

# ATSDR Record of Activity

UID #:        Date: 06 / 28 / 2005 Time: 8:35 am ☒ pm

Site Name: Chesapeake Products Site City: Chesapeake Cnty: Chesapeake State: VA

CERCLIS #:            Cost Recovery #: 3#VA Region: III

Site Status (1) ☐ NPL ☒ Non-NPL ☐ RCRA ☐ Non-Site specific ☐ Federal  
 (2) ☐ Emergency Response ☐ Removal ☒ Other

## Activities

☐ Incoming Call ☐ Public Meeting ☐ Health Consult ☐ Site Visit  
☐ Outgoing Call ☐ Other Meeting ☐ Health Referral ☐ Info Provided  
☐ Conference Call ☐ Data Review ☒ Written Response ☐ Training  
☐ Incoming Mail ☐ Other

Requestor and Affiliation: (1) Nicolas Brescia (EPA-OSC) Phone: 215-814-3253

Address: 1650 Arch Street City: Philadelphia State: PA Zip Code: 19103

Contacts and Affiliation: (31) Karl V. Markiewicz

1-EPA	2-USCG	3-OTHER FED	4-STATE ENV	5-STATE HLT
6-COUNTY HLTH	7-CITY HLTH	8-HOSPITAL	9-LAW ENFORCE	10-FIRE DEPT
11-POISON CTR	12-PRIV CITZ	13-OTHER	14-UNKNOWN	15-DOD
16-DOE	17-NOAA	18-OTHR STATE	19-OTHR COUNTY	20-OTHR CITY
21-INTL	22-CITZ GROUP	23-ELECT. OFF	24-PRIV. CO	25-NEWS MEDIA
26-ARMY	27-NAVY	28-AIR FORCE	29-DEF LOG AGCY	30-NRC
31-ATSDR				

## Program Areas

☐ Health Assessment ☐ Health Studies ☐ Tox Info-profile ☐ Worker Hlth  
☐ Petition Assessment ☐ Health Surveillnc ☐ Tox Info-Nonprofil ☐ Admin  
☐ Emergency Response ☐ Disease Registry ☐ Subst-Spec Resch ☐ Other  
☐ Health Consultation ☐ Exposr Registry ☐ Health Education

Narrative Summary: The EPA Region 3 asked ATSDR-R3 to determine the potential public health significance of metals found in soil and waste pile samples from the Chesapeake Products Site, Chesapeake, VA. The future use of the site is unknown at this time but it will most likely remain industrial or commercial/industrial in the foreseeable future given the surrounding land use. In April 2005, ten soil and twenty waste pile samples were collected from the site to determine to need for additional CERCLA action (e.g. assessment, removal, or remedial). The 7.6 acre site is located at 100 Ohio Street, Chesapeake City, VA, in an industrial area adjacent to the south branch of the Elizabeth River. It was used to receive, blend, bag, and ship fertilizer from 1876 to 2000. The site is currently inactive but will most likely be re-occupied. In 2003, sampling results indicated the presence of petroleum hydrocarbons and inorganic compounds in surface soil above screening levels. Concentrations of lead were reported to be above 1,000 parts per million (PPM) in six of 13 surface soil samples.

The area of investigation consists of the former sulfuric acid aboveground storage tank (AST) area and several structures used for blending and storing fertilizer, fertilizer mixtures, and raw materials. Two 30,000-gallon sulfuric acid tanks were removed in 2002 with the tank farm area remaining. The storage structures house fertilizer materials, either loose or in large wooden storage bins. The piles (2 to 20 cubic yards) appear to be comprised of soil, micronutrient solids, and fertilizer mixtures.

Eight surface soil samples were collected adjacent to the former sulfuric acid storage tank area while two were collected as on-site background samples. Additionally, solid material from 20 on-site waste piles was collected.

**Table 1: Concentration Ranges for On-site Surface Soil and Waste Pile Sampling Results**

Compound	Background Range (ppm)	AST Range (ppm)	Waste Pile Range (ppm)	Industrial Screening Value (ppm)
Arsenic	30-32	40-746	16-61	1.9
Barium	157-643	95-121	3-440	72,000
Cadmium	4-19	5-17	0.05-54	510
Chromium	9-342	27-52	0.76-376	3,100 <sub>CrVI</sub>
Lead	532-644	1,200-7,970	24-2,510	1,000
Mercury	0.12-7	0.33-0.4	0.06-2.3	310
Selenium	2.5-18	1.7	1.2-111	5,100

The results in Table 1 indicate that arsenic and lead are above their respective screening values. ATSDR has determined that the lead and arsenic levels found at the Chesapeake Products Site represents the potential to impact health of future occupants and/or routine workers at the site.

Action Required/Conclusions/Recommendations/Info Provided:

Based on surface soil and waste pile sample results from the Chesapeake Products Site, ATSDR supports exposure mitigating actions (e.g. removal) at the Chesapeake Products Site. However, if the site is ever developed for residential use then ATSDR recommends a re-evaluation of environmental conditions and exposure pathways.

ATSDR also recommends that further sampling be conducted to fully delineate the nature and extent of contamination if the site is re-occupied.

ATSDR's conclusions and recommendations are based upon the available information. If additional or new information becomes available, ATSDR is available to review the information and provide a determination as to the public health significance.

Signature:  Date: July 29, 2005

cc: