SDMS US EPA REGION V -1

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146319

CARUS CHEMICAL CO.
1500 EIGHTH STREET
LaSalle, ILLINOIS

October 30, 1991
Reconnaissance Visite for
Screening Site Inspection

ILD 005477666
L 0998160003

Arrived at Carus Chemical at 10:04 am.
Weather - Overcast, drizzle ≈ 45°
Bob Casper IEPA Representative
Greg Dunn IEPA Representative
David Covey Carus Chemical
James Miller Carus Chemical
Horst Adolf Carus Chemical

Discussion of boundary lines and plant property.
Explained the purpose for the meeting. To locate areas for possible groundwater, soil, or surface/sediment samples.
Storage Area 1 - Emergency Storage Area last used in 1985. ≈ 3/4 acre. Small emergency containment area is located just southeast of Storage Area 1. Storage Area 1 slopes toward one end to collect any precipitation. This collected precipitation is then sampled and discharged per their NPDES permit.
Storage Area 2 was going to be reworked for a landfill site. Th the reason the two monitor wells were placed near Storage Area 2. The only wells sampled are Monitor Wells 1 and 3, well 2 is dry, wells 4 and 5 are not sampled and a monitor well 6 near well 2 (this is a new well) is also sampled. Two surface water samples are also collected. One sample is colle upstream and one sample is collected downstream in the Little Vermilion River.

The week of November 18 was identified as the Screening Site Inspection. Probably the 20 and 21 of November.
The CERCLA Process was explained, commenting on the initial PA through HRS scoring.
Mr. Horst Adolf explained the history of the site.
In 1915, potassium permanganate was the only compound until 1936. In 1936, the dihydroxibenzene hydroquinone? was
In 1976, ~~map~~ manganese dioxide was produced, with Cesium salts started in 1984. Cesium is used in television tubes biological research to separate different heptites. Cesium was discontinued in 1990. Cerium oxide and manganese oxide used Cerium as a catalyst. Also a copper catalyst is used.
Mr. Adolf asked about the scoring considerations and the reason they were selected for an inspector.
The whole area east of the building we met in was used by a Tire Company nearby as a dumping area for cinders and slag

Meeting Ended at 11:10 a.m.

Conducted site recon with Jim Miller and Dave Covey. First location seen was the Storage Area 1 according to the Map.
Site plant is 12.9 acres and another 5 acres for the rest of the plant.
One of the monitor wells was observed. The well was pvc 2" pipe, cut-off approximately 1 foot from the ground. There was no cap and two rocks were observed in the pipe. The settling pond was observed along with the outfall into the Little Vermilion River. The pond is only about 2 feet d

The three monitor wells near the Storage Area 1 pond were

observed. All wells were locked and had an outer casing. A stainless steel bailer with string was observed next to well 1, lying on the ground. Walking south a purple colored substance was observed flowing near some drums. Another drainage area was observed on the south side of the site, near the southeast entrance to the site. The drainage eventually flows into the lagoon, that is discharged to the Little Vermilion River. The site tour ended at 12:15 pm. Left Carus Chemical at 12:25 pm.

Off-site recon was conducted at 12:25 pm. Directly north of Carus Chemical La Salle Falling Mills Inc. and Zinco Inc. Northwest of Carus is a Program Center (LaSalle Park and Recreation), which includes a park. A residential area exists west, and south of the plant. The Little Verm River is the eastern boundary of the site.

Nov. 20, 1991 – Screening Site Inspection at Carus Chemica

Arrived at Carus at 8:30. Met with Jim Miller, Roger Threadgill and Dave Covey to discuss our objectives. Bob Casper explained how many samples would be taken and where. Samples will split with Jim Miller acting as consultant for Carus. Samples will be sent to Ardle Labs in Mt. Vernon, IL. Carus person inquired about the lab data, reports generated and the Scoring of sites. Meeting ended at 9:A.

Weather: Mostly Cloudy – Temp. 40°F, Wind from NW.

First sample – Monitoring well – GW01 – located on east side of site – (West of "Emergency Storage Site" (Car. On site map indicated as "Retention Pond [Storage Area 1]). Storage Site has not been used by Carus Since

(G101 con't)

Jim Miller unlocked well at approx. 9:20 A.
Greg Dunn & Tim Murphy - sampling well.
2" PVC well with a screw-on cap.
No HNU reading.
Meter reading on well: @ 3.89 m (3.281 to feet) to water top of table
from top of casing 12.8 Ft. to water
7.62 m. to bottom of well, 25' to bottom of well
from top of casing (log states that casing is 3'
Readings: 9:38 A. 10-gallon purge total ac.
57°F to purge graph.
2.51 x 1000 Spec. Cond.
8.9 pH

Water appears to be very silty - graytish-brown
in color.
(Note: Sample bottles belonging to Carus rolled onto
ground).

9:47 A.
After 5 gallons out
56.4 °F.
2.62 x 1000
8.4 pH

Water depleting in well. HNU reading taken again
prior to sampling, & again no reading above background
10:05 A - After 10 gal. purged
56.7°F
2.80 x 1000
8.38 pH

Sample time : 10:15 A
Sample tool : Teflon bailer
Odor :
Color (or Appearance) - "Silty, cloudy, gray" - Greg D

Murphy: Dunn began sampling with EPA bottles firs
then Canus' bottles were sampled in middle of sampling p
Preservatives added to EPA sample bottles.
Photo no. 2 & 3 to north
4 to southeast

Well was left locked-up - padlock by Jim Mille
Coolers packed & sealed by G. Dunn & B. Ca

Sample point ~~G~~103 - No HNU reading at 10:43A.
4.41 meters = 14.47 ft. to water.
7.15m total depth = 23.46 feet
2.74m - 8.99 ft. of water in well
- Padlock opened by Jim Miller of 10:42 A., well-sc
cap.
- Well const - 2" PVC
Well bailed by Jim Murphy
Water : reddish-brown, silty
Water readings:
57.1°F
2.86 x 1000 Spec. cond.
7.86 pH

After 4 gallons -
57°F
2.88 x 1000 Spec. cond.
7.97 pH

Before sampling; after 7.5
57.2°F
2.91 x 1000 spec. cond.
7.88 pH

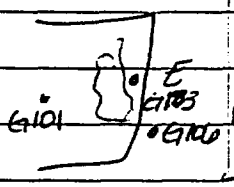
G103-con't

After 7.5 gal.-water remains the same appear. as it did in the beginning-Reddish-brown, silty
-Sampled by: Tim Murphy & Greg Dunn
-Time: 11:25 A. Volatiles filled first-the same as the first sample.
-HNU-0 above background.

Photo: 5 to south
4 to NNW

Cyanide bottle needed to be re-filled-orig. bottle punct. by knife when obtaining preservative, Floater cooler opened.

Well closed (re-capped) and padlocked by Tim Murphy & checked by Tim Miller-at 11:30 A.



Mon. well G103 located along eastern boundary of site-along (within) fenceline.

Mon. well G100-arrived-11:40 A-Located outside fenced area to east of fence, SE of G103.
After 1 gal. out -11:45 A.
57.1°F
3.77x1000 S.C.
7.46 pH

Tot. depth 9.74 m x3.281 = 32.02 ft.
T.O.C. 7.59 m to water (from T.O.C.) = 24.9 ft.
-Well bailed by Greg Dunn using teflon bailer.
Appearance: brown-silty

ppearance
silty

same

ounctured
ater

Tim
A.

ry

t out
G103.

bailer.

After 3.5 gal - 11:56 A
57.4°F
3.88 x 1000 S.C.
6.95 pH

Photos: 7 - tow
SE
8 - towa
NW

After 6.25 gal. purged - 12:05 P.
57.4°F
3.88 x 1000 S.C.
6.82 pH

Samplers: Tim Murphy; Greg Dunn
HNU reading: 0 units over background
Sample Time: 12:07 - actual
Appearance: brownish-gray, silty

12:22 P - Well recapped & locked by Greg Dunn
Left Carus Property at 12:25 P.
Arrived at the La Salle Electrical Utilities NP
Site at 1:50 P. in order to obtain a backgrou
Groundwater sample. We were met by Paul
Mason, who explained that they had alread
IEPA purged (~~[illegible]~~ developed) the wells.

Sample point - G112., We will be using the ba
that they have already used to dedicate the w
La Salle NR
12 gallons purged since yesterday, 6 gal. today.

Well unlocked by Paul Mason - well stainless steel - 2

Temp: 57.5°F
Cond: 1.0 x 1000
pH: 7.9

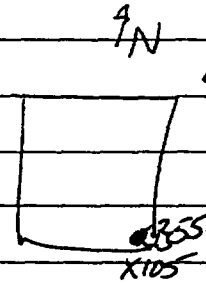
Samplers: Paul Mason, Greg Dunn & Tim Murphy.
Appearance: Clear; little silty at bottom.

Rich Lange, IEPA met up with us at 2:12.

As sampling continued, water got siltier.

Sampling ended at 2:27 P. Well capped & locked by Paul Mason.

Photo #9 - towards NE
#10 - towards South.



- Arrived back at Carus at 2:55 P. We began preparations for sample point X105.
- Sample time - 3:05 P.
- Samplers - G. Dunn & T. Murphy
- HNU - 0 units above background.
- Appearance - Black, moist clay - 1 greenish-yellow) - 4 inches below surface.

Measurements - 55' 6" North of SE fence post. Taken along fence between railroad ties.
Sample depth - 0-8".
Photo 11 - ESE
12 - N

X102
Sample time - 3:30P
Samplers - G. Dunn; T. Murphy
Sample Appearance - Black; moist (MnO_2) "Special Waste - Non-Hazardous," w/ rocks mixed in; Sludge-like in consistency.
37'3" N of old unused acid tank.

Photo #1 - toward south - note unused acid tank (background)
#2 - toward north

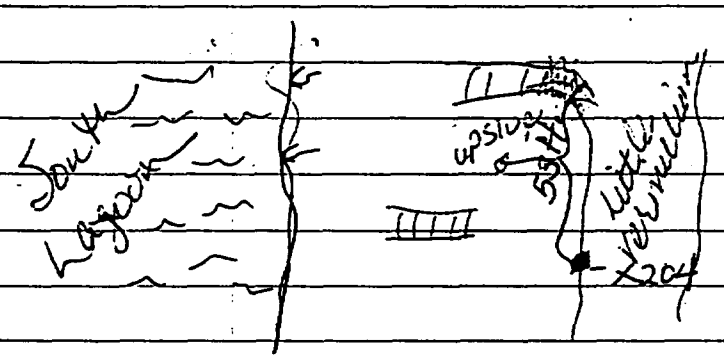
X207 3:50P T. Murphy; G. Dunn
Sediment sample taken from "Storage Area #1 (Emerg
Appearance: Wet; ~~dk.~~ Medium gray, organic matter prese
Depth - 3", 45'8" west of cyclone fence 22'6" north of monitoring station along fence.
Photo #3 - toward North
#4 - toward southeast
Left Carus Chemical with Jim Miller at - 4:05P.

X101 - 4:20P. Taken at Dagler Park.
Samplers: T. Murphy; G. Dunn
Appearance: ~~Black~~ Dk. Brown, Loamy, dk. brown
Depth: 0-4"

Photo #6 - toward SW
#7 - toward east
#8 - toward south - pool in background
Meas; 123' north of fence surrounding swimming pools
Left Park at 4:30P, heading for Fed Ex.

11/12/91 - Weather - Sunny. Temp: 30°F Breeze from: e
8:15A Arrived back at Carus Chemical.
8:31 - Arrived on banks of the Vermillion River, for
Sample X204.
Sample time - 9:00 A
Samplers: G. Dunn & T. Murphy
Appearance: brown, coarse-grained
Photo #10 - toward north -
#11 - toward north - note outfall in bkg
#12 - toward east -

Meas. - 53 ft. South of outfall, along bank.
1 - 1½' water (deep)
1 - 2' off bank.
There is an "Emergency outfall pipe upslope: 1
South from sample pt. See diagram below:

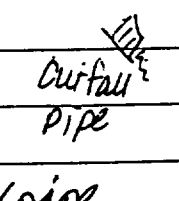


X205
Sample time 9:30A
Samplers: T. Murphy & G. Dunn
Sample taken from east bank of the South lagoon
Appearance: grayish brown & yellow, Fine gra
Measurements: From middle of handle on intake
Photos: #1 - to the south - note intake in bkgd. 9' north
#2 - to north

As sample was being taken, an oily sheen emerged from the sediment at the point of the sample, and floated on the surface. There was a slight odor to the sample.

X206 Sediment sample
Time: 9:55A, Sample taken at northern end of South lagoon; at end of delta. Water depth - 1-2 deep. Samplers: G. Dunn: T. Murphy
Appearance: 1-2" of sandy material: under that a dark colored clay. Dk. brown; fine grained with sandy material fine to medium. Slight odor - earthy. Some organic matter present. As sample was taken an oily sheen appeared ~~with~~ on the surface from (originating) the sample point. Depth of sample - 0
Photo: #3 to the South at end of delta.
#4 to the east
#5 to the south - showing delta
#6 to the South showing delta.
Wetland area to the west of sample point

X203 - 10:20A. Sediment Sample
Samplers: Tim Murphy & Greg Dunn
Sample taken along bank of Little Vermillion (west side
Sample appearance: sandy - dk. brown with slag. Organic matter present, no unusual odor. There is an outfall pipe located upslope to the north of sample point.
Photo #7 - to the north
#8 - to the south



Measurement: 55'6" South of outfall pipe

103 KN
~~X203~~ - 11:00 A Soil
Samplers: T. Murphy & G. Dunn
Appearance: yellow, green, brown, red - KN gray in color, coa grained.
Sample depth - 0-6"
- Taken in slag area - NE of Carus plant, south of fence.

Measurement - 76' 6" south of fence.
56' east from post where fence goes downhill.
- Photoboard shows sample pt. X203 actually is X103.
Photos: #9 - toward KN north } fence in background
#10 - toward north }
#11 - toward south - Cement Company building in photo background.
Cooler sealed at 11:15 A.

~~X2~~ KN ~~X2~~ KN Soil Sample
X104 - Samplers: T. Murphy & G. Dunn
Sample time - 11:25 A.
Sample taken along river bank, to the NE of Carus & Downslope from property fence - 150'5" from fence post to river. Sample - 55'5" from sample river
Meas - 95' downslope & east of fenceline.

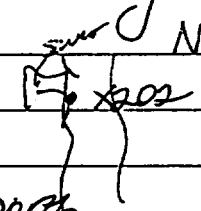
Appearance: Coarse-grained & dk. brown with color mix

Photo: #12 - toward West

14 drums (55 gal) found at flood level, appeared to cont. rusted out, some partially buried. slag materic

M:H Zinc
Mattheson & Hegeler-Zinc - 3-12 photos - Early to mid 7 bankruptcies, Zinc-O & La Salle Rolling Mills - tried to set up operations after M:H.

Photos 1 & 2 - Outflow from sewer - algae substance?
X202 - 12:20 P Sediment
Samplers: T. Murphy & G. Dunn
Sample Appearance: Thin layer of red & then a thick, dark clay.
Sample taken at concrete sewer outfall along Little Vermillion River.
Sample depth - 4 inch into sediment.
Water depth - 1 ft.
Photo #3 - towards south, #4 - towards north



X201 KN. ~~X208~~ - Sediment, 12:36 P
Samplers: G. Dunn & T. Murphy
Sample taken along bank of Little Vermillion River at p where stream (outflowing from sewer) enters river.
Sample appearance - dk brown, silty
Water depth: 3"
Sample depth: 7" below sediment (top).

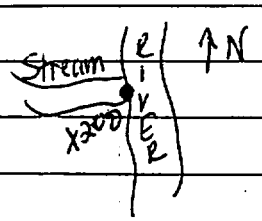


Photo #5 - NE (toward the)
#6 - NE (toward the)
#7 - ~~NE~~ KN S (toward the)

X208 - background - 12:55 P
Medium-grained sand - brown - Appearance
Sampler - G. Dunn
Sample taken along east bank of Little Vermilion River
Sample Depth:
Water Depth:

*Volatile jar cracked while transporting bottles to sample point.

Photo #8 - ENE
#9 - towards NE.

Left Carus Chemical Co. at approximately: 1:45

- Carus Chemical rep Jim Miller split all samples with us.
- All photos except sample point X104 (T. Murphy) were taken by Kim Nikh.