shizawa, Annette (ATSDR/DTEM/ATB)

'om: Clark.Milt@epamail.epa.gov
ənt: Friday, November 03, 2006 8:32 PM
ɔ: Ashizawa, Annette (ATSDR/DTEM/ATB)
ubject: Kalamazoo Changes

.ttachments: ATSDRkal.doc

ATSDRkal.doc (33 KB)

Annette,

Our changes on this waste site. Unacceptable risks to public health from fish consumption were found. State issued fish consumption advisories exist for the river. We would also recommend that all state agencies have a chance to comment on our report, prior to going out for public comment.

Milt

(See attached file: ATSDRkal.doc)

Milt

Public Health Outcome Data: Not reported. Because human exposure to PCBs at levels of public health concern may be occurring, the site (as of 1991) was being considered for a study to investigate fish ingestion and serum PCB levels. It was concluded that, if the number of people eating fish from the Kalamazoo River and Portage Creek were large, a fish consumption study would be warranted. As of 2000, ATSDR reported that the state was creating a study cohort of anglers, examining their fish consumption patterns, and obtaining medical histories and blood specimens for chemical analysis. The study found that Kalamazoo River fish-eaters had higher residue levels of total PCB and DDE in blood when compared to non-fish-eaters. However, the finding was not statistically significant (ATSDR 2000). In 2002, the MDEQ published the Final (Revised) Baseline Human Health Risk Assessment Report, which concluded that significant health risks to people and fish-eating animals resulted from eating PCB-contaminated fish from the Kalamazoo River. The risk assessment also concluded that contact with PCB-contaminated floodplain soils by dermal exposure presents a health risk to people, but that recreational activity in the Kalamazoo River such as swimming, boating and wading do not pose unacceptable PCB-related health risks to people.

Conclusions: The site covers a very large geographic area, heavily contaminated with PCBs from the paper industry. Remediation is in the early phases. Vulnerable populations living near the site are large.

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Friday, November 03, 2006 8:33 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: ATSDR Document

Attachments: RSQ.doc; Hedblum.doc; Fadrowski.doc


RSQ.doc (27 KB)

Hedblum.doc (28 KB)

Fadrowski.doc (27 KB)

----- Forwarded by Milt Clark/R5/USEPA/US on 11/03/2006 06:31 PM -----

SHEILA SULLIVAN/R5/USEPA/US
11/02/2006 04:25 PM

To: Joan Tanaka/R5/USEPA/US@EPA
cc: Milt Clark/R5/USEPA/US@EPA

Subject: ATSDR Document

Joan,
Attached please find the (minor) tracked changes to the text from the ATSDR document. The three sites I have that are included in the document are below.

(See attached file: RSQ.doc)(See attached file: Hedblum.doc)(See attached file: Fadrowski.doc)

--Sheila

3.5.1.2 Republic Steel Corp. Quarry

The site includes a 4-acre quarry and about seven acres of wooded land surrounding the quarry. It was originally a sandstone quarry. From 1950 to1975, Republic Steel Corp. used the quarry as a disposal site for waste pickle liquor consisting of sulfuric acid and dissolved metal oxides, and for rinse water from pickling operations. The waste was carried from the plant to the quarry by a ditch. Information regarding this site is taken from the 1989 ATSDR preliminary health assessment for this site, HazDat, and the 2003 EPA NPL fact sheet for the site.

Category of Public Health Hazard: This site was categorized by the 1989 ATSDR health assessment as an *Indeterminate Public Health Hazard* (Category 3) because of the potential threat to human health from exposure to contaminants in quarry water and sediment, soil and dust, and possibly in fish. Contaminants of concern included the IJC critical pollutants B(a)P and lead. A subsequent ATSDR site review and update concluded that the site poses *No Apparent Public Health Hazard* (Category 4). The site was remediated after the original 1989 health assessment was completed.

Contaminants of Concern in Completed Exposure Pathways: None identified. In the 1989 ATSDR health assessment, contaminants of concern included the IJC critical pollutants B(a)P and lead.

Demographics: The demographic profile, from the 2000 U.S. Census, for vulnerable populations living within 1 mile of this site:

Children 6 years and younger	1,400
Females aged 15-44	2,469
Adults 65 and older	1,539

Public Health Outcome Data: Not reported.

Conclusions: The Republic Steel Corp. Quarry site may have contributed to the environmental burden of the IJC critical pollutants B(a)P and lead in the past. As reported in the EPA fact sheet, remediation of the site, including removal of sediment and soils from the drainage ditch and hot spots near the edge of the quarry, has occurred. Contaminated quarry sediments were left in place because the contaminants were below the mixing zone, and remediation could entrain contaminated sediments in the water, increasing the hazard. Fencing was improved and an ordinance was passed by the city of Elyria to prohibit the use of groundwater as well as the use of the quarry for recreational purposes. In addition, the property zoning will be maintained as heavy industrial use only. Continued periodic monitoring of quarry surface water, quarry fish tissue, and groundwater were recommended. Deletion of the site from the NPL was finalized in December 2002.

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4.1.1.8 Hedblum Industries

The Hedblum Industries site is a 10-acre parcel located in Oscoda, Iosco County, MI, 1.2 miles west of Lake Huron. The site was leased to a series of industrial firms that manufactured parts for the automotive industry. Waste chemicals, including an estimated 4,000 gallons of spent trichloroethylene from a degreasing operation, were dumped in a pit near the main building. A pipe connecting an underground storage tank for trichloroethylene leaked. A number of residential wells in the area were found to be contaminated in 1973-1977. Most of the residents in the area of contamination were connected to municipal water in 1978, but a number were not. Trichloroethylene also was found in the bayou into which groundwater from the site discharges. The bayou feeds the Au Sable River. The information regarding this site is taken from the 1989 ATSDR health assessment and the 2003 EPA NPL fact sheet for this site.

Category of Public Health Hazard: This site was categorized as an *Indeterminate Public Health Hazard* (Category 3) because of the potential threat to human health from exposure to trichloroethylene and other VOCs.

Contaminants of Concern in Completed Exposure Pathways: None identified. No IJC critical pollutants are associated with this site. TCE has been identified in residential well water; eight households were estimated to have used contaminated well water at their household for an indeterminate time before they were switched to municipal water, but data were not adequate to measure the risks. One resident still has not switched to municipal water, and others use well water for gardens and lawns. Exposure pathways include ingestion, dermal contact, and inhalation of trichloroethylene volatilized from the water. The potential for exposure to trichloroethylene via subsurface vapor intrusion is also being assessed. As of 1990, no VOC contaminants were detected in residential wells. The groundwater is being treated by a system constructed in 1993.

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Demographics: Demographic profile, from the 2000 U.S. Census, for vulnerable populations living within 1 mile of this site:

Children 6 years and younger	135
Females aged 15-44	331
Adults 65 and older	349

Public Health Outcome Data: None reported.

Conclusions: This site has contributed to human exposure and to the environmental burden of trichloroethylene in the past through contamination of groundwater used for household water and discharge of contaminated groundwater into a bayou feeding the Au Sable River, where is expected to volatilize. The groundwater, however, has been under remediation since 1993; however, the system has not been fully effective and will be upgraded in the near future.

Deleted:
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5.5.1.2 Fadrowski Drum Disposal

This 20-acre site is located in the city of Franklin, Milwaukee County, WI. The site was operated as a landfill for construction debris and fill dirt from 1970 to 1982. In 1983, however, excavation for fill dirt on the property revealed barrels of hazardous wastes. As of 1994, the site had been fenced, and 167 buried drums and associated contamination had been excavated and contained. An onsite pond was drained and back filled. Information regarding this site is taken from the 1994 ATSDR public health assessment, HazDat, and the 2003 EPA NPL fact sheet for the site.

Category of Public Health Hazard: This site was categorized as an *Indeterminate Public Health Hazard* (Category 3) in a 1989 preliminary health assessment. In 1994, after some remediation had been performed, ATSDR concluded that the site poses *No Apparent Public Health Hazard* (Category 4).

Contaminants of Concern in Completed Exposure Pathways: The IJC critical pollutants B(a)P and lead were found in completed exposure pathways related to soil, but concentrations in surface soils were low enough that they did not pose a health risk. In fact, B(a)P was never a contaminant of concern at this site, although other carcinogenic PAHs were. There was some migration of contaminated soil from the disposal area into the adjacent wetland sand stream, but the contamination has been covered with clean soil. Groundwater was not appreciably affected. Since 1994, the drums have been removed, waste has been consolidated and capped, and monitoring wells and a leachate collection system have been installed. The effectiveness of the remedy is being monitored, and shows natural attenuation of site-related contaminants.

Demographics: Demographic profile, from the 2000 U.S. Census, for vulnerable populations living within 1 mile of this site:

Children 6 years and younger	856
Females aged 15-44	2,246
Adults 65 and older	1,208

Public Health Outcome Data: A health outcome data assessment, not related to this site but applicable to it, studied age-adjusted cancer rates for all cancer sites for the city of Franklin in comparison with the U.S., Wisconsin, and Milwaukee County for three time periods: 1960-1969, 1970-1979, and 1980-1985. The conclusion was that there are no significantly elevated rates for individual cancer sites, nor for specific cancers with an environmental exposure etiology, in Franklin.

Conclusions: The site has not been associated with completed exposure pathways to IJC or other pollutants at levels of health concern. The IJC critical pollutants B(a)P and lead were found in completed exposure pathways related to soil, but concentrations in surface soils were low enough that they did not pose a health risk. The site has been remediated. There may have been some migration of B(a)P and lead to an adjacent wetland and stream. The site was deleted from the NPL in September 2005.

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Friday, November 03, 2006 8:34 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: ATSDR Health Implications of Hazardous Waste Sites

----- Forwarded by Milt Clark/R5/USEPA/US on 11/03/2006 06:33 PM -----

Brad Bradley/R5/USEPA/US
11/02/2006 01:03 PM

To: Milt Clark/R5/USEPA/US@EPA
cc: Stuart Hersh/R5/USEPA/US@EPA
Subject: Re: ATSDR Health Implications of Hazardous Waste Sites(Document link: Milt Clark)

Milt- my comments are as follows:

Section 3.7, River Raisin AOC- why didn't they include Ford Outfalls/Visteon in their analysis? The Ford Outfalls Site impacts likely far exceed those associated with Consolidated Packaging

Section 5.5, Milwaukee AOC- the Boerke Site was cleaned up in 2003.
Arsenic and Naptha wastes were removed and disposed off-site. The only remaining wastes with concentrations exceeding the action levels are in the old disposal area at depth. This area has been provided with appropriate institutional controls to avoid disturbance and/or exposure of these remaining contaminated soils.

The Johns-Manville writeup was fine.

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Friday, November 03, 2006 8:35 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: Little Menominee SF site

----- Forwarded by Milt Clark/R5/USEPA/US on 11/03/2006 06:34 PM -----

RUSSELL
HART/R5/USEPA/US

11/02/2006 11:58 AM — To: Joan Tanaka/R5/USEPA/US@EPA, JMilton Clark/R5/USEPA/US@EPA; cc:

Subject: Fw: Little Menominee SF site

Good day, Joan and Milt - Regarding the ATSDR / AOC report, per your request I double-checked the information for the Milwaukee Estuary and the Moss-American site. Basically, the information looks OK. The last sentence in the "Conclusions" section notes in part "...As reported by EPA (June 2004),..." To update that for you, I am forwarding you some information I provided last month to MaryBeth Ross, which discusses site sediment management progress made in 2005. - Russ Hart

----- Forwarded by RUSSELL HART/R5/USEPA/US on 11/02/2006 11:48 AM -----

RUSSELL
HART/R5/USEPA/US

10/19/2006 02:51 PM — To: Marybeth Ross/R5/USEPA/US; cc:

Subject: Re: Little Menominee SF site
(Document link: RUSSELL HART)

Hi Ms. Ross - The graphic and summary both look very good. I would continue to use the 689 kg CPAH figure, and I believe the more recent volume of 3400 yds3 is probably a little more accurate. - Russ Hart

Marybeth
Ross/R5/USEPA/US

To

10/19/2006 11:34 AM — RUSSELL HART/R5/USEPA/US@EPA

cc

Subject

Re: Little Menominee SF site
(Document link: RUSSELL HART)

Hi Russ,

I would like to apologize for requesting this information from you again - you sent me the form with your handwritten comments on this site a few months ago. I just didn't make the connection between the Moss-American site and the Little Menomonee River site that Greg Hill mentioned to me.
But thanks for sending it again - you included some additional information the second time around.

I have two small requests:

1.) Can you please verify the information in the attached graphic and in the summary below (I modified the one you provided in the form)? I just want to make sure that there are no errors before I submit this information for publication in the GL Binational Toxics Strategy Progress Report next week, and before I post this on the web.

2.) You had 3600 cy dredged in the first form, and 3400 cy in the second. I put the 3400 cy estimate in the graphic and text - is that the correct estimate? Also, in the first form you indicated that the mass removed was approximately 689 kg of CPAHs, but did not include that estimate in the second form. Is that the correct mass removed?

Thanks!
-Mary Beth

Moss-American – Moss-American is an U.S. EPA Superfund NPL site in Milwaukee, WI, and the primary sediment contaminants of concern are PAHs from former creosote activity. Remediation occurred so as to execute the provisions of a 1990 Record of Decision, which called for several phases of work at the Moss-American site; one being sediment management work. A site-specific cleanup goal is 15 mg/kg carcinogenic CPAH.
Approximately five miles of the Little Menomonee River downstream of the former creosote facility were believed to have been contaminated.
Stream segment 1 underwent remediation in 2002-2003; during 2004 stream segments 2 and 3 were remediated. From November to December 2005, approximately 3,400 cubic yards of sediment were dredged from Segment 4 and transported from the Moss-American site to the Peoria Disposal facility in Peoria, IL.

[attachment "BTS_05.ppt" deleted by RUSSELL HART/R5/USEPA/US]

RUSSELL
HART/R5/USEPA/US

To

10/16/2006 11:45 AM — Marybeth Ross/R5/USEPA/US@EPA

cc

Subject
Re: Little Menominee SF site
(Document link: MaryBeth Ross)

Good day, Ms. Ross. I was on annual leave last week when your request first came in. Attached please find an update for 2005 sediment management at the Moss-American site involving the Little Menomonee River. - Russ Hart

[attachment "sediment remediation request form 2005.doc" deleted by Marybeth Ross/R5/USEPA/US]

Marybeth
Ross/R5/USEPA/US

10/11/2006 10:29 AM

To
RUSSELL HART/R5/USEPA/US@EPA
cc

Subject
Little Menominee SF site

Hi Russ,

Greg Hill at WDNR told me that a sediment remediation project may have been conducted at the Little Menominee Superfund site in 2005. If so, would you mind filling out the request form for that project? I would really appreciate any information that you can provide, or if you are not the Superfund lead on that project, if you could direct me to the appropriate person.

Thanks!
-Mary Beth

[attachment "sediment remediation request form.doc" deleted by Marybeth Ross/R5/USEPA/US]

Mary Beth Giancarlo Ross
Environmental Scientist
U.S. Environmental Protection Agency
Great Lakes National Program Office
77 W. Jackson Blvd. (G-17J)
Chicago, IL 60604
http://www.epa.gov/glnpo
P: 312-886-2253
F: 312-353-2018
ross.marybeth@epa.gov

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Friday, November 03, 2006 8:35 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: ATSDR Health Implications of Hazardous Waste Sites

----- Forwarded by Milt Clark/R5/USEPA/US on 11/03/2006 06:34 PM -----

MARY TIERNEY/R5/USEPA/US
11/02/2006 12:33 PM

To: Milt Clark/R5/USEPA/US@EPA
cc: Joan Tanaka/R5/USEPA/US@EPA
Subject: Re: Fw: ATSDR Health Implications of Hazardous Waste Sites(Document link: Milt Clark)

Milt,

For the four sites I'm assigned to that appear in the ATSDR report, the only suggested changes I have relate to the Hi-Mill Manufacturing site.
Two are minor changes to the write-up. Regarding the categorization of Hi-Mill, I would suggest changing it from a 3 to a 4 and have proposed language to add to the conclusion section (see below). If the category cannot be changed, perhaps they can add a statement that a review of current conditions should be done to confirm the category is correct (?).

Of the three other sites, two are categorized as a "5" and one is categorized as a "4."

Novaco -- okay (identified as category 5 -- no public health hazard) Auto Ion -- okay (identified as category 5 -- no public health hazard) Whitehall -- okay (identified as category 4 -- no apparent public health
hazard)

Hi-Mill is identified as category 3 -- indeterminate public health hazard -- based on a Public Health Assessment completed 15 years ago (1991).

The situations at Whitehall and Hi-Mill are somewhat similar, so designating one as a 4 and the other as a 3 appears to be inconsistent.
They are similar in that the problem at both sites was a contaminated drinking well, and in each case the well was shut down and another source of drinking water was provided.
The write-up on Whitehall
states: "The 1992 ATSDR public health assessment concluded that the site poses No Apparent Public Health Hazard because there is no current human exposure to significant levels of hazardous substance."

I believe the same statement could be made for Hi-Mill.

In the Conclusion section for Whitehall, it states: "Although this municipal supply well contributed to human exposure to VOCs, it was not the source of contamination, which remains unknown. It has been taken off-line. Monitoring of the groundwater continues."

A similar statement, with some modifications, could be made for Hi-Mill.
My suggested language is:

"Although this municipal supply well the plant production wells contributed to human exposure to VOCs, the wells have been sealed and a replacement well was installed in an uncontaminated area. it was not the source of contamination, which remains unknown. It has been taken off-line. Monitoring of the groundwater continues."
.....
The two minor changes to the Hi-Mill summary (Chapter 3, p. 132) are:

3.8.1.13 Hi-Mill Manufacturing Company
The Hi-Mill Manufacturing Company site is located on a 2.5-acre 4.5-acre site west of the City Township of Highland (Oakland County), MI.

Thanks,
Mary

Joan
Tanaka/R5/USEPA/
US

11/02/2006 10:58 AM

To: caine.howard@epa.gov, tierney.mary@epa.gov, hart.russell@epa.gov, sullivan.sheila@epa.gov, murawski.ronald@epa.gov

cc: Milt Clark/R5/USEPA/US@EPA

Subject: Fw: ATSDR Health Implications of Hazardous Waste Sites

Howard, Mary, Russ, Sheila, and Ron,
Please find below a work assignment from Milt with a very short turn around time. By Friday, November 3, please provide to him comments on the discussion of Superfund sites in the attached chapters of an ATSDR report on health concerns from hazardous waste sites in Areas of Concern
(AOC). The following sites are discussed in this report:

Chapter 3
Big D Campground, page 64 Caine
Republic Steel Quarry, page 91 Sullivan
Novaco, page 113 Tierney
Master Metals, pages 120, 127 Sullivan
Hi-Mill, pages 122, 131, 150 Tierney

Chapter 4
Hedblum Industries, pages 167, 174 Sullivan
Spiegelberg/Rasmussen, pages 167, 176 Caine

Chapter 5
SCA Independent Landfill, pages 200, 208 Murawski
Whitehall Wells, pages 200, 210 Tierney

Auto Ion, pages 224, 226	Tierney
Fadrowski Drum, pages 288, 289	Sullivan
Moss American, pages 288, 291	Hart

Please review the discussions of site conditions/hazards on the pages of the report noted above, and provide any corrections to Milt (copy me) by November 3rd, if possible. If you are not able to respond by tomorrow, please do so as soon as you are able. Thanks.

Joan Tanaka, Section Chief
Remedial Response Section #4
Remedial Response Branch #2
Superfund Division
U.S. EPA, Region 5
(312)-353-5425
----- Forwarded by Joan Tanaka/R5/USEPA/US on 11/02/2006 10:40 AM -----

Milt Clark/R5/USEPA/US

11/01/2006 04:18 PM

To: R5 Supervisors & Managers

cc: JAMES HAHNENBERG/R5/USEPA/US@EPA, Shari Kolak/R5/USEPA/US@EPA, TERESE VANDONSEL/R5/USEPA/US@EPA, Kevin Adler/R5/USEPA/US@EPA, Brad Bradley/R5/USEPA/US@EPA, Jon Peterson/R5/USEPA/US@EPA, Scott Cieniawski/R5/USEPA/US@EPA, BRENDA JONES/R5/USEPA/US@EPA, WALTER NIED/R5/USEPA/US@EPA, REBECCA FREY/R5/USEPA/US@EPA, Jacqueline Fisher/R5/USEPA/US@EPA

Subject: ATSDR Health Implications of Hazardous Waste Sites

ATSDR has complied a large document concerning health implications at hazardous waste sites within Great Lakes AOCs. They gave us an extremely short deadline for responding to the document. Many RPMs (possibly OSCs) in your branches and sections have received the document and have already commenting upon it, but I am uncertain if all AOCs and sites have been reviewed and commented upon.

ATSDR's deadline was today, but they have extended us a few extra days.
Can you please request your project managers to review the site information below and copy me with any comments by COB Friday November 3. I am not aware of all site managers involved with sites within AOCs so please forward this to them. Site listings and documents are listed below and the CDs are available in my chair if you need to borrow them.

Please note that there are significant omissions and concerns regarding the quality of these site evaluations and in many cases it has been suggested that EPA has not done sufficient work to characterize these areas, when it is clear we have done more than is reflected in the document. So please ensure that the writeup for each site has been

looked over for quality.

Thanks for your help in advance on this fire drill.

Milt

[attachment "Chapter 3-Great Lakes AOC Report.doc.zip" deleted by MARY TIERNEY/R5/USEPA/US] [attachment "Chapter 4-Great Lakes AOC Report.doc.zip" deleted by MARY TIERNEY/R5/USEPA/US] [attachment "Chapter 5-Great Lakes AOC Report.doc.zip" deleted by MARY TIERNEY/R5/USEPA/US]

[attachment "Chapter 7-Great Lakes AOC Report.doc.zip" deleted by Joan Tanaka/R5/USEPA/US] [attachment "Chapter 1-Great Lakes AOC Report.doc.zip" deleted by Joan Tanaka/R5/USEPA/US]

ASHTABULA RIVER AOC, ASHTABULA COUNTY, OH CUYAHOGA RIVER AOC, CUYAHOGA AND SUMMIT COUNTIES, OH BLACK RIVER AOC, LORAIN COUNTY, OH MAUMEE RIVER AOC, LUCAS, OTTAWA, AND WOOD COUNTIES, OH RIVER RAISIN AOC, MONROE COUNTY, MI ROUGE RIVER AOC, WAYNE AND OAKLAND COUNTIES, MI CLINTON RIVER AOC, OAKLAND AND MACOMB COUNTIES, MI SAGINAW RIVER AND BAY AOC MUSKEGON LAKE AOC AND WHITE LAKE AOC, MUSKEGON COUNTY, MI KALAMAZOO RIVER AOC, ALLEGAN AND KALAMAZOO COUNTIES, MI GRAND CALUMET AOC, LAKE COUNTY, IN, AND COOK COUNTY, IL WAUKEGAN HARBOR AOC, LAKE COUNTY, IL MILWAUKEE ESTUARY AOC, MILWAUKEE COUNTY, WI SHEBOYGAN RIVER AOC, SHEBOYGAN COUNTY, WI LOWER GREEN BAY AND FOX RIVER AOC (FOX RIVER/SOUTHERN GREEN BAY AOC),
BROWN COUNTY, WI
MENOMINEE RIVER AOC, MENOMINEE COUNTY, MI AND MARINETTE COUNTY,WI MANISTIQUE RIVER AOC, SCHOOLCRAFT COUNTY, MI DEER LAKE AOC, MARQUETTE COUNTY, MI TORCH LAKE AOC, HOUGHTON COUNTY, MI ST. LOUIS RIVER AND BAY AOC, ST. LOUIS AND CARLTON COUNTIES, MN AND DOUGLAS COUNTY, WI

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Friday, November 03, 2006 8:36 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: ATSDR Health Implications of Hazardous Waste Sites

Attachments: Chapter 5-Great Lakes AOC Report RUDDIMAN CREEK.doc

Chapter 5-Great Lakes AOC Repo...

----- Forwarded by Milt Clark/R5/USEPA/US on 11/03/2006 06:35 PM -----

Scott Ireland/R5/USEPA/US
11/02/2006 10:17 AM

To: Milt Clark/R5/USEPA/US@EPA
cc: David Cowgill/R5/USEPA/US@EPA, Scott Cieniawski/R5/USEPA/US@EPA, Marc Tuchman/R5/USEPA/US@EPA, Marybeth Ross/R5/USEPA/US@EPA, Alie Muneer/R5/USEPA/US@EPA, Ajit Vaidya/R5/USEPA/US@EPA, David Wethington/R5/USEPA/US@EPA, Michael Russ/R5/USEPA/US@EPA, Mark Elster/R5/USEPA/US@EPA

Subject: Re: ATSDR Health Implications of Hazardous Waste Sites

Milt,

I took a look at the above document and found one area in chapter 5 (Ruddiman Creek) that needs edited. I have attached the edits below.
This review focused on sites within the AOCs where we have completed or have started sediment remediation projects under the Great Lakes Legacy Act. The other projects that have been completed do not "fit" in the document as these "sites" were not listed within the AOCs but I thought I would pass them along and let you decide what, if anything, you wanted to do with them.

Remediation projects that have been completed (other than Ruddiman Creek which is detailed in the attachment) inlcude:

Newton Creek/ Hog Island Inlet in the St. Louis River AOC:
This project removed 46,000 cubic yards of sediments contaminated with lead and PAHs. This project was completed in November, 2005.

Black Lagoon, Detroit River AOC:

This project removed 115,000 cubic yards of sediment contaminated with PCBs and mercury. This project was completed in November, 2005.

Remediation projects that have been initiated inlcude:

Ashtabula River, Ashtabula River AOC:
This project began in September of 2006 and is expected to remove over 600,000 cubic yards of sediment contaminated with PCBs.

Tannery Bay, St. Mary's River AOC:
This project began in July of 2006 and is expected to remove over 40,000 cubic yards of sediment contaminated with mercury and chromium.

We have also completed/initiated a few sediment evaluation projects under the Great Lakes Legacy Act as well. These have not been included here as they do not seem to fit within the document. They are in the Muskegon Lake AOC, St. Louis River AOC and the Detroit River AOC.
Please let me know if you would like more detail on these sites.

(See attached file: Chapter 5-Great Lakes AOC Report RUDDIMAN CREEK.doc)

5.1.1.8 Ruddiman Drain Area (Ruddiman Creek Area)

The west, north, and main branches of Ruddiman Creek watershed flow through areas of dense residential development, and into Ruddiman Pond. Area residents play in and around these creek branches and pond. Sediments of Ruddiman Creek and pond were sampled following passage of the Clean Michigan Initiative, and found to be contaminated. The sources of contamination were not discussed. Information on this site is taken from the 2003 ATSDR health consultation.

Category of Public Health Hazard: This site was categorized as an *Indeterminate Public Health Hazard* (Category 3) in 2003 because of the limited monitoring data and uncertainties in estimated human doses.

Contaminants of Concern in Completed Exposure Pathways: The IJC critical pollutants PCBs and lead were found at concentrations of concern in sediments of the main branch of the Ruddiman Creek. ATSDR concluded that the uncertainties surrounding the estimated dose of PCBs from sediment exposure, the lack of a lead model for the child (age 10-16 years) likely to be exposed to creek sediments, and the limited numbers of samples that did not adequately characterize the contamination, precluded a definitive conclusion regarding the hazard.

Demographics: Not reported, but the contaminated main branch of the creek is located less than 100 feet from several apartment complexes and an elementary school.

Public Health Outcome Data: None reported.

Conclusions: The sediments of the main branch of this creek are contaminated with PCBs and lead at levels of concern for human exposure (and for ecological effects). The sources of this contamination were not discussed, and it was concluded that addition sampling was needed to better define the extent of contamination, including sampling of fish, and that warning signs were needed. **THIS SITE HAS BEEN REMEDIATED UNDER THE GREAT LAKES LEGACY ACT.**
90,000 CUBIC YARDS OF CONTAMINATED SEDIMENT WAS REMOVED FROM RUDDIMAN CREEK AND POND BETWEEN AUGUST 2005 AND JUNE 2006. THIS PROJETC RMEOVED APPROXIMATELY 126,000 POUNDS OF LEAD, 320 POUNDS OF PCBS AND 204,000 POUNDS OF CHROMIUM.

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Monday, November 06, 2006 11:14 AM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Dow Chemical Writeup

Attachments: ATSDR.DOw.doc

ATSDR.DOw.doc
(51 KB)

Annette,

Attached are comments on the Dow Midland Section. Some additions in blue and red. U.S. EPA is very concerned that the conclusions reached in this section and for several other sites simply do not reflect the previous conclusions taken by state health and environmental agencies.
Without extensive modification prior to public review and dissemination, rather than help, these reports may do a serious dis-service to the efforts made by the federal government and our state partners.

Given the inadequate review time, and various problems with the document, U.S. EPA will be unable to support the assessments as currently written. Hopefully, ATSDR will slow up and take the necessary time with state and federal partners to ensure a high quality product.

We will be providing additional comments by the end of next week, but they cannot reflect a comprehensive or coordinated evaluation.

Regards,

Milt Clark
Senior Health and Science Advisor
312-886-1918

(See attached file: ATSDR.DOw.doc)

(See attached file: ATSDR.DOw.doc)

4.1.1.12 Dow Chemical Co., Michigan Division, Midland Location

The Dow Chemical Company plant in the city of Midland, Midland County, MI was the subject of an ATSDR health consultation that was triggered by community concerns regarding high levels of PCDDs in soil in Midland and in fish in the nearby Tittabawassee River downstream of Midland. The Dow plant encompasses approximately 1,900 acres on the southern perimeter of the city. The Tittabawassee River forms the southern boundary of the plant site and flows southeast to join with the Saginaw River in the vicinity of the city of Saginaw. In the late 1800s, the Dow plant began production of chlorine from brine using an electrolytic cell process. PCDDs, PCDFs, and octachlorostyrene are known to be by products of the electrolytic cell process. A variety of additional chemicals have been produced at this Dow plant, including Agent Orange [which contains 2,4,5-trichlorophenoxyacetic acid (2,4,5-T)], and 2,4,5-trichlorophenol. PCDDs and PCDFs are known to be impurities in some chlorinated phenolic chemicals, such as 2,4,5-trichlorophenol and 2,4,5-T. Chlorophenol production started in 1915. Wastes generated from this process were initially transferred to 600 acres of onsite waste ponds. During high flow periods in the early 1900s, wastes from these ponds were intentionally released to the Tittabawassee River. Some site waste has been and is taken by truck from the Dow plant to local landfills. Since that time, Dow has operated its own wastewater treatment plant onsite, but a significant flood in 1986 overwhelmed the wastewater treatment plant and flooded areas of the plant where soils were contaminated with PCDDs. The runoff and untreated or partially treated chemical wastes entered the Tittabawassee River. Two incinerators are used for treatment of liquid and solid hazardous and non-hazardous wastes generated from manufacturing at the plant. Incineration of chlorine-containing wastes also produces PCDDs and PCDFs. Information regarding this site is taken from the 2002 health consultation prepared by ATSDR. This health consultation focused on contamination of Midland soil. A separate health consultation was prepared regarding contamination in the Tittabawassee River floodplain near the city of Saginaw, in Saginaw County (see Section 4.1.1.13).

Category of Public Health Hazard: This site was categorized as an *Indeterminate Public Health Hazard* (Category 3) because the data necessary to determine if dioxin contaminated soil in the Midland area poses a public health risk are not available. (THERE IS MORE THAN SUFFICIENT DATA TO ASSESS PUBLIC HEALTH RISK). The Michigan Department of Public Health and U.S. EPA has concluded that dioxin contamination (as PCDDs and PCDFs) found in some Midland residential soils and in fish clearly presents an unacceptable public health risk.

Contaminants of Concern in Completed Exposure Pathways: Not identified. The IJC critical pollutants PCDDs and PCDFs were found at very high concentrations (expressed as total toxic equivalent, TEQ) concentrations in soil at the Dow plant. The residential areas to the northeast are expected to have the highest impact from historical incinerator emissions, but no data are available concerning dioxin concentrations in these areas of Midland. Most of the TEQ concentration data for the community fall within the range (>50 but <1000 ppt TEQs) that triggers additional ATSDR evaluation, including consideration of background and bioavailability data in order to evaluate the incremental contribution of soil exposure; this information was not available. An initial investigation for other contaminants besides PCDDs and PCDFs is expected

To be completed in 2007. Fish contamination by PCDDs and PCDFs, which have resulted in fish consumption advisories, represent a completed exposure pathway.

Demographics: Residential neighborhoods are located in close proximity to the northeast perimeter of the Dow plant and within a quarter of a mile from a soil sampling site where total TEQs were above the ATSDR action level of 1,000 ppt.

Public Health Outcome Data:

- Michigan Department of Public Health Evaluations of Congenital Malformation Rates and Soft and Connective Tissue Cancer Mortality Rates, determined higher than expected birth defects and cancer in Midland (Michigan Department of Public Health, 1983). Specifically, data from birth and fetal death records showed four anomalies to have a statistically significantly higher rates in Midland County than in the State of Michigan rates for grouped years 1970-1975. These defects include cleft lip with or without cleft palate, cleft palate without cleft lip, hypospadias, and hip dislocation without CNS defects. Mortality rates from soft and connective tissue cancers among white females from Midland Country were confirmed to be 3.8 and 4.0 times the national average for the periods of 1960-1969 and 1970-1978, respectively. While the statistically significant excess cancer rates may have occurred by chance alone, the unlikihood of this occurring suggests that some other exposure factor was involved.
- An analysis of cancer incidence data for zip codes 48640 (southwest area of Midland including the Dow plant site) and 48642 (area northeast of the Dow plant) as compared with Midland County, Bay County, and the state of Michigan showed no elevated incidences of specific cancer types in these two zip code areas. There was a higher-than-expected incidence of all cancers combined in 48640 (but not 48642) as compared with Midland County, Bay County, and the state of Michigan for individual years 1994 through 1998 and all years combined. A higher-than-expected incidence of all cancers combined was seen in this zip code area upwind and including the site, but not the zip code area downwind of the site, which was considered more highly contaminated with PCDDs and PCDFs from the Dow Chemical Company's onsite incineration of chemical wastes. The interpretation of this data is not easily ascertained. Age-adjusted incidence rates for thyroid cancer in the two zip code areas were also computed and were considered statistically unreliable. This was documented in a table from the Michigan Department of Community Health (June 5, 2001) without numeric values being shown to justify this conclusion.

- A Dow Cohort mortality study of workers in the Midland plant compared 2,187 male employees who worked at any time between 1940 and 1983 in areas of the plant where there was potential exposure to dioxin, with exposure classified on the basis of job history. Causes of death were compared to those of the U.S. population and an internal "unexposed" group of employees. Rates for all causes of death were lower in the exposed cohort than in the U.S. population, likely due to the healthy worker effect (workers being healthy or they would not be working). However, there was a slightly higher rate for some cancers when the workers were compared to a group of unexposed employees. The relevance of this study to the non-Dow-employee residents of the

community was considered questionable since the exposure situation is probably very different for workers as compared to the area residents.

- An analysis of birth defects data for 1992 through 1996 from the Michigan Birth Defects Registry did not show any consistent pattern of excesses in any particular category or for birth defects overall for Midland County (about 1,000 births/year). No excess was seen for types of birth defects, such as anecephaly, spina bifida, and cleft lip, which had been reported as related to dioxin exposure.

Conclusions: This site has contributed to the environmental burden of the IJC critical pollutants PCDDs and PCDFs. Whether residents of the community near the plant experienced a level of exposure sufficient to be considered a public health risk could not be determined due to the lack of soil monitoring data in the critical areas and other data deficiencies."?? How can such a statement be made if dioxin levels are above 1,000 ppt? U.S. EPA collected sufficient soil and fish data in the 1980s to conclude that a public health risk did exist from consumption of fish. Data subsequently taken by

4.1.1.13 Tittabawassee River

The Dow Chemical Company plant in the city of Midland, Midland County, MI was the subject of an ATSDR health consultation that was triggered by community concerns regarding high levels of PCDDs in soil in the city of Midland and in fish in the nearby Tittabawassee River downstream of Midland. An additional concern arose when sampling of the Tittabawassee floodplain near the confluence of the Tittabawassee and Saginaw Rivers revealed high levels of dioxin contamination. The soil contamination issue was considered in the ATSDR health consultation on the Dow Chemical Co. site, presented in Section 4.1.1.12, which provides a description of the plant location and releases to the environment. The issue of contamination of the floodplain of the Tittabawassee River is considered in a separate 2002 ATSDR health consultation, summarized below. The Tittabawassee floodplain area that is potentially of concern extends from the City of Midland in Midland County to the City of Saginaw in Saginaw County. The sampling sites were within Saginaw County.

Category of Public Health Hazard: This site was categorized as an *Indeterminate Public Health Hazard* (Category 3) because of the potential threat to human health from exposure to PCDDs and PCDFs and the lack of monitoring data for the residential area. This statements contradicts conclusions reached by the Michigan Departments of Environmental Quality and U.S.EPA. There is more than sufficient data to render conclusions.

Contaminants of Concern in Completed Exposure Pathways: Elevated dioxin TEQs (as high as 7,261 ppt, includes PCDDs and PCDFs) were found in soil samples from a floodplain area near the confluence of the Tittabawassee and Saginaw Rivers in Saginaw County, analyzed as part of a wetland mitigation project, and in other floodplain areas (golf course, wildlife refuge) upstream from the mitigation site. These levels were considered to be high enough to pose an urgent public health hazard if people were routinely exposed to soil at these locations, but ATSDR concluded that the level of exposure on these properties is not known, and was

concerned regarding the lack of sampling on nearby residential properties. The only known source of dioxin contamination was the Dow Chemical Company plant upstream at Midland. ATSDR concluded that the contamination likely resulted from deposition of contaminated river sediments in the Tittabawassee River floodplain. As discussed in Section 4.1.1.12, fish in the Tittabawassee River below the city of Midland have elevated levels of PCDDs and PCBs. Based on the floodplain soil data together with the fish data, ATSDR concluded that dioxin contamination may be widespread throughout the Tittabawassee River watershed below Midland, but data were lacking on possible exposures. Subsequent sampling has found dioxin TEQs as high as 41,000 ppt within the first six miles downstream of the Dow plant.

Demographics: Twelve homes are located adjacent to the river less than half a mile upstream from the mitigation site where very high TEQs were detected. Numerous other residential properties are located within the floodplain upstream of the wetland mitigation site.

Public Health Outcome Data: ~~None reported.~~

In 2006, the University of Michigan conducted a dioxin exposure study which was funded by Dow. Some of the key initial findings of the study are:

- People who live in regions expected to have dioxin contamination in Midland/Saginaw have higher levels of dioxins in their blood than do people in a control area.
- People who have higher levels of dioxins in their soil have a higher TEQ (total dioxin-like activity) in their blood.
- People who eat fish from the Tittabawassee River, Saginaw River, and Saginaw Bay have higher levels of dioxins in their blood than people who do not eat fish from these areas.
- People who do recreational activities in the Tittabawassee River, Saginaw River, and Saginaw Bay have higher levels of dioxins in their blood than people who do not do recreational activities in these areas.

Conclusions: This site is contaminated with the IJC critical pollutants PCDDs and PCDFs, probably from releases from the Dow Chemical Company plant upstream at Midland, Midland County. The dioxin contamination is ~~may be~~ widespread throughout the Tittabawassee River watershed below Midland. ~~and but initial data were lacking on possible exposures~~ The available analytical sampling data combined with information on human activities in the watershed areas indicate that statistically significant exposures to dioxin could be occurring, especially within populations who consume significant quantities of locally harvested fish and/or wild game. A wild game study for the flood plain of the Tittabawassee River downstream of Midland was conducted by Dow in 2004. State of Michigan health assessors have reviewed the wild game data and found that levels of dioxins in the wild game harvested in the floodplain for the study were up to 7 times higher than samples taken upstream of Midland in deer muscle meat, 118 times higher in deer liver, 66 times higher in turkey, and 40 times higher in squirrel. The results concluded that eating deer, turkey, or squirrel that contain dioxin at the levels found in the Dow wild game study could result in adverse health effects.

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Clark.Milt@epamail.epa.gov
Sent: Monday, November 13, 2006 12:21 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: ATSDR Health Implications of Hazardous Waste Sites

Attachments: Lake MI LaMP SOLEC 2006 Brauer..ppt

Lake MI LaMP
OLEC 2006 Brauer..

----- Forwarded by Milt Clark/R5/USEPA/US on 11/13/2006 11:20 AM -----

Sue Brauer/R5/USEPA/US
11/08/2006 06:21 PM

To: Milt Clark/R5/USEPA/US@EPA
cc: Mary Setnicar/R5/USEPA/US@EPA
Subject: Re: Fw: ATSDR Health Implications of Hazardous Waste Sites(Document link: Milt Clark)

Hi Milt, I'm sorry I couldn't make the due date. I was at SOLEC in Milwaukee Nov. 1-3.

With respect to Chapter 1, if FDA action levels for poisonous or deleterious substances in human food and animal fee are applicable to sampled media, ATSDR should refer to those too or explain why not. See www.cfsan.fda.gov/~lrd/fdaact.html .

Chapter 2 was not forwarded.

With respect to Chapter 3, ATSDR lists "RCRA sites." I don't think all of the hazardous waste treatment, storage, and disposal facilities were included. Used oil processors were not included (these facilities have a history of receiving PCB 'hot loads' without PCB identification).
Hazardous waste generators were also not included, unless in the TRI tables. The process for identifying "RCRA sites" should be explained.
How did ATSDR determine 'hazardous waste site' relevance to the AOC???
Granted, ATSDR has a statutory obligation for Superfund sites, but this document omits identification of RCRA corrective action sites and other RCRA (hazardous waste) installations.

In Section 5.1, page 199 includes the phrase "down river lake." I think what is intended is "drowned river mouth" lake.

Section 5.1.1 (p. 199) states, "ATSDR has evaluated the data for 12 hazardous waste sites in Muskegon County, MI, and reached conclusions regarding any potential effect to health posed by these sites." There are 568 RCRA notifiers in Muskegon County, Michigan.

Sections 5.3.5.2 and 5.3.5.3 should acknowledge the diversion of surface water in the Chicago River System to the Mississippi River Basin.

Section 5.4.1.4 states on page 276, "The ATSDR Public Health Hazard category for fish consumption has resulted in Advisories for fish consumption." Fish contaminant sampling in Illinois is conducted in cooperation with the Illinois Department of Natural Resources to screen for the accumulation of toxic substances. The 1989 MOA spells out responsibilities of participating agencies (Depts. of Agriculture, Natural Resources, Nuclear Safety, Public Health and Environmental Protection Agency). Table C-13 in Illinois' 2006 consolidated Clean Water Act 303(d) and 305(b) report (see http://www.epa.state.il.us/water/water-quality/report-2006/2006-report.pdf) attributes health protection values for PCBs, methyl mercury, and chlordane to closely following the Protocol for a Uniform Great Lakes Sport Fish Consumption Advisory (Anderson et al, 1993). FDA action levels are relied upon for aldrin, DDT (total), dieldrin, endrin, heptachlor, heptachlor epoxide, hexachlorobenzene, lindane, mirex, and toxaphene. In light of information from Illinois, should ATSDR reword the quoted sentence?

[stopped page by page reviews in disgust]

Section 7.5 qualifies the report. I would add that hazardous waste generation data was not considered. I had Jane Ratcliffe's section map this for Lake Erie in the mid- to late- 1990s and can provide examples.
Furthermore, reports prepared by States in compliance with Sections 303(d) and 305(b) of the Clean Water Act are a significant source of data that was not reviewed. With respect to Lake Michigan, please see the attached powerpoint presentation and Appendix A in the 2002-2006 Lake Michigan LaMPs at http://www.epa.gov/grtlakes/lakemich/lm02/index.html (2002), http://www.epa.gov/grtlakes/lakemich/2004update/index.html (2004), and http://www.epa.gov/grtlakes/lakemich/2006/index.html (2006). I'm so aggravated--Annette Ashizawa of ATSDR is on the Lake Michigan LaMP Toxic Reduction Subcommittee e-mail list but does not participate.

(See attached file: Lake MI LaMP SOLEC 2006 Brauer..ppt)

Sue Rodenbeck Brauer
U.S. EPA, Region 5 (DW-8J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
phone (312) 353-6134
fax (312) 353-4788
brauer.sue@epa.gov

Mary
Setnicar/R5/USEP
A/US

11/01/2006 04:40
PM

To Sue Brauer/R5/USEPA/US@EPA

cc

Subject
Fw: ATSDR Health Implications of Hazardous Waste Sites

don't know if you'll be able to check this out before Milt's deadline, but thought you might be interested

----- Forwarded by Mary Setnicar/R5/USEPA/US on 11/01/2006 04:38 PM -----

Milt Clark/R5/USEPA/US

11/01/2006 04:18 PM

To: R5 Supervisors & Managers

cc: JAMES HAHNENBERG/R5/USEPA/US@EPA, Shari Kolak/R5/USEPA/US@EPA, TERESE VANDONSEL/R5/USEPA/US@EPA, Kevin Adler/R5/USEPA/US@EPA, Brad Bradley/R5/USEPA/US@EPA, Jon Peterson/R5/USEPA/US@EPA, Scott Cieniawski/R5/USEPA/US@EPA, BRENDA JONES/R5/USEPA/US@EPA, WALTER NIED/R5/USEPA/US@EPA, REBECCA FREY/R5/USEPA/US@EPA, Jacqueline Fisher/R5/USEPA/US@EPA

Subject: ATSDR Health Implications of Hazardous Waste Sites

ATSDR has complied a large document concerning health implications at hazardous waste sites within Great Lakes AOCs. They gave us an extremely short deadline for responding to the document. Many RPMs (possibly OSCs) in your branches and sections have received the document and have already commenting upon it, but I am uncertain if all AOCs and sites have been reviewed and commented upon.

ATSDR's deadline was today, but they have extended us a few extra days.
Can you please request your project managers to review the site information below and copy me with any comments by COB Friday November 3. I am not aware of all site managers involved with sites within AOCs so please forward this to them. Site listings and documents are listed below and the CDs are available in my chair if you need to borrow them.

Please note that there are significant omissions and concerns regarding the quality of these site evaluations and in many cases it has been suggested that EPA has not done sufficient work to characterize these areas, when it is clear we have done more than is reflected in the document. So please ensure that the writeup for each site has been looked over for quality.

Thanks for your help in advance on this fire drill.

Milt

[attachment "Chapter 3-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]
[attachment "Chapter 4-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]
[attachment "Chapter 5-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]
[attachment "Chapter 6-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]
[attachment "Chapter 7-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]
[attachment "Chapter 1-Great Lakes AOC Report.doc.zip" deleted by Sue Brauer/R5/USEPA/US]

ASHTABULA RIVER AOC, ASHTABULA COUNTY, OH CUYAHOGA RIVER AOC, CUYAHOGA AND SUMMIT COUNTIES, OH BLACK RIVER AOC, LORAIN COUNTY, OH MAUMEE RIVER AOC, LUCAS, OTTAWA, AND WOOD COUNTIES, OH RIVER RAISIN AOC, MONROE COUNTY, MI ROUGE RIVER AOC, WAYNE AND OAKLAND COUNTIES, MI CLINTON RIVER AOC, OAKLAND AND MACOMB COUNTIES, MI SAGINAW RIVER AND BAY AOC MUSKEGON LAKE AOC AND WHITE LAKE AOC, MUSKEGON COUNTY, MI KALAMAZOO RIVER AOC, ALLEGAN AND KALAMAZOO COUNTIES, MI GRAND CALUMET AOC, LAKE COUNTY, IN, AND COOK COUNTY, IL WAUKEGAN HARBOR AOC, LAKE COUNTY, IL MILWAUKEE ESTUARY AOC, MILWAUKEE COUNTY, WI SHEBOYGAN RIVER AOC, SHEBOYGAN COUNTY, WI LOWER GREEN BAY AND FOX RIVER AOC (FOX RIVER/SOUTHERN GREEN BAY AOC),

BROWN COUNTY, WI

MENOMINEE RIVER AOC, MENOMINEE COUNTY, MI AND MARINETTE COUNTY,WI MANISTIQUE RIVER AOC, SCHOOLCRAFT COUNTY, MI DEER LAKE AOC, MARQUETTE COUNTY, MI TORCH LAKE AOC, HOUGHTON COUNTY, MI ST. LOUIS RIVER AND BAY AOC, ST. LOUIS AND CARLTON COUNTIES, MN AND DOUGLAS COUNTY, WI

Ashizawa, Annette (ATSDR/DTEM/ATB)

From: Collier.Demaree@epamail.epa.gov
Sent: Monday, February 12, 2007 3:40 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Cc: Gonzalez.rafaelp@epa.gov; Fisher.Jacqueline@epamail.epa.gov
Subject: Re: FW: Black River AOC and public health considerations and ATSDR

Attachments: ATSDR.doc

ATSDR.doc (47 KB)

Hi Annette,

I just spoke with Jackie Fisher in GLNPO since I recently updated the ATSDR report for Ford Road Industrial Landfill - I am attaching what I sent to her for the report and she is actually getting that out in the mail today so you should be getting the official version very soon.
Please let me know if there is anything else you need or give me a call at 312-886-0214.

Demaree

(See attached file: ATSDR.doc)

"Ashizawa, Annette (ATSDR/DTEM/ATB)" <ada8@CDC.GOV>

02/12/2007 01:37 PM

To
Demaree Collier/R5/USEPA/US@EPA, RafaelP Gonzalez/R5/USEPA/US@EPA

cc
vincent.annemarie@epamail.epa.gov', "Murray, Ed (ATSDR/DTEM/ATB)" <hem0@CDC.GOV>, "Smith, Casandra V. (ATSDR/DTEM/ATB)" <cvs1@CDC.GOV>

Subject
FW: Black River AOC and public health considerations and ATSDR

Hi,
I received notification from Anne Marie Vincent that the two of you could update me on the Black River cleanup (see e-mail dated 11/13/06 below).

If you have any new information beyond what is in the 11/13/06 e-mail (written by Anne Marie Vincent), please let me know. Knowing people are busy, I would appreciate even a

brief (sentence or two) status update.

Thanks.
Annette Ashizawa, Ph.D.
ATSDR

-----Original Message-----
From: Ashizawa, Annette (ATSDR/DTEM/ATB)
Sent: Friday, February 09, 2007 6:23 PM
To: 'vincent.annemarie@epamail.epa.gov'
Subject: FW: Black River AOC and public health considerations and ATSDR

Could you give me the e-mail address for Demaree Collier and Rafael Gonzalez?
Thanks.

-----Original Message-----
From: Ashizawa, Annette (ATSDR/DTEM/ATB)
Sent: Monday, November 13, 2006 3:49 PM
To: 'vincent.annemarie@epamail.epa.gov'
Subject: RE: Black River AOC and public health considerations and ATSDR

Thank you. If I have questions, I will contact you.

-----Original Message-----
From: vincent.annemarie@epamail.epa.gov
[mailto:vincent.annemarie@epamail.epa.gov]
Sent: Monday, November 13, 2006 3:29 PM
To: Ashizawa, Annette (ATSDR/DTEM/ATB)
Subject: Fw: Black River AOC and public health considerations and ATSDR

Dr. Ashizawa,

I apologize for the delay in responding regarding this AOC report. I was out of town at a conference immediately following my receipt of the report CD and was out at meetings and training for most of the week following that. I was not sure where to send comments to, so I am forwarding you an e-mail thread with all of the responses I have put together regarding this report.

The last e-mail in the thread below is a copy of the e-mail response from my Black River RAP counterpart at Ohio EPA. He sent his response earlier and I found myself in agreement with his concerns for the AOC map and overlaid layers for making the map(s). In addition, the second attached e-mail below lists my concerns with the site specific information for the Ford Road Landfill. The second to last included e-mail addresses my general concerns with the ATSDR report. I am not a risk assessor, I am a field person and inspector. With that being said , these are just my general ideas regarding the usefulness of this report from my perspective as a liaison for USEPA to the Black River RAP based on my limited knowledge of assessing risks.

Anne Marie Vincent
==========
Anne Marie Vincent
US EPA Liaison -Black River RAP
USEPA - Cleveland Office
25089 Center Ridge Road
Westlake, Ohio 44145
Phone: 440-250-1720
Fax: 440-250-1750
e-mail: vincent.annemarie@epa.gov
==========
----- Forwarded by AnneMarie Vincent/R5/USEPA/US on 11/13/2006 03:19 PM

Milt
Clark/R5/USEPA/U

S

To
AnneMarie Vincent/R5/USEPA/US@EPA

11/13/2006 03:14 PM

cc
Jacqueline Fisher/R5/USEPA/US@EPA

Subject
Re: Fw: Black River AOC and public health considerations and ATSDR(Document link: AnneMarie Vincent)

Anne Marie,

Do not hesitate to pass any comments to ATSDR. Thanks for your help.

Milt

AnneMarie Vincent/R5/USEPA/US

To
Jacqueline Fisher/R5/USEPA/US@EPA, Milt Clark/R5/USEPA/US@EPA

11/13/2006 02:11 PM

cc

Subject
Fw: Black River AOC and public health considerations and ATSDR

I am not involved with the Ford Road Landfill effort, but I assume you all contacted Demaree Collier or Rafael Gonzalez. They are the contact people for the proposed clean up of the Landfill site. There was actually a risk assessment done for the site itself in conjunction with the EPA proposed Cleanup Plan. Public meetings were held on this issue in the summer of 2006. But the ATSDR report doesn't appear to have taken into account this information, being as though the ATSDR report used 2002 data believe. So before even being released, the section on the Black River may be partially inaccurate. Again, I am not the expert on this site and only know about it because I attended the public meeting in June sponsored by USEPA. I assume that Demaree or Rafeal provided more substantial input as the site contacts for the agency.

Anne Marie Vincent

I apologize for the delay in response, but I was attending SOLEC the week I received the FEDEX of the report Disc and in training or meetings most of last week. Plus, I have found that most of my comments were previously represented by other responses.

Anne Marie Vincent

==========
Anne Marie Vincent
USEPA - Cleveland Office
25089 Center Ridge Road
Westlake, Ohio 44145
Phone: 440-250-1720
Fax: 440-250-1750
e-mail: vincent.annemarie@epa.gov
==========
----- Forwarded by AnneMarie Vincent/R5/USEPA/US on 11/13/2006 03:01 PM -----

AnneMarie Vincent/R5/USEPA/US

11/13/2006 02:42 PM

To

cc

Subject

Fw: Black River AOC and public health considerations and ATSDR

Jacqueline and Milt -

I am forwarding to you a message which I was copied on from my Black River RAP counterpart at Ohio EPA (Ted Conlin). Ted had sent his response to Dr. Ashizawa, regarding the ATSDR report. As the Black River RAP Liaison for US EPA, I reviewed the ATSDR report, discussed my thoughts with Ted Conlin and found that my comments were similar to those discussed by Ted Conlin of Ohio EPA. I also found that my additional thoughts, beyond my concerns with the map, were in-line with those of Frederick Luckey of USEPA Region 2. So I did not send my comments as to not reiterate the same concerns about the report. The maps in the report, in particular, the Black River AOC, are not correct, as indicated in more detail by Ted Conlin's response from Ohio EPA. In addition I have the same concerns as Mr. Luckey, that the maps and corresponding assumptive findings seem to be no more than a generic data dump as opposed to a soundly based analysis of the actual risk to public health from the AOC areas. The value of the information is further compromised by the misalignment of the map layers in GIS used for the watershed (Black River AOC).

Anne Marie Vincent
Region 5 Black River RAP Liaison

==========
Anne Marie Vincent
USEPA - Cleveland Office
25089 Center Ridge Road
Westlake, Ohio 44145
Phone: 440-250-1720
Fax: 440-250-1750
e-mail: vincent.annemarie@epa.gov
==========
----- Forwarded by AnneMarie Vincent/R5/USEPA/US on 11/13/2006 12:42 PM -----

Ted Conlin

<ted.conlin@epa.
state.oh.us>

11/06/2006 03:24
PM

To
ADA8@CDC.GOV

cc
AnneMarie Vincent/R5/USEPA/US@EPA

Subject
Black River AOC and public health considerations and ATSDR

Dear Dr. Ashizawa,

I apologize, but I will not be able to review the ATSDR AOC report as I feel the information might have some serious errors in site locations and therefore, your databases might need to be tweaked.

The map of the Black River AOC is wrong in two ways:

1) The AOC does not include the Lake Erie tributaries east of the Black River mouth, only the actual Black River watershed.

2) It appears the map was generated using two different GIS projections as the map on the disk shows that the Cities of Lorain and Elyria are no longer in the Black River AOC and in fact, shows these Cities to be in Cuyahoga County. Both Cities are indeed within Lorain County and Elyria is the county seat. It appears that the cities and roadways layers used to generate the map are in a different projection from the projection used for the layers of streams, counties and Lake Erie coastline.

If you can get this corrected, I will be better able to review the report.

3.5.1.1 Ford Road Industrial Landfill

This site is an inactive 15-acre landfill located in Elyria, and bordering on the Black River. The landfill was originally a ravine, but has been filled by the waste disposed there. The site is not fenced, accessible from all sides, and within 1 mile of several residences. Surface water at the site flows directly, as runoff, into the Black River, and also into an intermittent stream that drains into the Black River, and into a ravine, from whence runoff enters a wetland that drains into the Black River. Groundwater flows toward the Black River. The site was used for the disposal of industrial wastes from the 1950s until 1974. The wastes, from several local industries, included organics, inorganics, heavy metals, pesticides, catalysts, sanitary sewage sludges, paint sludges, latex sludges, and small quantities of unknown hazardous wastes. The wastes were frequently burned after dumping; several areas of exposed ash are visible. Closing and capping of the landfills was not completed under EPA supervision or guidelines, the cap is sagging, and a number of drums and other wastes including ash are visible. The landfill is unlined. A landfill gas monitoring system was formally approved by Ohio EPA in early 2006 and was implemented. Sampling results have shown that no landfill gas is migrating through the existing cap.

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USEPA negotiated an Administrative Order by Consent (AOC) with a group of potentially responsible parties (PRPs) to conduct a remedial investigation/feasibility (RI/FS) at the site in 2002. This work was completed in 2005 and a Record of Decision (ROD) outlining the preferred remedial action to clean up the site was signed in September 2006.

Deleted: No study of landfill gas has been conducted. Information regarding this site is taken from the 2002 ATSDR health consultation for the site.

Category of Public Health Hazard: This site was previously categorized as an *Indeterminate Public Health Hazard* (Category 3) because of the lack of current environmental monitoring data and the fact that the available data did not provide a complete picture of the extent of contamination. However, with the completion of the RI/FS and the ROD, this site will be need to be reevaluated to determine its correct category placement.

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Contaminants of Concern in Completed Exposure Pathways:

Based upon the findings of the RI/FS and the risk assessment conducted at the site, the following contaminants of potential concern (COPCs) were identified:

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- For soil and sediment, COPCs are PAHs, PCBs, and metals;

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- For surface water the COPCs are one SVOC (bis[2-ethylhexyl]phthalate) and five metals (aluminum, antimony, arsenic, iron, and thallium);

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- For groundwater, the COPCs are two VOCs (benzene and vinyl chloride), one SVOC (bis[2-ethylhexyl]phthalate), PCBs, and several metals; and

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- For leachate, the COPCs are two VOCs (benzene and chloroform), one SVOC (bis[2-ethylhexyl]phthalate), three pesticides (beta-BHC, dieldrin, and heptachlor), and several metals.

One primary exposure pathway for human receptors is incidental ingestion of and dermal contact with soil at the Site. The exposure to COPCs in soil via the inhalation pathway is not expected to be significant, though, since soil COPCs consist primarily of inorganics, PCBs, and PAHs and the majority of Site soils are covered with vegetation, which mitigates the potential for generation of fugitive dust.

Potential exposure to COPCs in groundwater is not expected to be significant since no active potable water wells are in use within a one-mile radius of the Site. This was confirmed by City of Elyria Water Department records which document that the 10 residences identified in a search of Ohio DNR water well logs had installed wells between the mid-1950s and mid-1960s but they are all currently connected to the public water supply. In addition, the depth to groundwater (2004 data range from 4.5 to 26 feet below ground surface) prevents exposure to COPCs in groundwater via direct contact. Also, several potential seep locations were identified onsite, but exposure to leachate is not expected to be significant due to the limited nature of these seeps coupled with the dense vegetation along the slopes of the landfill.

The portion of the Black River adjacent to the Site may be used for recreational activities such as fishing, wading, and swimming. Therefore, recreational receptors (i.e., children and adults) may be exposed to sediment and surface water within the Black River via the incidental ingestion and dermal contact exposure pathways. However, the intermittent stream adjacent to the Site is relatively small and is only inundated during significant rainfall events, which precludes its use for recreational activities such as fishing, swimming, or wading. Therefore, surface water from the ditch adjacent to the Site is not expected to present significant exposure pathways. Due to the ephemeral nature of the intermittent stream, recreational receptors may be exposed to substrate (i.e., soil/sediment) within the stream channel.

Consumption of contaminated fish from the Black River is a potentially complete exposure pathway. The observations of Site-related PCB concentrations in the sediment at the edge of the river indicate that the fish ingestion exposure pathway is potentially complete. PCBs are known to bioaccumulate in fish, and have been identified as a COPC for sediment.

Demographics A residential area is located directly across Ford Road, west of the site.

Public Health Outcome Data: Not reported.

Conclusions: The Ford Road Industrial Landfill is currently being addressed under the USEPA Superfund Program. It is anticipated that a Consent Decree with the responsible parties will be finalized in 2007 and work to implement the actions outlined in the ROD will begin shortly thereafter. This will address any previous issues raised at the site.

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Deleted: None identified, but few samples had been obtained and analyzed, and the data were from a 1993 investigation, and thus, outdated. Concern was focused on sediments in the Black River and an intermittent tributary leading to the Black River, in which elevated levels of PAHs, including the IJC critical pollutant B(a)P, and elevated levels of the IJC critical pollutants, PCBs and lead, were found, as well as the non-IJC pollutant, arsenic. The data were inadequate, however, to determine whether contaminants are leaching from the landfill into the Black River. Contaminants in surface water did not exceed background, but there was concern that ingestion or contact with surface water and sediments could be a pathway of exposure to contaminants from this site.¶

Deleted: : Not reported, but several residences are located within 1 mile of the site

Deleted: The Ford Road Industrial Landfill site may have contributed and may continue to contribute to the Black River AOC's environmental burden of the IJC critical pollutants PCBs, B(a)P, and lead, as well as other contaminants, but the sampling and monitoring data were inadequate to characterize the extent of contamination at the site, and whether transport into the Black River is occurring. Surface water flows into the Black River, and groundwater flow is expected to be towards the Black River. The landfill is unlined, the cap is not adequate, access to the site is not restricted, and closure was not performed under EPA supervision and guidelines. However, remediation of this site was expected in fiscal year 2006, as reported by EPA (June 2004).

3.5.5.1 Hazardous Waste Sites

Only two hazardous waste sites in Lorain County have ever been categorized by ATSDR in health hazard Categories 1-3. Based on the documents for these sites reviewed in Section 3.1.1, there is no clear evidence that human exposure to site-related IJC critical pollutants is currently occurring at concentrations or doses that exceed health-based screening values. The Republic Steel Quarry Site has been remediated by removal of contaminated soil and exposure is prevented by restriction of access to the site. Contaminants remain in the quarry sediment, but are below the mixing zone. In the past, this site may have contributed to the environmental burden of the IJC critical pollutants B(a)P and lead, and it still may serve as a reservoir of these contaminants.

The Ford Road Industrial Landfill has been investigated adequately, but it has not been remediated yet at this point in time., It is situated on the Black River and surface water and groundwater flow is toward the Black River. This site may have contributed and may continue to contribute to the Black River AOC's environmental burden of the IJC critical pollutants including PCBs. It is planned that the existing contamination will be addressed under a negotiated Consent Decree to implement the clean up alternatives outlined in the ROD. This will prevent any further contamination of the Black River from the Ford Road site.

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Public health outcome data were not available for these sites.

Agricultural and storm water runoff, sedimentation from habitat loss and rapid construction growth, combined sewage overflow (CSO), and failing home sewage treatment systems are non-point sources of water quality degradation and are current issues of concern to the community as reported by EPA (June 2004).

Issues for Follow-Up

Previously for the Ford Road Industrial Landfill - in its 2002 health consultation, ATSDR concluded that up-to-date and more extensive monitoring data are needed to characterize the extent of the contamination and whether contaminants are leaching from the landfill into the Black River. Sampling of fish tissue may be needed. Access to the site should be restricted to protect children from the exposed drums and waste. However, with the current completion of the RI/FS and the ROD and the anticipated start of the clean up of the site, there are no longer any issues to follow upon at this time.