

PRELIMINARY Public Health Assessment for

**PENTA WOOD PRODUCTS INCORPORATED
SIREN, BURNETT COUNTY, WISCONSIN
CERCLIS NO. WID006176945
OCTOBER 2, 1996**

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
Agency for Toxic Substances and Disease Registry



PRELIMINARY PUBLIC HEALTH ASSESSMENT

PENTA WOOD PRODUCTS INCORPORATED

SIREN, BURNETT COUNTY, WISCONSIN

CERCLIS NO. WID006176945

Prepared by:

**Wisconsin Department of Health and Family Services
Under Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry**

THE ATSDR PUBLIC HEALTH ASSESSMENT: A NOTE OF EXPLANATION

This Public Health Assessment was prepared by ATSDR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) section 104 (i)(6) (42 U.S.C. 9604 (i)(6)), and in accordance with our implementing regulations (42 C.F.R. Part 90). In preparing this document, ATSDR has collected relevant health data, environmental data, and community health concerns from the Environmental Protection Agency (EPA), state and local health and environmental agencies, the community, and potentially responsible parties, where appropriate.

In addition, this document has previously been provided to EPA and the affected states in an initial release, as required by CERCLA section 104 (i)(6)(H) for their information and review. The revised document was released for a 30-day public comment period. Subsequent to the public comment period, ATSDR addressed all public comments and revised or appended the document as appropriate. The public health assessment has now been reissued. This concludes the public health assessment process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

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Use of trade names is for identification only and does not constitute endorsement by the Public Health Service or the U.S. Department of Health and Human Services.

Foreword

Penta Wood Products Superfund National Priorities List (NPL) site is a part of the Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment Enhancement Initiative. As indicated in ATSDR's Federal Registry announcement of June 8, 1995; the purpose of the initiative is to determine how ATSDR can produce earlier, more targeted evaluations that can be more effectively integrated into the Superfund Program. ATSDR's original public health assessment procedures would have required the Wisconsin Division of Health (DOH) to develop a Public Health Assessment document for this site. It would have taken approximately two years from the date this site was proposed to the NPL to develop the assessment and only then would the public have received ATSDR's written evaluation of this site. Under the initiative, the evaluation will be accessible to the public in almost half the time. Since fall of 1992, the DOH has provided consultation to the site assessment team and information to citizens so that they might reduce their exposure to toxic materials at the site. Although citizens have already received this information in other forms, we will make this document accessible to the public by placing it in the information repositories.

This document indicates what actions the DOH and ATSDR have taken to address the elements required by Section 104(I)(6)(A) of the comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended [42 U.S.C. 9604(I)(6)(A)]. Those elements are:

- 1) Nature and extent of contamination,
- 2) Potential pathways of human exposure,
- 3) Demographics (size and susceptibility of nearby populations),
- 4) Health hazards of the site, and
- 5) Comparison of morbidity and mortality data.

In addition, this document indicates how the DOH and ATSDR provided earlier, specifically targeted evaluations. DOH's future plans at this site are also presented in this document.

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Results and Findings

Penta Wood Products, a wood treating company, operated from 1953 through 1992. The Penta Wood Products, 8682 State Highway 70, is 2 miles west of the Village of Siren in the township of Daniels, Burnett County (See Appendix D, figure 1).

Now inactive, the company treated wooden posts and utility poles. Much of the liquid waste from the treatment processes were disposed into two lagoons and on wood chips piled at the northwest and northern edges of the property. Some wastes were inadvertently spilled on the ground at various locations throughout the property. The wastes affected an estimated 80 acres of the total 144-acre Penta Wood property. Beginning in 1986, the Wisconsin Department of Natural Resources (DNR) documented uncontrolled spills at Penta Wood Products. In 1992, the company closed because financial difficulties kept them from complying with federal and state environmental regulations. When the company closed, tanks, drums and open vats of chemicals were abandoned at the site. The U.S. Environmental Protection Agency (EPA) estimated that as much as 110,000 cubic yards of soil were contaminated with wood treatment chemicals. Because of the environmental threat to the wetlands and the human exposure threat from contact with site chemicals, EPA initiated a removal action in 1994. The EPA proposed adding the Penta Wood Products site to the NPL (a.k.a. Superfund) on October 2, 1995.

In November 1993, the DOH provided a health consultation on Penta Wood Products to environmental agency staff (Appendix A). The purpose of the consultation was to examine available environmental sampling data of chemicals found on the property, evaluate the human health implications of these chemicals, and provide input on the selection of the proposed removal actions.

Nature and Extent of Contamination

Past waste disposal practices at Penta Wood Products resulted in significant soil and groundwater contamination. Refer to the consultation (Appendix A) for a complete summary of Penta Wood operating practices and environmental sampling data collected prior to 1993.

The site was contaminated with wood treatment chemicals, of which pentachlorophenol (PCP) ammonia, copper, zinc, and arsenic (ACZA) are the chemicals of concern. Because of the environmental threat to the wetlands and the human exposure threat from contact with site chemicals, EPA planned a removal action. Their removal addressed the most significant public health threats posed by accessible chemicals, sludge, and contaminated soil. Throughout the process, the DOH has consulted on the health implications of levels of contamination found at the site.

In 1994 and 1995, the EPA removed contaminated oil and sludge from the Penta Wood property. According to an EPA fact sheet, 102 drums of PCP, arsenic, zinc, copper and chrome sludge were removed. They excavated and decontaminated underground storage tanks, treated water from decontamination, and removed and mixed with concrete 4000 cubic yards of ACZA-contaminated soil. By mixing soil with concrete EPA stabilized the contaminants while constructing a treatment pad that will be used in the future for bioremediation of wood chips. Anticipating future cleanup, they set up several test mixtures for evaluation of remediation of PCP-contaminated soil and wood chips. There is evidence that contaminants may have washed northeast off the site toward a wetland. In order to restrict runoff and movement of contaminants from the site, the EPA constructed berms and retention ponds.

Potential Pathways

The two most significant pathways for exposure to site chemicals are dermal contact with residual chemicals in surface media and future ingestion of contaminated groundwater.

Dermal Contact: The EPA constructed a partial fence and displayed warning signs to reduce trespassing on this site. However, residual levels of contamination exist at the surface of this site which enables possible human exposure through dermal contact or accidental ingestion of contaminated soil particles. We do not have enough data to evaluate whether exposure to residual chemicals poses a public health hazard.

The 1993 health consultation evaluated pathways of human exposure to site-related contaminants and identified short-term and long-term health hazards associated with the site. It included a detailed evaluation of the health implications associated with exposure to PCP, arsenic and dioxins. Although no current exposures were identified, the consult concluded that the levels of PCP and arsenic in site soils posed a public health hazard. (See Appendix A)

Future Ingestion: Directly below the former seepage lagoon, levels of PCP in groundwater were reported as high as 39,000 ppb. Three residences are within 200 feet south and east of the plant. Private wells providing drinking water to residences adjacent to the property, were tested for contaminants in 1993, and none were detected. Groundwater appears to flow north or northeast from the site, which is away from the closest private wells. In that direction, the nearest buildings are approximately 1 mile away (See Appendix D, figure 2).

Data Gaps

At this writing, the DOH and ATSDR have not received recent results of private well sampling that we recommended in a previous consultation. We are also without data that describes the residual contamination left at the site after the removal. Without that information we are unable to determine if the site currently poses a significant public health hazard. The EPA is

planning to complete a Remedial Investigation for this site that will define the extent and migration of the groundwater contamination.

Community Interactions

Since 1992, the DOH and the other agencies provided information to citizens about the contaminants of concern, their location, and the health effects associated with exposure to the chemicals. Through personal interviews, citizens have expressed their concerns and provided input into the health assessment process. In addition to attending public meetings, DOH has contacted Town of Daniels community leaders, providing them with information about services available from the DOH and ATSDR and public health issues associated with Penta Wood Products.

Community Concerns

During community interviews in 1995, people expressed to DOH a variety of concerns. Their primary health concern is that nearby water supply wells remain safe. Citizens are also concerned about the eventual use of the site. Seeing the amounts of money being spent on the site, they fear the investigative process will prevent the site from being restored to productive use and that the community will be left with an untaxable piece of property. Being very practical people, they are skeptical about the amount of money being spent to investigate the contamination. They are further frustrated because the Wisconsin Department of Transportation is buying nearby farmland to reroute Highway 70 in order to avoid contaminated soil (even though the site is being cleaned up). A few residents reported health conditions that they believe may be associated with past exposure to chemicals while working at Penta Wood Products. They reported illnesses that include skin cancer, neurologic problems with muscular pain, and emphysema. Other citizens denied that anyone had health problems from working at the plant.

Demographics

Selected demographic information for the Siren Zip Code that includes the site, is presented in Appendix C. The total population of the area is 2,502 of mostly white individuals (97%): Over 75% of the population is over the age of 18 and the average family income is \$23,329. Most of the citizens of Daniels obtain their water from residential wells, which have so far remained unaffected by site contaminants. Because of the distance (2 miles) between the site and the Village of Siren, it is unlikely that drinking water in the village will be affected by site contaminants.

Comparison of Morbidity and Mortality Data

Because only a limited number of workers have been exposed to site-related chemicals (our information shows 25-30 employees at closing in a very sparsely populated area), we would be unable to conduct meaningful comparisons of morbidity and mortality data that may be associated with the observed levels of exposure. Instead, in 1994, DOH contacted area physicians with information about the site and provided them with ATSDR case studies on arsenic and pentachlorophenol exposure assessment. In that way, physicians would be better able to diagnose and treat symptoms that may be associated with past exposure to site chemicals. Area physicians were identified through the Wisconsin Department of Regulation and Licensing, using zip codes for a 5-county area around the site.

Health Professional Involvement

Over the past 4 years DOH has involved local health professionals (physicians and public health professionals) in a number of ways. Responding to past occupational exposure, physicians were provided with the information mentioned above and were invited to attend a public meeting which was held on March 29, 1994. Since 1992, we have updated and involved staff from the Burnett County Health Department in the health assessment process and community interactions. Health department staff provide a number of services that are significant in the assessment of public health. For the benefit of the community they 1) are accessible to the public to address community health concerns, 2) attend public informational meetings 3) review public information documents, and 4) provide input on community health concerns.

Conclusions

Health Hazard Summary: DOH and ATSDR conclude that the Penta Wood Products NPL site is a Public Health Hazard because of past exposures to site chemicals and the potential for future exposure to contaminated groundwater. It is an indeterminate public health hazard for exposure to current levels of contamination remaining in surface media.

DOH and ATSDR have concluded the following:

1. On-site groundwater is contaminated and would pose a serious public health threat if people were to drink it. The future contamination of nearby private drinking water supplies is a public health concern. Enforcement agencies plan a comprehensive study of groundwater contamination in the next phase of remediation at the site. This information will help DOH and ATSDR better define the potential threat of exposure to contaminated drinking water. Until those data are available, future exposure to chemicals in drinking water poses an indeterminate health risk.
2. Although there is partial fencing around the site, it is possible for people to trespass and come in contact with residual contaminants left in surface materials. Without data to fully evaluate this hazard, the site poses an indeterminate health hazard with regard to dermal contact and possible accidental ingestion of contaminants in surface media.
3. In the past, on-site workers may have been exposed to PCP and arsenic in the treatment process from inhaling contaminated air, drinking contaminated groundwater, inadvertently ingesting contaminated soil and dust, and dermally absorbing PCP. Past occupational exposure to chemicals posed a likely health threat. However, it is not possible to recreate exposure scenarios from which we could anticipate measurable health effects. Specific health effects associated with past exposures to PCP and ACZA are included in the attached health consultation (See Appendix A).

In addition to the conclusions above, DOH and ATSDR concluded the following:

1. The possibly exposed population is too small to conduct any meaningful comparison of morbidity and mortality on diseases that may be associated with the observed levels of exposure to site-related contaminants.
2. Professional health education is appropriate for area physicians and local health department staff to address illness and symptoms that may be consistent with past exposures to harmful site chemicals.

Recommendations

1. DOH should re-evaluate the Penta Wood Products NPL site after the results of the Remedial Investigation are available.
2. DOH should continue to provide consultation and support to enforcement agencies (EPA and DNR) as they reduce the public health risks associated with contaminated media from this site.
3. DOH should continue to provide professional support to area physicians and local health department staff as the need arises or community concerns dictate.
4. DOH should continue to provide information and opportunities for citizen involvement through personal contacts, public meetings, educational materials and responses to citizen concerns.
5. DOH should make certain that the most threatened residential wells are appropriately tested for site contaminants.

Public Health Action Plan

The purpose of the Public Health Action Plan is to ensure that this Results and Findings report not only identifies past activities at this site but also provides a plan of action designed to mitigate and prevent adverse human health effects resulting from exposure to hazardous substances in the environment.

DOH with ATSDR will continue to evaluate information from the Remedial Investigation and from on-going monitoring at the site. As data are available, DOH will determine adverse health consequences from exposure to chemicals in groundwater or other media.

DOH will continue to provide health education to citizens in the Town of Daniels and the Village of Siren as public health concerns arise.

Preparers of Report

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ATSDR Regional Representative

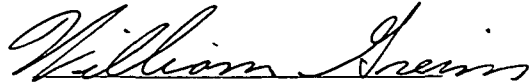
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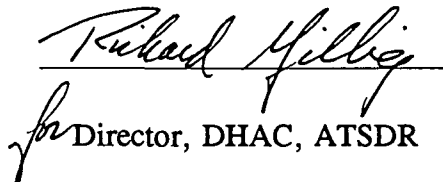
CERTIFICATION

The Penta Woods Products Preliminary Public Health Assessment was prepared by the Wisconsin Division of Health under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the public health assessment was initiated.



Technical Project Officer, SPS, SSAB, DHAC

The Division of Health Assessment and Consultation, ATSDR, has reviewed this public health assessment and concurs with its findings.



for Director, DHAC, ATSDR

Appendices

Appendix A - Health Consultation for Penta Wood Products

TOWN OF DANIELS
BURNETT, WISCONSIN

CERCLIS No. WID006176945

November 16, 1993

DATE: November 16, 1993

TO: Manna Muroya, Regional Representative
Agency for Toxic Substances and Disease Registry
Region 5

FROM: Kenneth Bro, Environmental Engineer
Wisconsin Division of Health

SUBJECT: Health Consultation: Penta Wood Products, Inc.
Town of Daniels
Burnett County, Wisconsin

BACKGROUND AND STATEMENT OF ISSUES

In October 1992 the Region 5 site assessment team asked the Agency for Toxic Substances and Disease Registry (ATSDR) for a health consultation on the Penta Wood Products site. The site assessment team includes representatives of the Environmental Protection Agency-Region 5 (EPA), ATSDR, and the Wisconsin Department of Natural Resources (DNR). The site is a part of the Superfund Accelerated Cleanup Model (SACM), and the consultation was to cover previously available data on the site and data collected by the team. The ATSDR Region 5 office forwarded the team's request to the Wisconsin Division of Health. The Wisconsin Department of Natural Resources (DNR) provided the Wisconsin Division of Health with copies of information on the site. The Division of Health participated in some of the team's meetings and visited the Penta Wood site.

The company occupies approximately 80 acres of a 120-acre parcel adjacent to State Highway 70 in the Town of Daniels, about 2 miles west of the Village of Siren. The company, a wood treating facility, operated from 1953 through 1992. From 1953 to 1956, poles and timbers were treated by being dipped in an open tank of pentachlorophenol mixed with fuel oil. Lumber was treated by a vacuum system. In 1956 the company began using a pressure treatment cylinder for all types of products. In 1975 the company added a second pressure treatment cylinder using fuel oil mixed with ammonia, copper, zinc, and arsenic (ACZA) (1, pp.1-3).

Wood to be treated was placed on a platform on tracks that led into the pressure tanks. After treatment the wood was rolled out of the cylinders and dripped around the tracks. The wood was then moved to outdoor storage areas on either side of Highway 70. Wastewater from the pentachlorophenol treatment included recovered condensate, seal water, and drippings from the treated wood. Wastewater was piped to a small oil/water separator, where recovered preservative was returned to the process, and wastewater was discharged to a seepage lagoon. Until 1976 about 200 gallons per year of sludge from the separator was poured over a pile of woodchips in the northwest corner of the site (2). By 1987 the company collected the sludge from both treatment processes, dried it and burned it in a wood fire furnace (3).

The company has a history of hazardous waste spills. In 1986 nearly 20,000 gallons of ACZA solution spilled on the sandy soils in the ACZA treatment area (1, p.3). In 1988 an estimated 30-40 cubic yards of pentachlorophenol/fuel oil/water mix spilled when a valve to the separator system was left open (4).

There are three residences within 200 feet of the plant. One of these residences is on a dairy farm directly across Highway 70 (south) of the site. Another residence is also directly across the highway, and the third residence is east of the site. All three residences are served by private wells. The wells are finished in glacial till which underlies the site. These wells were sampled most recently by the site assessment team, and no contamination was detected (5). There also are production wells on site that approximately 25 employees used for drinking water until 1988 when the water was found to be contaminated with pentachlorophenol (1, p.8).

Pentachlorophenol contamination in surface soils on-site is widespread. Sludge in the former seepage lagoon was found to contain pentachlorophenol at 40,000 mg/kg. Soils near the oil/water separator contained 17,000 mg/kg. Soil at the wood chip disposal area contained 5,100 mg/kg (1). Arsenic contamination in soils is also widely distributed. In the ACZA treatment area arsenic was found at 42,000 mg/kg. In the lagoon it was found at 75 mg/kg. Sediment in a wetland downhill from the seepage lagoon contained pentachlorophenol at 13 mg/kg and arsenic at 74.0 mg/kg. Surface soil in a former wood storage area between two residences on the south side of Highway 70 (across the highway from the treatment plant) contains pentachlorophenol at 1,400 mg/kg and arsenic at 27 mg/kg (6, 7).

One sample of soil and ash from the boiler blowdown pond was analyzed for polychlorinated dibenzodioxin (PCDD). 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) was not detected ($<0.084 \mu\text{g}/\text{kg}$); no other tetra-PCDD were detected ($<0.10 \mu\text{g}/\text{kg}$); total penta-PCDD were found at $0.260 \mu\text{g}/\text{kg}$; total hexa-PCDD were at $3.80 \mu\text{g}/\text{kg}$; total hepta-PCDD were at $48.50 \mu\text{g}/\text{kg}$, and octa-PCDD were at $74.2 \mu\text{g}/\text{kg}$. The worst case 2,3,7,8-TCDD "toxicity equivalent" concentration in the soil/ash material was estimated at $0.331 \mu\text{g}/\text{kg}$ (assuming that no TCDD is present below the detection limit) (8). Sixteen samples of surface soil collected in April 1993 were tested for 2,3,7,8-TCDD, and none was detected (detection limits were not reported) (6).

Pentachlorophenol contamination in groundwater under the site is widespread, but has not been detected in off-site wells. Concentrations near the seepage lagoon have been as high as $39,000 \mu\text{g}/\text{L}$; near the oil/water separator at $1,800 \mu\text{g}/\text{L}$ (8); near the treated wood storage area at $130 \mu\text{g}/\text{L}$; at the production well

at 4,200 $\mu\text{g}/\text{L}$; near the wood chip disposal area at 3.5 $\mu\text{g}/\text{L}$ (1). The site lies on a glacial end moraine where depths to groundwater are 130 feet below the ground surface. The water table below the site is nearly flat. The site may lie over a groundwater divide (8, pp.34-40). Local groundwater flow appears to be to the north-northeast, and the regional groundwater flow is to the north. Residential wells north and northeast of the site have not been checked for site-related contaminants (9). At least three buildings are within one mile of the site in this direction, according to the U. S. Geological Survey quadrat map.

Surface water from the site flows to the northeast, toward a wetland at the western edge of Doctor Lake. There are indications that the seepage lagoon has overflowed through an eroded gully that leads to the wetland, which lies on a glacial outwash plain (1).

While the site is accessible to anyone on foot, there were no signs that people are trespassing on the property, likely because a company employee still uses the office and watches the property while the company's physical assets are being salvaged and sold. There are no children living at one of the two residences directly across the highway from the plant, but grandchildren reportedly visit occasionally. There are two teenagers and two adults at the second residence. A third residence is east of the property, near the wetland (10, 5).

DISCUSSION

In the past, on site workers may have been exposed to pentachlorophenol and arsenic in the treatment process from inhaling contaminated air, drinking contaminated groundwater, inadvertently ingesting contaminated soil and dust, and dermally absorbing pentachlorophenol. Nearby residents may have been exposed to pentachlorophenol that volatilized in the air and blew in contaminated soil. It is also possible that dioxins and arsenic were emitted from the smokestack when waste sludge was burned in the wood furnace (11, pp.71-72). A worker in the firetower directly south of the smokestack reported that smoke from the operation used to blow toward the tower and obscure her view (10). Particulates from the smokestack may also have been deposited on the farmland across the highway, where grazing dairy cows may have ingested it.

In addition to the possibility that 2,3,7,8-TCDD was formed in the wood furnace, it may also have been formed by catalytic dechlorination of higher chlorinated PCDDs during the pressure treatment of the wood inside the metal cylinder (11, p.72). It is possible that TCDD was deposited in areas where drippings and wastestreams from the treatment process leaked or spilled. Both

pentachlorophenol and arsenic may also have overflowed from the seepage lagoon to the wetland northeast of the site.

On-site workers were drinking water from the production well at the time a well water sample was found to contain pentachlorophenol at 2,700 $\mu\text{g/L}$ (1). Doses equivalent to drinking the most contaminated water on-site have damaged the liver, kidneys, nervous, and immune systems of laboratory animals. Doses as high as that from drinking the most contaminated groundwater have also affected the fetal development of laboratory animals. Because pentachlorophenol causes cancer in laboratory animals that ingested it, it may also pose a cancer risk to people who drink groundwater contaminated with pentachlorophenol (12).

Because the site is accessible and because on-site soil remains highly contaminated, it is possible that health effects could result if exposure were to occur in the future. If children entered the site and played regularly in such areas as the seepage lagoon, there is a possibility that they could experience liver damage from exposure to pentachlorophenol in soil (12). Exposure to high levels of arsenic in soil could affect people's cardiovascular system and increase their risk of developing skin cancer (13).

If 2,3,7,8-TCDD is at elevated concentrations in grazing areas or areas where children frequently play, there is a risk that people exposed to contaminated soil or dairy products would experience reproductive system damage and an increased risk of contracting cancer. TCDD can also accumulate through the food chain in people who eat contaminated fish or products of cattle that graze on contaminated soil (11, 14).

Now that the on-site production well has stopped operating and drawing contamination toward the middle of the site, contaminants may flow off-site through the highly permeable glacial aquifer. Because neither the extent nor the potential for off-site migration of contaminated groundwater has not been defined yet, the potential health effects on people using private wells near the site cannot be evaluated.

CONCLUSIONS

Based on its review of the available data, the Wisconsin Division of Health concludes:

- Pentachlorophenol and arsenic in on-site soil pose a public health hazard because highly contaminated surface soils are accessible to anyone entering the site. Given the available information, no current exposures at levels of health concern have been identified.

- On-site groundwater contains very high levels of pentachlorophenol and arsenic that would pose a serious threat if people were to drink groundwater.
- It is possible that on-site workers were exposed to arsenic, pentachlorophenol, and possibly significant "toxicity equivalent" doses of TCDD, but information about actual levels of exposures is not available.
- Too little information on dioxin contamination in soil is available to evaluate the extent to which these chemicals may pose a health threat.
- Too little information on both the extent and potential for off-site migration of contaminated groundwater is available to evaluate the health threat to nearby residential wells.

RECOMMENDATIONS

- Restrict access to contaminated soils, sludges, and wood waste at the site.
- Take steps to ensure that pentachlorophenol in on-site groundwater does not extend to private water supplies. Conduct periodic monitoring of nearby residential wells -- including private wells north of the site -- for site-related contamination, and characterize the extent of groundwater contamination.
- Sample blowdown pond soil, stained soils below the former drip tracks to the pentachlorophenol treatment cylinder, and soil downwind of the smokestack (near the farm across the highway) for dioxins at lower detection limits (in the 1-2 ng/kg range) in order to evaluate the potential for exposure to dioxins through accumulation in the food chain (14).
- Take steps to prevent off-site migration of contaminants in surface water.

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**Appendix B - Demographic Information for Siren, Zip
54872**

Demographic Information for Siren, Wisconsin (Zip Code 54872)

<u>Demographic Information</u>	<u>Number (Percentage of Total Population)</u>
Total Population	2502
White Individuals	97%
Black	0%
Asian	0.1%
American Indian	2.1%
Hispanic	3 total
Children < 4 year old	5.9%
People > 18 years old	75.9%
Total number of households	1020
Total number of families*	690
Households with people > 65 years old	35.3%
Female headed households	12.3%
Household with children	44.2%
Average family income	\$23,329

*family = homes with a head of household and at least one other related person

Based upon the 1990 U.S. Census Data, The Sourcebook of ZIP Code Demographics, Volume one, CACI, 1991.

Appendix C - DOH 1997 Site Work Plan
for
Penta Wood Products

TOWN OF DANIELS
BURNETT, WISCONSIN

CERCLIS No. WID006176945

DOH Site Work for Penta Wood Products

Includes 1997 projected activities, as of October 4, 1996

Anticipated or Actual Date	Activity Description	Completed
1993-1996	Remedial Decision Team Involvement Site Assessment Team Involvement	ongoing
4/22/93	Responded to citizen concern about possible associated health effects	complete
11/19/93	Provided consultation on exposure to dioxin at the site	complete
11/17/93	Consultation	complete
3/94	Letter sent to are physicians with ATSDR case studies on arsenic and pentachlorophenol	complete
3/29/94	Site visit	complete
3/29/94	Public Meeting presentation, soliciting public health concerns and information needs.	complete
3/94	Distributed public health information in EPA/DNR site information sheet	complete
5/94	Contributed information to EPA site fact sheet	complete
6/30/94	Calculations of child exposure dose dioxin	complete
11/30/94	Public Meeting Presentation, soliciting citizen health concerns and information needs	complete
11/94	Wrote sections of EPA site information sheet	complete
4/95	Site visit	complete
4/95	Interviews with concerned citizens to solicit health concerns determine information needs and answer health-related questions.	complete
5/95	Reviewed EPA Community Involvement Plan	complete
6/95	Provided health information on PCP for EPA site information sheet.	complete

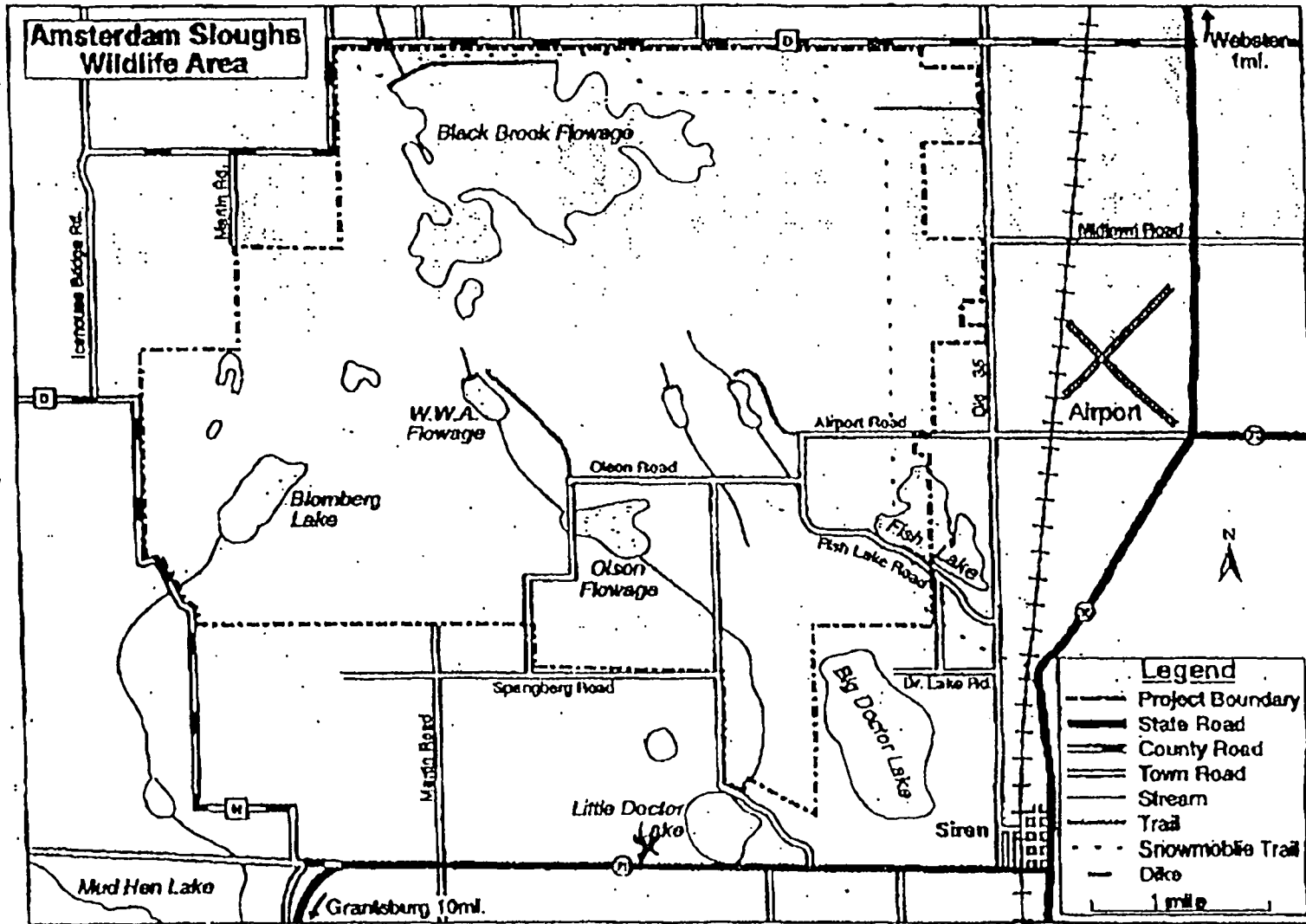
1st Quarter 97	Review residual contamination at site, evaluate the implications for public health	
1st Quarter 97	Respond to citizen concerns about drinking water quality near the site	
1st Quarter 97	Distribute a copy of the Preliminary Health Assessment to two repositories	
1997	Assist with public meetings and citizen interaction activities as they arise	
1997	Respond to citizen concerns as they arise	
1997	Update and keep involved professional staff of the Burnett County Health Department	
1997	Provide to ATSDR a draft health assessment as the remedial investigation is completed for this site	

Note:

- * This plan will be adjusted to respond to concerns or issues raised by citizens, EPA or DNR.
- * Because a Remedial Investigation for this site will be available in the future, and because the DOH has established on-going communication with area residents, we decided that a public review of this document is not needed. A review of groundwater data will be completed when information is available from the remedial investigation. When the complete investigative package is available, the DOH will prepare a public health assessment for distribution.

Appendix D - Figures

Figure 1

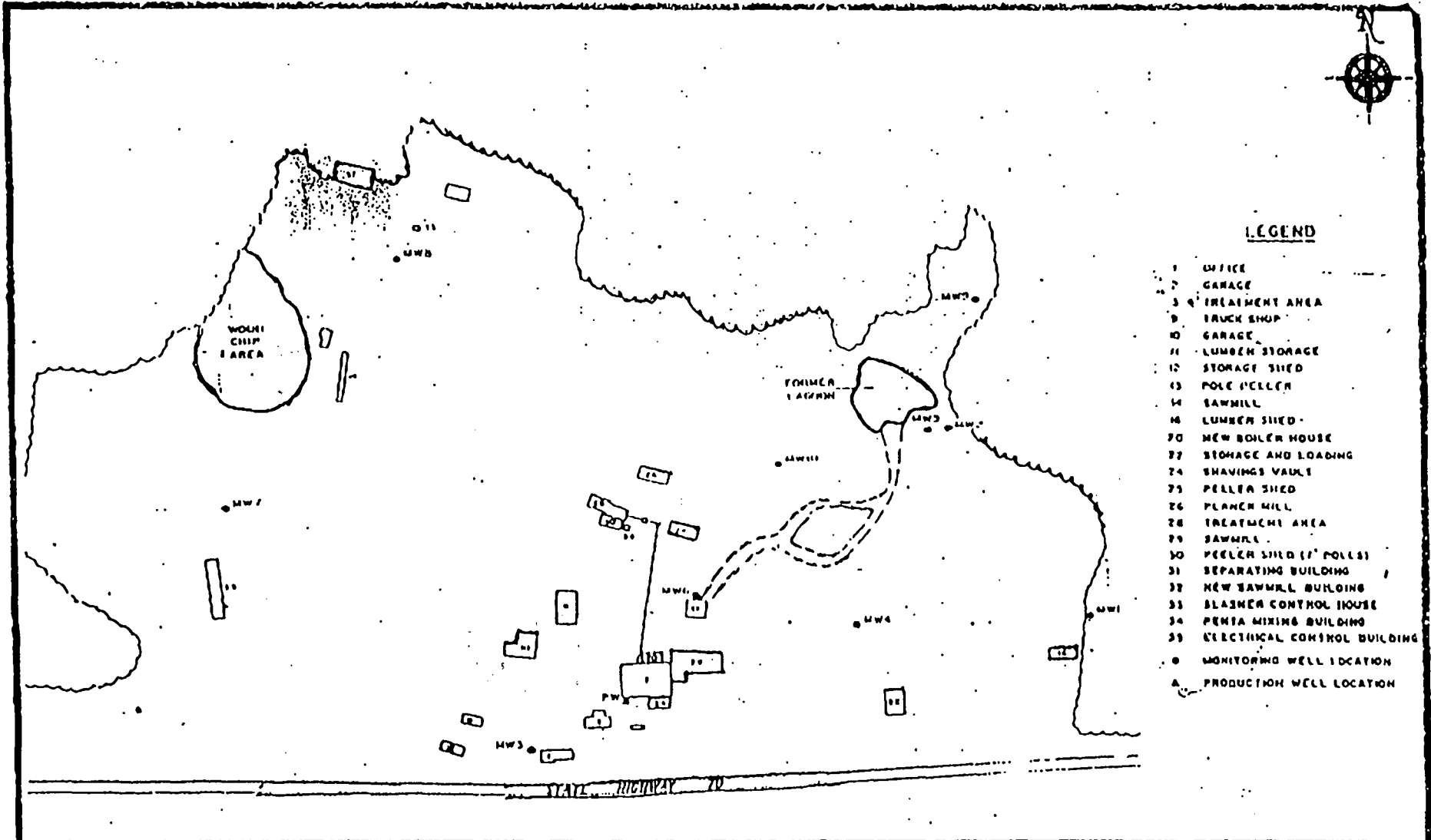


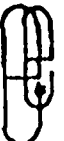
D - 2



PENTA WOOD PRODUCTS

D-3



 <p>ecology and environment, inc. Technical Assistance Team Region V</p>	SITE PENTA WOOD PRODUCTS		SCALE NA
	CITY SIREN	STATE WISCONSIN	PAK EW10415SAA
TITLE MONITORING WELL LOCATIONS	FIGURE # 2	DRAWN BY WDNR PRELIMINARY ASSESSMENT NARRATIVE	DATE 5/12/92