

**Notes from Washtenaw County and City of Ann Arbor EPA Superfund Discussion  
Gelman/Pall/Danaher 1, 4 Dioxane Plume  
July 25, 2016**

**Attendees**

Chicago: Evan Pratt, Ellen Rabinowitz, Joan Tanaka (EPA), Nuria Muniz (EPA), Denise Boone (EPA), Erica Aultz (EPA)

Jackson: Dan Hamel (DEQ), Mitch Adelman (DEQ), Kevin Lund (DEQ)

City of Ann Arbor: Matt Naud, Chuck Warpehoski (City Council)

Zeeb Rd: Jenni Conn, Kristen Schweighoefer, Russ O'Brien, Dan Bicknell (CARD), Roger Rayle (CARD), Mike Moran (Ann Arbor Township), Kent Martinez-Kratz (County Commissioner), Kirk Profit (GCSI)

Other Locations: Greg Dill, Kim Klein (GCSI), Zachary Hayward (Debbie Dingell's Office)

**Notes**

Introductions

The attorneys (Curt Hedger, Bob Davis, and Abigail Elias) were asked to leave the call and did not participate because the EPA did not have their own attorneys on the call.

**Background:**

Evan Pratt provided brief background information. The MDEQ has been overseeing the cleanup since the mid-1980s. The cleanup effort has been tied up in a consent judgment with an adversarial responsible party. By and large the local desire is to see the cleanup move along a lot faster than the current pace.

**Amount of Contaminant**

A map was shared that included numbers for the estimated total amount of dioxane in the ground (850,000 lbs) and the amount that has been removed. Joan Tanaka asked how the estimated contaminant mass left in the ground was determined. where the numbers came from for what is left in the ground. Roger Rayle responded that the numbers came from the responsible party. 850,000 lbs is what the company representative claimed they used for 20 years at the facility. A substantial amount more material was used than has been removed to date. Mitch Adelman said the DEQ does not have anything official as to the amount originally lost to the environment or how much is remaining. Dan Bicknell said there is not a groundwater model for the site. Roger Rayle said they have never calculated the amount in the "Deep E" plume.

**Modeling of Site**

There was some general discussion on modeling of the site. Historically there have been 2 models developed. Some were publically available due to negotiations with court. Some recent modeling was done by Dr. Lemke at Wayne State University. It is the DEQ's position that modeling is a good predictive tool but physical data is needed to support the projections to validate the modeling. Mitch Adelman said more wells have been put in over time, and with that better definition is available. Dan Bicknell noted that there are only 3 wells on the property for treatment.

Evan Pratt asked if the EPA would model groundwater for something as extensive as this. Joan Tanaka replied that it is not possible for her to say if they would need a model or not because EPA is not familiar enough with the site details. The EPA determines what contamination is there and how to clean it up to meet the remedial action objectives.

#### Time Line

EPA reported that it takes between 3 and 4 years to list a site on the National Priorities List. A remedial investigation feasibility study takes on average about 5 years to complete; however timeframes are widely variable depending on site conditions, and can be much longer. After the nature and extent of contamination is defined the feasibility study evaluates cleanup alternatives and then a remedy is selected. The EPA's goal would be to restore to the groundwater to drinking water standards in cases where the aquifer is a potential or actual drinking water source. It is possible to waive the requirement to restore a drinking water aquifer to drinking water standards if doing so is found "technically impracticable". A "technically impracticable" finding is very uncommon. Typical groundwater treatment options include pump and treat, barrier walls, injection type treatment. It is often appropriate to remediate and cleaning the contaminated soil to cut off sourcing of contamination to the ground water. The EPA works to ensure no one is exposed to hazardous substances, which can include by hooking up to municipal water. A clean up that requires restoration of groundwater to drinking water standards like this takes tens and tens of years. 1, 4-dioxane is an emerging contaminant and the EPA does not have much experience cleaning up a plume like this.

Dan Bicknell asked about the 12 month report on the review of timeframe for addressing the preliminary assessment petitions. Joan Tanaka replied that EPA is required to a response either complete a preliminary assessment report or respond to a preliminary assessment petition would be received within 12 months. This is the 1<sup>st</sup> step to be added to the National Priorities List (NPL). The evaluation process uses a scoring system. 28.5 is the magic number. Timeline: Discovery → Historical Review → Sampling → Sampling → NPL. Existing data may can be used and may be helpful, but it has to be of sufficient quality. Validated. Valid existing data of sufficient quality could shorten the process. As a site moves through the process for NPL listing evaluation it can be determined to not qualify for the NPL at any step in the process.

#### Superfund Site Eligibility

Joan Tanaka stated that the Superfund program is a safety net program when other environmental programs don't work. If there is another environmental action that is working, the site would not typically be eligible for Superfund. Superfund is for legacy and "orphan" sites where there are no other environmental actions program to get the responsible parties to do the work, or there are no responsible parties to do the work. Two huge factors in the NPL listing process are that the site has to meet technical qualifications (a 28.5 score in the EPA's assessment rubric) and EPA HQ has determined it is appropriate for NPL listing. Things considered include has to be eligible for the program because no other environmental program nothing else is around to clean up the site and the state agency supports NPL listing.

Locally, the feeling is that court rulings have been unfriendly to the cleanup and restoration of the aquifer.

Joan did state that there have been cases for sites that qualify for the NPL, when the responsible party, the existing regulatory agency and the EPA have ~~all met and all~~ agreed that the site should be a Superfund site, and that existing regulatory efforts should discontinue. In those cases, the site has moved forward with the Superfund program.

#### Restoration of Ground Water Aquifer

Mitch Adelman said that currently there is no restoration component to the consent judgment. He discussed the Evergreen portion that was to be restored within 5 years of July 2005. In December of 2004, the state and the company needed to work together to define the limits of the prohibition zone. There was a 2011 modification to the consent judgment that set up a non-expansion objective for the western portion of the site and included the Evergreen portion in the prohibition zone. Evan Pratt said that state laws do not require a responsible party to cleanup to a tighter level if standards change. The consent judgment would have to be amended if the state standard drops to 7.2 ppb.

Ellen Rabinowitz asked EPA whether they would use their standards or the state standards in the clean-up objective. Joan Tanaka replied that the EPA would likely restore the site to safe drinking water standards. It was discussed that dioxane is not part of the drinking water criteria and does not have a drinking water standard. EPA clarified that they would evaluate the contaminant and look at cleanup numbers ~~a standard that was within the three orders of magnitude of their acceptable risk range unless there's a promulgated state number.~~ ~~XXXXX~~ said that, currently 85 ppb is the Michigan 1,4 dioxane cleanup number and likely to go to 7.2 ppb. A clarifying question was asked if EPA used the current 85 ppb for sites in Michigan. EPA staff replied that they believed that to be the case.

**Commented [JT1]:** EPA does not recall stating the Michigan dioxane standards. Someone should be identified as providing this information.

Evan Pratt shared a short list of key expectations of local interest. They are transparency, best science, contingency planning and communications plan. EPA responded to each one and the highlights are listed below.

#### Transparency:

Is it typical for requests to require data to be publically available?

~~Joan Tanaka said yes.~~ The Superfund statute requires the EPA to interact with the public. There are community interviews to determine how to best interact with the public at a given site and a lot of community outreach if the community is interested in a lot of community outreach. Anything the EPA actually uses to make decisions is available to the public. Preliminary data and draft workplans are not available to the public. The EPA makes every effort to ~~supply robust~~ provide communication that serves a particular community interests. Data used in decision-making is available to the public.

A technical assistance grant is available for qualifying communities for sites listed on the NPL. This gives communities money to hire somebody to help them understand technically what is going on. The technical assistance grant (TAG) is \$50,000 and can be

renewed if determined appropriate. Grants are awarded to a group that represents the community at large. There are lots of requirements in qualifying for a TAG.

EPA will develop fact sheets and give information updates to the community as appropriate for the community interests.

#### Best Science:

Will EPA require Method 522 for laboratory analysis of 1,4-dioxane?

EPA did not have lab staff available to answer specifically. They did note that EPA has a robust quality assurance program for data collection and analysis. uses best science to collect data and 1, 4-dioxane data analysis is not a routine analysis very tricky.

Will the EPA allow the responsible party to be in the lead on the testing program?

Joan Tanaka replied that the EPA expects the responsible party to do the investigation and cleanup and pay for all of the personnel and contractor resources. EPA may do split sampling. They have a rigorous quality assurance program regarding the quality of the data.

#### Contingency Plan

Is there a requirement for a contingency plan?

Joan Tanaka asked if Evan meant a contingency plan to hook up more people to municipal water. Evan replied no, we do not want to hook up more people. He said we want a contingency plan that says if the 1, 4-dioxane is at a certain level in the buffer zone, more water needs to be extracted. The solution in the past has been to hook up more people to municipal water rather than speed up the pace of the cleanup. At this time, EPA cannot answer the question of whether a contingency plan would be required. Joan said the goal is to cut off exposure and make sure people are protected. If the cleanup plan is not being met, further discussion is done to fix the plan. She is not comfortable saying that if these things don't work, then there is a contingency plan. The goal in decision making is to set forth a plan that will work.

Goal → Remedy → Review

#### Communications

Will there be a written agreement on communication?

EPA does not develop written agreements with communities on communication at NPL sites. is not promising a written agreement on communication. They EPA conducts do site specific community outreach and typically develops a site specific community involvement plan at each NPL site. There is and have a technical assistance grant program. Joan stated that EPA makes every effort to communicate to meet community needs, but can't guarantee the community will be satisfied with EPA's efforts. it might not meet community expectations.

Are there some common misconceptions during these preliminary conversations?

Joan Tanaka said that they usually do not have this kind of robust discussion at this point. The fact that this site is already being cleaned up under a judicial enforcement agreement by the MDEQ doesn't make a good fit for the Superfund program. In order for a site to be proposed to

the NPL for listing, ~~eligible for NPL listing.~~ The EPA expects a letter from the Governor's office saying they support listing on the NPL. Without that letter, they are unlikely to list. It is required that if EPA needs to use taxpayer money for cleanup, the state has to ~~provide -commit~~ 10% of the ~~cleanup~~ costs.

**Commented [MN2]:** The site may be eligible for listing, but the State may decide to work on it.

The federal register process is not a regional office process. ~~The Much~~ work ~~to develop the NPL listing package~~ is done in Chicago Region 5 but the final determination on NPL listing is made in Washington DC. The public comment period on ~~NPL the proposals~~ is 60 days.

Rep. Dingell's office commented that they are looking over the proposal and waiting on more input from the townships, city, and county. They are currently monitoring.

Will someone from Region 5 be able to come to Ann Arbor and discuss this topic in a public forum/setting in the next 2-3 months?

Yes.

Will EPA require the responsible party to submit historical data and share the database for analysis?

EPA stated that ~~when sites are listed on the NPL they would make available to the public -share~~ any data that was used for decision making.

#### Superfund Stigma

Evan Pratt asked Matt Naud if there have been specific conversation with the University of Michigan as to whether ~~S~~superfund would be a benefit or concern. Matt replied that he has not had any direct official conversations with UofM.

Property value was mentioned. What is the impact on property values with a ~~S~~superfund site designation? It is a concern for some elected officials.

Roger Rayle commented that the stigma of the ever expanding prohibition zones is more troublesome than the stigma of being an EPA site. We want no more contaminated water supplies. He mentioned there might be a problem with the appointed head of the DEQ being a BP lawyer. The other problem is the data. We need good data to have good modeling. Can the EPA require the responsible party to share the historical and ongoing sampling and well log data? Joan Tanaka said ~~for NPL sites~~ the EPA has to ~~make available to the public -share~~ all data used to make decisions ~~with the public~~. Mitch Adelman pointed out the distinction between data and database. He said the results are being shared but not in a format Roger feels is usable.

Joan Tanaka said that if a site is a ~~S~~superfund ~~NPL~~ site it is ineligible for brownfields redevelopment grants.

#### Timeline

EPA is required to complete a ~~The~~ preliminary assessment (PA) or respond within 12 months ~~would take 1 year after receipt of a PA petition.~~

After a PA, additional evaluation review would occur to decide if it appears the site may qualify for EPA would recommend the site for listing. That evaluation review takes approximately 3-4 additional years. With existing data, that process may be shorted to 2-3 years. There is no guarantee that the site would qualify for listing after this process is complete.

After NPL listing, an EPA employee is assigned to body would need to be created to manage the site. EPA would enter into negotiations with the responsible party to perform the investigation and if negotiations are successful, an administrative agreement for the Potentially Responsible Parties to conduct the RIFS would be signed. need to be created. The negotiations typically take 1 year, and, on average, it takes on average approximately 5 years to complete an RIFS, reach an administrative agreement, but that timeline is widely variable depending on site specific conditions.

EPA noted that 10 years is a fair estimate for how long it would take to initiate a cleanup at the Pall Gelman site once evaluation for NPL listing was initiated, and the site was listed on the NPL timeline. Dan Bicknell asked if work would begin after 5 years. EPA said yes. EPA stated that the Superfund remedial process is they are not quick but they are thorough.

#### Lead Site versus Fund Site

Dan Bicknell asked about the difference between a lead site and fund site. Joan Tanaka said a the Potentially Responsible Party lead site has a responsible party that pays for everything and does the cleanup. If there is no responsible party, an EPA contractor is hired to do the work. XXX said We that EPA said (that based on what people familiar with the site were saying) there seems to be a have a viable Ppotentially Rresponsible Pparty in our situation.

#### Consent Judgment

Kirk Profit asked how the court and consent judgment figures into this situation. Joan Tanaka said that this is part of the problem in going for Superfund for this site because there is already an enforcement program in place. In that sense, it is not a good fit for the Superfund program. States have come to EPA and said they have an enforcement agreement with responsible parties but neither party wants to work under the agreement. If EPA, the responsible party and the state all agree sign off, EPA could take over the enforcement lead if the site qualifies for the NPL. This has happened in the past. More discussion with lawyers is needed.

#### Site Optimization Program

Matt Naud asked Joan Tanaka if there are any examples where the EPA has come in and done something like the site optimization program and brought in outside technical expertise. Joan said that she is not familiar with EPA having they done that would not do that for if the sites is not on the NPL.

#### Wrap Up Questions

When in the process is the determination made about if the site is eligible due to already having an existing enforcement mechanism? The site eligibility is determined early. If the preliminary assessment indicates another regulatory program is looking at the site, it could be ineligible. Superfund is to cleanup releases of hazardous substances and waste that have no other way of getting cleaned up.

Mitch Adelman asked if the EPA has the authority to require responsible parties to share their databases or just the data itself. Joan Tanaka replied that at NPL sites the EPA prescribes the format that the data must be given in.

Dan Bicknell asked what the role of DEQ would be if the site was Superfund. EPA is required to consult with DEQ throughout the process. They have the opportunity to comment on all draft documents.

The consent judgment might complicate the situation. The site might be ineligible. The state agreement needs to be resolved before going on the NPL.

Roger Rayle asked if the EPA has encountered the situation where the responsible party went bankrupt. Joan Tanaka responded that it is a common occurrence there are many instances of Potentially Responsible Parties at Superfund NPL sites having gone bankrupt. In most cases there are other Potentially Responsible Parties who remain available to conduct necessary work. On rare occasions PRP-lead sites have needed to transition to EPA-lead because no viable Potentially Responsible Parties remain.

Does the community group have the opportunity to review documents? It is not unheard of but probably not on the draft documents. There could be interim deliverables. When there is a proposed remedy for cleanup, it is required by law to have public comment.