SURFACE WATER ROUTE WORKSHEET

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		A	ir Route	Workshe	et				e'
		Assig	ned Value			Multi-		Max.	Ref.
Rati	ng Factor	(cir	cle one)			plier	Score	Score	(Section
[1]	Observed Release	0	45		131	1		45	sub. (1)
	Date and Location:								
	Sampling Procedures:								
	If line [1] is 0, then $S_{a} = 1$ If line [1] is 45, then proc	0. Enter eed to 1	r on line ine [2].	[5].					
(2)	Waste Characteristics								sub. (2)
	Reactivity and Incompatibility	0 1 2	2 3			1	•	3	
	Toxicity Hazardous Waste Quantity/ Total Waste Quantity	0 1 2	2 3 2 3 4	567	8	3 1		9 8	
	Tota	Route (	Character	istics	Score			20	
[3]	Potential Impacts Population Within A-Wile Padius	0 9 12	15 18			1		30	sub. (3)
	Distance to Sensitive Environment	0 1	2 3			2		6	
	Land Use	013	23			1		3	
	Tota	1 Potent	ial Impac	ts Scor	e			39	
[4]	Multiply [1] x [2] x [3]						35	,100	

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Figure 6 AIR ROUTE WORKSHEET

### WISCONSIN ENVIRONMENTAL FUNDING REFERENCE SUMMARY

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Site or	Facility N	Name: <u>C.M</u> .	Christianse	n			
Location	: City <u>P</u> ł	nelps	County_	Vilas	DNI	District <u>NCd</u>	

Reference Identification Number	Description of Reference
#1	WDNR Spill File Rhinelander & Wausau
#2	Quadrangel TOPO map Phelps, WI
#3	Water Resources of WI Upper Wi River Basin
#4	Public Water Supply Book 1985

C.M. Christiansen Co. SE SW See 35 TY2N RILE Phelps Vilas Co.

Reported by anonymous caller. Spill. Material appears to be some type of solvent of paint. Unknown UDCS, 31 drums. Leaking containers. Date of incident 8/29/89 Detects & lengeng, ethylbengens, Methylethylketong Toluene, Kylenes, Fubricating oil Soil beneath drum s-23 may contain comporends listed below according to computer identification from gas chromatogrophy moss spectroscopy inalysis : acetone, haptilalene, methy raphthalenes. Phelps pop=1200 Pen Water resources of Wisc. survey: Thin lenses of sand & grave arthin one beneath till on cloy, area is mostly rolling ground morious but includes one area of hilly morains

C. M. Christiansen

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3 . <sup>0 0</sup>

C.M. Christiansa Co. operated a polodipping business attere telephone poles were treated in wood preservative. The solution was 5% PCP in a carrier of A Moco # 2 fuel oil. Dip tark is 10 × 48' + 4' deep." approx. 120' from stream & wetland area. Seat So. of area is drying area where logs were placed after being lifted from dys tank. His operation was from 1954-1978 Results of samples takens &- slight fuel oil odor in ta Unoble oil film observed. Jevels of PCP found in soil samples are 3 × greater than toric levels for aquatic life. His could be critical to aquatic life in creek if G.W. is discharged into creek Anonymus complaint of leaking drums blind Sylvan bldg. DNR form 31 drums. see rest page

 $\left( \begin{array}{c} \\ \end{array} \right)$ 

# ENVIRONMENTAL REPAIR PROGRAM CASE TRACKING FORM FOR VER. (2) 2.1 Form 4400-150

MA 18	· · · · · · · · · · · · · · · · · · ·
1.0. #	9/17/90
District: NCD County: $V_1$ las Co. Site Name: C. M. Christiansen #1 <u>Y4 mile NE of Italien #1</u> Address: <u>Phelps</u> WF 54554 Legal Municipality: <u>TVC</u> Date of Discovery: <u>8</u> / <u>19</u> / <u>87</u> PRIORITY SCREENING: FUNDING SOURCE: <u>X</u> 1 = High <u>3</u> = Low <u>4</u> = Unknown <u>4</u> = SF PRE-SCORE <u>23</u> 40 <u>7</u> = EPA Emergency Besp.	Case No.: PMN: FID: Proj. Mgr: $CRP$ Support Person: $CRP$ Legal Desc: $SE 1/4$ $SW$ $1/4$ Sec $3\leq$ , T $4/2$ , R $11$ (E)W Lat: N' Long: W Date of RP Contact: $9 / 2\leq 1.8/7$ ENFORCEMENT AUTHORITY: X 1 = Spill Law s. 144.76, Wis. Stats. 2 = Envir Repair Law s. 144.442, Wis. Stats. 3 = Hazardous Waste Rules NR 600 Series 4 = Solid Waste Rules NR 600 Series 5 = CERCLA ments) $6 = Abandoned Container s. 144.77, Wis. Stat. 7 = Other (Describe in Comments)$
PROGRAMS INVOLVED:       (L - LEAD       S - SUPPOR         Aban Containers       NR 500 Solid V         Lust       Spills         NR 600 Hazardous Waste       Superfund         RESPONSIBLE PARTY:       Business Name:       C. M. Christiansch         Owner/Mgr.:       P. C. Christiansch       Address:         PO Brix 100       Other Lag       Other Lag	RT) Vaste Water Supply Water Resources Mgt Env. Repair Business Name:  Owner/Mgr.: Address:
Phone: $\underline{715}$ / $\underline{545}$ - $2333$ Contact Person:	Phone: / Contact Person: WN IMPACTS (X) POTENTIAL IMPACTS (X)
No Threat Fire/Explosion threat (1) Contaminated Private Well (2) Contaminated Public Well (3) Groundwater Contamination (4) Soil Contamination (5) Direct Contact (10) Contaminated Surface Water (7) Contaminated Air (8) Other (6)	
CONSULTANT INFORMATION: Company: White Water Assoc. Contact Person: Address: PO Gay 27	Company: Contact Person: Address:

	Anasa	MI	49907			•
Phone:	906 1 872-	7889		Phone:	/	
(List addition	nal on separate sheet & atta	ch.)				

TYPE         DISCHARGED           (Enter Code)	RECOVERED		STORED	DISPOSED		L LOCATION ST/
x as appropriate)	DATE	ER	ATE	STATUS		
NO ACTION TAKEN EMERGENCY WORK PLAN APP FIELD INVEST I II REM DESIGN REM ACTION I O & M I REM ACTION II O & M II LONG TERM MONT ENFORCEMENT	(MM Y /	Y) (MM	YY)  / / / / / / / / / / / / / / / / / /			
CONSULTANT		CONTRACT/P ORDER NU	PURCHASE JMBER SSSSSS	CONTRACT	AMOUNT PAID TO DATE 	LAST INVOIC APPROVED DA // // //
·····	· · ·		SSSSSSSS		\$ \$ \$ \$ \$ \$ \$	// . // . // . //
			S S S		s s	///////

	Groundwater Route Worksheet			
Rating Factor	Assigned Value (circle one)	Multi- plier	Max. Score Scor	Ref. Ref.
[1] Observed Release	0 (45)	۱	(45)45	sub. (1)
If observed release is If observed release is	given a score of 45, proceed to 1 given a score of 0, proceed to 1	ine [4]. ne [2].		
[2] Route Characteristics				sub. (2)
Depth to Groundwater	0 1 2 3	2	6	
Infiltration Potential	0 1 2 3	1	3	
Hermeadility of the	V I 2 J	1	2	
Physical State	0 1 2 3	1	3	
_	Total Route Characteristics Scor	e	15	
[3] Containment	0 1 2 3	1	3	sub. (3)
				sub. (4)
[4] Waste Characteristics	$\sim$			• • •
Toxicity/Persistence	• 0 3 6 <u>(</u> 2.15 18	1	19 18	
Leachate Strength	0 2 4 6 8 10	1	10	
Waste Quantity/Hazal Waste Quantity	0 1 2 3 4 5 6 7 8	١	28	
	Total Waste Characteristics Scor	e	(14) 26	
[5] Potential Impacts			<u> </u>	sub. (5)
Groundwater Use	$0 \ 1 \ 2 \ 3 \ 0 \ 1 \ 2 \ 3 \ 0 \ 1 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0$	2	6	
UISTANCE TO NEAREST Wall/Population		3 1	9 ⊿∩	
Served	30 32 35 40	•	30 -	
-			an	
	iotal Potential Impacts		<u>(36) 49</u>	
[6] If line [1] is 45, mu	ltiply [1] × [4] × [5]			
If line [1] is 0, mul	tiply [2] x [3] x [4] x [5]	22680	- 57,330	

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Figure 2 GROUNDWATER ROUTE WORKSHEET

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Arright Value				
(circle one)	Multi- glier	Score	Max. Score	Ref. (Section
0 45	1	0	45	sub. (1)
given a score of 45, proceed to lin given a score of 0, proceed to line	ne [4]. e [2].			
0 (1) 2 3	1	1	3	sub. (2)
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 2	16	3 6	
0 1 2 3	1	3	3	
Total Route Characteristics Score			15	
0 1 2 3	1	3	3	sub. (3)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	12	18 8	sub. (4)
	•	2		
Total Waste Characteristics Score		(14)	26	<u></u>
$\begin{array}{c} 0 & 1 & 2 & 3 \\ 0 & 4 & 2 & 3 \end{array}$	3 2	6	9 6	sub. (5)
(0) 4 6 8 10 0 12 16 18 20 24 30 32 35 40	١	0	40	
Total Potential Impacts		(12)	) 55	
iply [1] x [4] x [5]		)		
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 0 \\ \hline 1 \\ \hline 1 \\ \hline 1 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ \hline 1 \\ \hline 0 \\ \hline 1 \\ \hline 2 \\ \hline 3 \\ \hline 1 \\ 1 \\$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Figure 5 SURFACE WATER ROUTE WORKSHEET

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	Assign	ed Value	Multi-	Hax.	Ref.
Rating Factor	(circ	le one)	plier	Score Score	(Section
[1] Observed Release	0	45	1	45	sub. (1)
Date and Location:					
Sampling Procedures:					
If line [1] is 0, then $S_{\bullet}$ If line [1] is 45, then p	= 0. Enter roceed to li	on line [5]. ne [2].			
[2] Waste Characteristics					sub. (2)
Reactivity and	0 1 2	3	1	. 3	
Toxicity Hazardous Waste Quantit Total Waste Quantity	0 1 2 y/ 0 1 2	3 3 4 5 6 7	3 8 1	9 8	
	otal Route C	haracteristics	Score	20	
	0 9 12	15 18	1	30	sub. (3)
[3] Potential Impacts Population Within	21 24 2	7 20			
[3] Potential Impacts Population Within 4—Mile Radius Distance to Sensitive	21 24 2 0 1 2	7 30 3	2	6	
[3] Potential Impacts Population Within 4-Mile Radius Distance to Sensitive Environment Land Use	21 24 2 0 1 2 0 1 2	7 30 3 3	2 1	6 3	

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Figure 6 AIR ROUTE WORKSHEET

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## WORKSHEET FOR COMPUTING THE MIGRATION SCORE, Sm

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	<u> </u>	S <sup>2</sup>
GROUNDWATER ROUTE SCORE (Sgw)		
	39.56	1564.99
SURFACE WATER ROUTE SCORE (Sgw)		
	8.62	74.30
AIR ROUTE SCORE (Sa)		
		0
$Sgw^2 + Ssw^2 + Sa^2$		
		1639.29
$(Sgw^{2} + Ssw^{2} + Sa^{2})^{0.5}$		
	40.48814641	
(Sgw <sup>2</sup> + Ssw <sup>2</sup> +Sa <sup>2</sup> ) <sup>0.5</sup> / 1.73	Sm = 23.40	

Site or Facility Name: C.M. Christiansen

Location: Phelps, Vilas Co. SE SW Sec 35 T42N R11E

DNR District: NCD

Person(s) in charge of the site or facility:

Name of Reviewer: Joan Loduha

Date: September 17, 1990

General description of the site or facility:

(For example: landfill, surface impoundment, waste pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

C.M. Christiansen Co. operated a pole-dipping business where telephone poles were treated in wood preservative. The solution was 5% PCP in a carrier of AMOCO #2 fuel oil. The site is approximately 120 feet from stream and wetland area. This operation was from 1954 - 1978.

A spill was reported by an anonymous caller. The material appears to be some type of solvent or paint. Unknown VOCs. 31 Drums were found by WDNR. There was leaking containers. Date of incident was 8/29/89. Detects of benzene, ethylbenzene, Methlethylhetone, Toluene, xylenes, lubricating oil. Soil beneat drum S-23 may contain compounds listed below according to computer identification from gas chromatography/mass spectroscopy analysis: acetone, naptilalene, methyl naphthalenes. Phelps has a population of 1200 people. Soil consists of thin lenses of sand & gravel within ore beneath till or clay. Area is mostly rolling ground moraine but includes one area of hilly moraine.

SCORES: Sm = 23.40

(Sgw = 39.56 Ssw = 8.62 Sa = 0)

EF COVER SHEET

#### WISCONSIN ENVIRONMENTAL FUNDING REFERENCE SUMMARY

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Site or Facility Name: <u>C.M. Christiansen</u>			
County <u>Vilas</u>	DNR District_NCd		
Description of R	eference		
WDNR Spill File	e Rhinelander & Wausau		
Quadrangel TOPO map Phelps, WI			
Water Resources	of WI Upper Wi River Basin		
<u>Public Water Su</u>	pply Book 1985		
	hristiansen CountyVilas Description of R 		

C. M. Christiansen

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X C.M. Christianson Co. operated a poledipping business where telephone poles were treated in wood preservative. The solution was 5% PCP in a carrier of A MOCO # 2 fuel orl. Dip tack is 10 × 48' 7 4' deep." approx. 120' from stream & wetland area. fast So. of area is drying area where logs were placed after being lifted from dyp tank. This operation was from 1954-1978 Risults of sample taken & slight fuel oil Jevels of PCP found in soil samples are 3 × greater than toric levels for aquatic life. This could be critical to aquatic life in creek if G.W. is discharged into creek

Anonymus complaint of leaking drums blind Sylvan bldg. DNR form 31 drums. see rext page

C.M. Christiansen Co. Uilas Co. SE SW Sec 35 TY2N RILE Phelps Reported by anonymous caller. Spill. Material appears to be some type of solvent on paint, lonknown VOCO, 31 drums, Leaking. Containers, Date of incident 8/29/89 Detects of lengeng, ettylbengens, Methylethylketors Toluene, Kylenes, Fubricating oul Soil beneath drum s-23 may contain comporends listed below according to computer identification from gas chromatogrophy/moss spectroscopy analysis : acetone, raptilalene, method raphthalenes. Phelps pop=1200 Pen Wate resources of Wise. survey : Thin lenses of sand & grave arthin one beneath till on clay, drea is mostly rolling ground morains but includes one area of hilly morains

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