

Health Committee Meeting: August 12, 2004

Overview:

ATSDR (funded out of Superfund). They are not part of EPA, but part of CDC. Another agency (NIEHS) which is also paid by Superfund. These agencies receive close to \$80 million / year (about 2/3 of \$ going towards cleanups). ATSDR is coming Sept. 15 to do a "health consultation."

Purpose of this meeting:

What kinds of things do we, as a CAG want to have ready to discuss with ATSDR? What do we want from them? What questions do we have/should we have for them? Ed passed out a handout describing the jobs ATSDR does. We want consultation that produces advice on how to respond to health problems in the community and ways to reduce or prevent health problems/effects.

Background – What We Know About Health in This Area:

ATSDR did two studies (1988 and 1993) that were somewhat critical of the status quo for the site – mentioned that the VCC site posed potential human health risk. Also, there have been studies that show cancer death rates for St. Louis exceed Michigan in 8/10 years in 1980s. Also, there was a study that showed increased numbers of thyroid disease (not related to diabetes) for this area. Also, Breckenridge Cancer Cluster study done in the 1970s showed environmental cause of high numbers of non-hodgkins lymphoma – but nothing specific was found as the initial cause. There is also a lot of health information related to toxicology and DDT/DDD/DDE as seen in an ATSDR report – September, 1975. Also, Dupont did a study of PBB toxicity and from that decided not to produce it (1972) – these are the two main contaminants in the Pine River and on the VCC site proper. Surveys done around the area show that people who fish eat the fish and some eat them on a regular basis. Alma Schools information shows that we have a high rate of special education needs (emotionally impaired) - above expected rate for people who live around the refinery. Michigan cohort PBB exposure study has lots of data on workers and farmers. Bottom line: There are indicators that point to a possible environmental health concern for this region.

What Do We Want To Do? - Comments

Look at what chemicals were produced and their manifestation in health problems and try to relate them to what we see in the area.

There are old dumps and burial sites that Velsicol was responsible for dumping in – ie. Olive Road site in Bethany Township.

*Maybe we need to get names of people who have lived around here and perhaps worked for Velsicol that have information that would be helpful.

Fred Brown suggests ATSDR meet with Technical Advisory Committee. Here are his comments:

- *Body burden of toxic substances. CDC publishes a list of chemicals and their occurrence in different ethnic groups, age groups, etc...*

2nd national report of human exposure to environmental chemicals (2003) CDC publication. *We are alert to the problem of body burden. You cannot talk about only one chemical – Body burden must be considered when anyone analyzes health risk assessment. When evaluating incremental bio-uptake, and the risk associated with that bio-uptake, consideration must be given to person's body burden. DDT doesn't act all by itself, but in the presence of these other chemicals.*

If you look at body burden of persistent chemicals – you must think of the next step – maternal body burden impacts fetus and nursing infant. What are those impacts – many of these chemicals are trans-placental through the cord blood. Proof is there, these chemicals impact fetus...though we aren't always sure how. Nursing infant – lipid soluble chemicals expressed as lipid content (picogram/gram....etc...) these are used interchangeably. Make a chart. Have these ATSDR people explain it this way.

*Body burdens must be considered collectively – not as individual materials. They act together. This has been proven scientifically. Many of these materials will cause a change of reaction of another material...sometimes more hazardous, sometimes less hazardous. How has DDT/DDE been studied in reference to this? Ie. Poly-bromated diphenyl ether has increased in breast milk exponentially – doubling every 5 years. Poly-bromated diphenyl ether (PBDE) is in pesticides. **Local group should force ATSDR to look at the body burden – additive potential of known local contaminants and explain it to the community.***

Body burden calculations should include not just blood serum, but adipose (fatty) tissue. You need this for the total.

What is the occurrence of miscarriages (especially 1st baby miscarriages) for women in this area? We know DDT/DDE cause endocrin disruption and fetal impact.

There is a collection of news stories in St. Louis Historical Museum. Some data on how many employees were in the service. Could you use this to track down health information?

ATSDR will only study Velsicol's contribution so we need a way to make sure we hook the Velsicol impact / interaction with body burden.

PAHs react much as dioxins do – See Giesy research.

There are people who have health problems that are still alive.

Gene Kenaga has a copy of resources based on all of what we have been talking about – approach him about this.

Also, what about spouses of workers? Asbestos spouses died of asbestosis when they washed their husband's. Also, what about people who consumed PBB contaminated meat and/or milk. Pancreatic cancer...is this a result of PBB?

What will be the community comprised of – that ATSDR is looking at? Maybe we can ask to work with them and help point out those people in the community that we feel they should work with.

ATSDR study on dioxin in Tittabwassee River (1997) says that these studies may not be applicable to all exposures...this must consider body burden...more research needs to be done on fetal impact.

We need to gather as much of the historical data on health in this area that we can and provide it to ATSDR...then we can have a better position to force them to move beyond what we already know. These include:

PBB study with cohorts
Former ATSDR studies
Breckenridge study