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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO CLEAN CONSTRUCTION OR DEMOLITION DEBRIS (CCDD) FILL OPERATIONS: PROPOSED AMENDMENTS TO 35 Ill. Adm. Code 1100	)	R 2012-009(B) (Rulemaking Land)

TRANSCRIPT FROM THE PROCEEDINGS taken before HEARING OFFICER MARIE TIPSORD, by LISA K. HAHN, CSR, RMR, a notary public within and for the County of Macon and State of Illinois, at the Illinois Environmental Protection Agency, Sangamo Room, 1021 North Grand Avenue East (North Entrance), Springfield, Illinois, on the 20th day of May, 2013, A.D., at 10:30 a.m.

APPEARANCES:

ILLINOIS POLLUTION CONTROL BOARD
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, IL 60601
312-814-4925
marie.tipsord@illinois.gov
BY: MS. MARIE TIPSORD, HEARING OFFICER TIPSORD

ILLINOIS POLLUTION CONTROL BOARD MEMBERS PRESENT

Ms. Alisa Liu
Mr. Anand Rao
Ms. Deanna Glosser
Mr. Jerome O'Leary
Ms. Sara Shannon, for Thomas Holbrook

I N D E X

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HEARING OFFICER TIPSORD: I think we're ready to start.

Good morning, everyone. My name is Marie Tipsord, and I've been appointed by the Board to serve as Hearing Officer in this proceeding entitled: Proposed Amendments to Clean Construction or Demolition Debris Fill Operations (CCDD): Proposed Amendments to 35 Ill. Adm. Code 1100, R12-9, Subdocket B.

With me today to my immediate left is Board Member Deanna Glosser, the Presiding Board Member, and to my immediate right, Board Member Jerry O'Leary. To my far left on the end is Alisa Liu, and next to her is Anand Rao from our technical unit.

Also with us today to my far right is Sara Shannon. She's here representing Chairman Tom Holbrook, who is unable to be here today, so he sent Sarah to take notes and listen in.

On August 23rd, 2013, the Board adopted Amendments to the CCDD rules and opened Subdocket B as a recommendation of the Joint Committee on Administrative Rules. JCAR recommended that the Board give further consideration to whether groundwater monitoring should be required for these facilities.

This would give the Board the opportunity to receive further comment from parties who may not have submitted their supportive views when groundwater monitoring was an element of this proposal and who may have opinions and information to offer in light of the Board's decision to remove the requirement before going to First Notice on its Rulemaking. That's a quote from the JCAR recommendation. The Board accepted additional comments in Subdocket B until December 1st, 2012.

On March 21st, 2013, the Board directed that additional hearings be held, and that the Hearing Officer present questions for participants to respond to. The purpose of today's hearing is to hear testimony responding to those questions.

We have received pre-filed testimony from six individuals. We will swear in the witness, take the testimony as if read, and mark it as an exhibit. We will then proceed to question the individuals or entities. I will allow a brief introductory comment from the witness, if they would like to do so.

I want to note that I will also offer into the record as exhibits the pre-filed questions. This will allow for either citation in comments and the

Board's opinion.

We will also begin with Exhibit Number 52, as the Board received 51 exhibits in the R12-9 root docket, and we have already had citations to some of that prior testimony in the comments we've seen. So for ease of citation, we will start at 52.

Before we open today's hearing, I discussed the order of our testifiers. Of the pre-filed testimony, we will begin with Will County; then go to Mr. Hamper, then Brian Lansu, James Huff, the People, and the IEPA.

Before we start with pre-filed testimony, I have been informed that we have some State Legislators with us today, as well as County Executives, and we will let them go first. As this is a session day, we want them to go about the State's business as quickly as possible.

Anyone may ask a question today; however, I do ask that you raise your hand, wait for me to acknowledge you. After I have acknowledged you, please state your name, who you represent, before you begin your questions.

Please speak one at a time. If you speak over each other, the court reporter will not be able

to get the questions on the record. And please note, any questions asked by a Board member or Staff are intended to help build a complete record for the Board's decision and not to express any preconceived notion or bias.

Are there any questions on the procedures we're going to be following today?

Okay. Thank you very much.

With that, Ms. Curry, did you want to introduce him?

MS. CURRY: Representative Walsh.

REPRESENTATIVE WALSH: Where would you like me to go?

HEARING OFFICER TIPSORD: If you would like, you can come up here. That way you can talk to the back of the room. And would you like to be sworn in, Representative Walsh?

REPRESENTATIVE WALSH: If it's necessary, I will.

HEARING OFFICER TIPSORD: We will swear you in.

(Witness sworn.)

LARRY WALSH, JR., called as a witness herein, having been first duly sworn, testified as follows:

REPRESENTATIVE WALSH: Good morning. I'm Larry Walsh, Jr., State Representative from the 86th District. I represent Joliet, Elwood, Channahon, along the Des Plaines River Valley there through Joliet.

I was asked to testify on behalf of my constituents along the 86th District in the County of Will for the purpose of groundwater monitoring for our CCDD sites there in the Joliet area.

We have put forth several arguments in the past as this process has been going along, but I just wanted to reiterate some of these main points, is that Will County has nine active permitted CCDD facilities within the county, and all are located adjacent to principal waterway systems of Northwestern Will County including the DuPage River and the Des Plaines River. Seventy-one percent of the population of Will County's residents rely on groundwater for their drinking water. That is a huge number for a county as large as Will and the number of people that are in it, and for

that purpose alone, that's why we're requesting this rule change.

For the cost of 6 cents to 16 cents per cubic foot of clean debris going in there into these facilities, compared to where it's dumped there -- they charge $4.50 -- it's a small cost to make sure that our water systems are safe.

So, with that being said, that's basically the reason why I came before you today, to show the concern that we have in Will County, especially within the Joliet area. I know my constituents, I probably have over a thousand that are on their own wells that are directly close to a CCDD facility, to make sure that their water's safe, and that's all they're asking.

So, with that, I please ask for your consideration in this rule changing, and I would ask for your favorable opinion. Thank you.

HEARING OFFICER TIPSORD: Thank you, Representative Walsh.

Does anyone have any questions?

Seeing none, thank you very much. We appreciate your time and your comments that were received from you. They've been very helpful. Thank

you.

And next?

SENATOR MCGUIRE: I'm State Senator Pat McGuire from the 43rd District.

HEARING OFFICER TIPSORD: Good morning, Senator McGuire.

(Witness sworn.)

PAT MCGUIRE, called as a witness herein, having been first duly sworn, testified as follows:

SENATOR MCGUIRE: As the elder of the two legislators, do you mind if I sit?

HEARING OFFICER TIPSORD: No, please do.

SENATOR MCGUIRE: Thank you. I appreciate the opportunity to speak with you this morning. I'm here to strongly support Will County's call for the implementation of groundwater monitoring at Clean Construction and Demolition Debris sites.

And if I may, I'll briefly describe the 43rd District. The 43rd District is the populous of west central Will County. It's the townships of Jackson, Channahon, Joliet, Lockport and Du Page, and within the 43rd District, there are a majority of the nine

permitted CCDD facilities, which Representative Walsh mentioned. So, again, a majority of the nine active permitted CCDD facilities are within the 43rd District. Please note that four of them are directly beside the Des Plaines River, right on the river. Three more are very close to the river.

As Representative Walsh noted, 71 percent of Will County residents rely on a shallow aquifer system for their potable water supply, and contaminants near or below the ground surface can rapidly infiltrate into this aquifer, move through the aquifer and towards waterways or areas of groundwater withdrawal.

So requiring CCDD sites to install groundwater monitoring systems is absolutely essential to ensure that community water supplies are protected and safe from contamination.

Again, as Representative Walsh noted, the cost is certainly tolerable, and this is proven by the fact that at least one of those nine Will County CCDD sites has agreed to put in monitoring wells as a condition of its zoning permit. And monitoring wells, also, I would suggest, will have a salutary effect on the operators so that they will ensure that the fill they are accepting is clean, since the wells will

detect any contamination.

So, in closing, I urge you on behalf of the men, women, and children of the 43rd District to require three things: First, groundwater monitoring at all CCDD facilities; secondly, that reporting of noncompliant CCDD facilities be in line with conditions established for other solid waste landfills, which, as you know, require reporting of an exceedance within ten days of the change in groundwater quality; and, finally, that corrective action in cases of noncompliance with groundwater quality standards also be in line with conditions established for solid waste landfills.

Thank you.

HEARING OFFICER TIPSORD: Thank you very much, Senator McGuire.

Does anyone have any questions?

Thank you very much. We appreciate you taking the time to speak to us today.

SENATOR MCGUIRE: Thank you.

(Witness sworn.)

LARRY WALSH, SR., called as a witness herein, having been first duly sworn, testified as follows:

MR. WALSH: Good morning, everyone. I'm Will County Executive, Larry Walsh, former State Senator of the 43rd District, and I want to sincerely thank the Illinois Pollution Control Board for allowing us to come and speak to you today on this very, very important matter.

I want to thank our State Senator and our State Representative for taking time out of their busy schedules to come and testify, also, as they represent a huge portion of Will County.

Will County is the fourth largest populated county in the State of Illinois, approximately 700,000 residents. We're the 13th largest geographic county out of the 102 counties in the State of Illinois. This issue is truly of major importance to us and our future.

Over the past several years, Will County and its legislative representatives have been involved with many pieces of legislation that have been introduced regarding regulation of Clean Construction

Demolition Debris and uncontaminated soil fill operations. Once legislation was passed in 2010 that did not require groundwater monitoring, but recommended to the Illinois Pollution Control Board in the rulemaking processes at these sites, Will County began providing comments to the IEPA and the Illinois Pollution Control Board requesting that the IPCB adopt rules requiring groundwater monitoring for the CCDD, and the uncontaminated soil fill operations be rejected.

The IPCB is conducting hearings this month due to Will County, IEPA, Illinois Attorney General's Office, and other parties requesting that the IPCB reconsider their decision and require groundwater monitoring at CCDD and uncontaminated soil fill operations.

Why does Will County care? The majority of Will County's residents and businesses rely on groundwater, not Lake Michigan water, as their primary drinking and domestic water source.

Many of the Clean Construction and Demolition Debris and uncontaminated soil fill operations are located near Will County's residential and businesses and have their debris within close

proximity to the water source they will consume or use.

Will County has nine operating CCDD sites and one registered uncontaminated soil only operation. Only Kane County has more of these types of sites than Will County. Will County is the only county that inspects CCDD and uncontaminated soil operations on behalf of the IEPA and, therefore, has a vested interest in ensuring that they operate in an environmentally sound manner.

Until recently, within the last two years, CCDD and uncontaminated soil only operations were not required to thoroughly screen or verify and provide test results or sign off from PE and PG, the loads they were receiving. The screening methods were done with just visual check or using a device that would only detect a portion of the load being received. Therefore, it is possible that contaminated material has been accepted at these facilities for many years.

In addition to improving screening, groundwater monitoring is another way to protect our groundwater through detection. Whether to require groundwater monitoring or not should not be based on cost, since our drinking water is vital to our lives.

Additionally, through a thorough analysis using experts, Will County, as well as the IEPA and others, have determined that the cost to perform groundwater monitoring is pennies, 6 cents to 16 cents per cubic yard, which the is way loads are charged at the CCD and uncontaminated fills.

I appreciate your time and I cannot express how sincere we are in this issue. 700,000 residents. Within the next 25 to 30 years, we should become the second most populated county in the State of Illinois, reaching a peak at about 1.2 million. A vast majority of those 1.2 million residents will be relying on us making sure that the underground water that is going to be their life is secure and safe.

We are asking for a simple mechanism of monitoring these wells, monitoring wells at these sites for the protection, the protection and the livelihood, of our county in the future.

I thank you again for your time.

HEARING OFFICER TIPSORD: Thank you very much.

Are there any questions?

Thank you so much for your time.

Okay. And if anyone else would like to

testify later today, we do have a sign-up sheet at the side of the room under the 1980s poster that you can sign up, and if you do that, by the end of the day, we will get to you.

And with that, we will move to Stuart Cravens from Will County.

Was there someone else that needed to speak before we start? Okay. Go ahead. I'm sorry. Before you go and have a seat, Mr. Cravens, there's just some paperwork.

I'm going to enter as an exhibit as Exhibit 52, the Board's Hearing Officer Order of April 18th, 2013, which contains the prefiled questions that the Board sent out.

(Exhibit Number 52 was marked for identification and admitted into evidence.)

As Exhibit 53, simply because it's the next one in my pile, we will enter the prefiled questions filed April 18, 2013 by Illinois Association of Aggregate Producers.

(Exhibit Number 53 was marked for identification and admitted into evidence.)

And, finally, as Exhibit 54, the prefiled questions also dated April 19th, 2013 by the People of the State of Illinois. That is Exhibit 54.

(Exhibit Number 54 was marked for identification and admitted into evidence.)

And with that, can we have you sworn in, please?

(Witness sworn.)

STUART CRAVENS, called as a witness herein, having been first duly sworn, testified as follows:

HEARING OFFICER TIPSORD: And do you have a clean copy of your testimony to provide as an exhibit? The copy I have is marked up. Thanks.

If there's no objection, we will enter the prefiled testimony of Mr. Cravens as Exhibit Number 55. Seeing none, it's Exhibit Number 55.

(Exhibit Number 55 was marked for identification and admitted into evidence.)

Mr. Cravens, do you want to give us a brief summary? Go ahead.

MR. CRAVENS: Yeah, it will be brief. I'm not going to repeat the information already provided by the Will County representatives, state and local, and the executive. It pretty much adequately summed up Will County's standing and concerns about groundwater quality in Will County, the fact that essentially the entire county is underlain by shallow aquifers, sand and gravel, principally Silurian Dolomite.

I've spent 30 years of my career dealing with groundwater contamination, almost wholly in Illinois, and ten of those years were totally in Cook County, Kankakee County, and Will County, which is all Silurian Dolomite, and that area essentially provides the bulk of groundwater for that entire area of Will County. There is the Cambrian-Ordovician aquifer, which provides some groundwater, substantial groundwater for the Joliet area, but the rest of that county is relying on shallow groundwater in the Dolomite, a little bit of sand and gravel.

Essentially, these are very susceptible aquifers to contamination. They're hooked up to a lot of community water supplies and domestic well supplies around the entire county, and they're again, as

mentioned earlier, next to the Du Page River and the Des Plaines River, they're intimately connected with all the surface water supplies of Will County.

As already mentioned, Will County supplies 71 percent of the groundwater to the users. The rest is Lake Michigan water. The shallow aquifer system in Will County and northeastern Illinois, in general, is a resource which exists predominantly within glacial sand and gravel deposits in the Silurian Dolomite bedrock.

Again, this is a deeper aquifer. The Cambrian-Ordovician, we're not concerned about that in this hearing here. What we're concerned about is contamination of shallow aquifers from CCDD operations and uncontaminated soil fill operations, and being that Will County is underlain by aquifers, almost the entire county, and that there are dozens of community water supplies, thousands of domestic water supplies in the county, essentially Will County has more standing, more so than almost any other county in the State of Illinois, in terms of where these facilities are located, how they're managed by the IEPA, how they're regulated and overseen, and the biggest concern of Will County and myself, and I think all the

residents of Will County, is that they have a true concern about whether they're going to have impacts of their groundwater, whether they're going to have impacts to their health and the environment, and it's pretty much a no-brainer that in Will County that we've got shallow aquifers and Dolomite, which essentially if it's contaminated, in a matter of days or weeks, this groundwater can gravel tens to hundreds of feet. I mean, you're talking fractured bedrock, and if you put a contaminant in fractured bedrock and allow that to travel, over a period of weeks or months, it can literally travel ten feet, a hundred feet, or even further, and we've seen this in case after case in Kankakee County, Cook County, Will County, where we do have contaminants and where they've had to do some large cleanups because of that.

So Will County's standing, basically, is because of the Dolomite. The Dolomite itself -- just a quick preview; I'm not going to go into all of it. We addressed every question we wanted to in the testimony, and you can read this and we'll take questions about all of that.

But the Dolomite is 100 to 150 feet thick at the top where it's very prone to contaminants and to

contaminant movement. It can be 3, 4, 500 feet thick, but we're concerned about that upper 100, upper 150 feet, more so than anyplace else, because that's what most people are drawing their drinking water out of, and that's what's connected to the waterways in the county.

The Dolomite; basically, water moves through it with large openings and fractures and big planer openings where the bedrock has bedding planes. These same features which make it a great source of drinking water also make it a great place where contaminants can move quickly. So what makes something a good drinking water supply, makes it also more susceptible to contamination.

So this is a Class I groundwater resource. It's not a hard bedrock where they can just put it in there like it's a piece of ceramic or a ceramic bowl and it just sits there. These are unlined CCD fill operations. When you put material in there, it's going to move. And, again, they may put a head on -- they may put a groundwater withdrawal on that and create a head towards that facility, but they're not going to maintain that year round.

We honestly believe that you need to do

groundwater monitoring year round because things move very quickly through this material, because you do have quarterly geochemical changes, because you do have rainfall changes, seasonal changes, because you have surface water level changes.

If you remember this spring, look how quickly the Illinois River and all the rivers up there flooded. Well, those rapid changes are also affecting groundwater, and you may have groundwater flowing towards the rivers nine months of the year. You get one flood event, and the groundwater is moving in the opposite direction. So these gradients and these directions, they change. They don't change -- they don't stay stable year round. They can switch very quickly. They can change quarterly; they can change semiannually. One year doesn't dictate how the groundwater's going to move the next year, necessarily, so we strongly believe that initially at these facilities, we should be doing quarterly groundwater monitoring and not annual, and to do a statistical background, and this is in the interest of these operations, the CCDDs.

If you do quarterly groundwater monitoring, you're going to get a nice statistical background, and

that's for the protection of everybody. If you just do one round of sampling, you can't even do statistics on one round. One point, you can't do statistics with, but if we do a background groundwater quality of four quarters, initially, to establish a nice baseline of what is groundwater out here, what's happening with it over the course of the year, then you can go in and actually, in the future, once you have that baseline, you can go to annual or semiannual. You can actually have parameters that are monitored quarterly, or you can have some parameters which are monitored annually. So you could have a larger set of parameters on an annual basis, like a full set of 620s, but then you can have a subset on a quarterly basis where maybe you're only doing six or seven parameters, which have been shown to be impacted by the CCDDs.

So what we're trying to do here is say we agree with IEPA a hundred percent what they're doing; we agree with almost everything in the regulations; we would even like to see them toughened up a little bit more in terms of what statistical procedures are you using? Can we actually get quarterly monitoring and background monitoring in there initially, and then we can go to other levels of monitoring and different

sets of parameters, but at the front here, we don't know what we're dealing with. Let's do the full set of 620s. Let's do quarterly monitoring. Let's get a good baseline, find out exactly what's happening at these places, and we don't know what is happening, and that's the bottom line, and then once we have that, then we can then go to more reasonable monitoring.

Is it going to be economically burdensome? I absolutely do not believe so. There's a lot of numbers put forth by the ag producers, by waste management, IEPA, PFC on behalf of Will County put together their numbers, and our numbers were based on Illinois EPA LUST reimbursement rates, so they're not unreasonable. And some of the costs that were thrown out there in the past were for different cases than a normal monitoring situation. So we think that monitoring can be done very cost effectively.

The bottom line is, if there's good monitoring done upfront, and if these places really aren't causing impact, then all of these other issues about corrective actions, and when should there be corrective actions, and is it 90 days, or 180 days, or 360 days, it's sort of a moot point.

You're saying there's no impact, you're

saying there's not going to be corrective actions because there's no contamination to these aquifers from these CCDDs. So, essentially, in terms of how strict the back end of things are, it's sort of a moot point because if you're not impacting and you're taking good background groundwater samples, and you do some good quarterly monitoring up front, everybody should be happy because you've got the data, the public's not going to distrust you, the county will feel confident that you're doing what you need to be doing, and essentially a lot of these, more what might be considered stringent regulatory items, are going to be a moot point, and I'll leave it at that.

Again, we answered every question we felt that we had a good say on, in terms of some of the science and some of the regulations, and we'll be glad to take all your questions. Thank you.

HEARING OFFICER TIPSORD: Thank you. Are there any questions? Yes, sir.

MR. WILCOX: Greg Wilcox with the Land Reclamation Recycling Association.

You mentioned a lot of these sites are next to the Des Plaines River and to major waterways.

MR. CRAVENS: Yes.

MR. WILCOX: Can you explain the connection why -- is that a concern to you that their location is next to the waterway? And how does -- I'm not sure what you're trying to -- the point you're making there.

MR. CRAVENS: Well, the fact is, when you have bedrock and Dolomite that's next to the waterways, the groundwater moves -- it's going to move towards waterways sometimes. Sometimes if waterways are in flood, they will actually move towards some of these quarries. But essentially when you have fractured Dolomite sand and gravel next to waterways, you have groundwater moving, and if it's impacted, it's going to move into those waterways. I mean, there is an integral connection between the shallow materials and the waterways in Illinois.

MR. WILCOX: So your concern is sometimes the fill in the CCDD sites, the water may move into the Des Plaines River.

MR. CRAVENS: Well, yeah. There's a potential always when you've got any kind of operation like that, the groundwater is going to be moving into rivers, and sometimes it moves away from the rivers. It depends on the pumping.

If you have a huge pumping counter depression from a lot of wells and supplies, you could actually have water moving towards CCDs or any kind of -- one location towards those pumping cones, and those cones can -- you know, can actually move water away from waterways and away from those CCDDs to the pumping water supplies.

So water is going to move any direction where it's being pumped or discharged, via rivers, towards quarries. I mean, there's a --

MR. WILCOX: Are you saying you're concerned that the contaminants in the Des Plaines River may move into the quarry, or are you concerned that the contaminants that may be in the quarry will move into the Des Plaines River?

MR. CRAVENS: Well, the concern is that the contaminants in the quarry could move into the Des Plaines River during periods of time. I mean, they'll move into the river or any kind of water supplies between the river or the quarry. I mean, but when rivers are in flood, there is also a backflow from the river a certain distance through those same materials, which is why we want quarterly monitoring.

If you just do monitoring once a year and

you do it in the summer, well, the groundwater is always going to be typically moving towards these rivers, but during a flood event, you're going to get a backflow in some cases -- I'm not saying any particular location or any particular river -- but I've seen all over the state when the Mississippi River is in flood, we'll get water moving back into bottomlands from these rivers back into these areas, which is why one sample point is not going to give you what the background groundwater quality is for the entire year.

MR. WILCOX: Would you at all be concerned, then, if the cost of monitoring, although you may consider it inexpensive, if it's not fiscally, you know, they can't make it work, and they close down the filling of that quarry, would you be concerned that the rivers may flow directly into the quarry, which would then have direct contact with the river water going right to your groundwater aquifer.

I'm not totally familiar with the Des Plaines River, but I don't think it meets groundwater one standards.

MR. CRAVENS: Yeah. Well, the thing is, when you've got a river, when there's a flow reversal,

it's for a short period of time, so what I've seen in groundwater wells, again, all over the state is, you'll have eleven and a half months -- you know, depending on the year. I mean, last year, we had a drought, so water was always moving towards the rivers. But there's always the potential when you have a big flood event during that short period of time, during that flood event when the hydrograph goes up, that you're going to get water going back into those wells, and you're going to get a change in water quality in those wells.

I mean, the bottom line is that the river's in flood and you have areas around it flooded, you're getting water moving from rivers back into that groundwater system. But, again, that's a very short event, hydrographs are up, you're getting water moving back from the rivers for a short period of time. They come back down in your normal groundwater flow direction back into those waterways.

MR. WILCOX: My simple question is, would you rather see the quarries filled with soil, or empty, so that water could go directly into the rock?

MR. CRAVENS: I don't have -- I mean, I guess I haven't thought about that question. I mean,

in terms of -- optimally, you wouldn't have any holes in the ground and you would just have --

MR. WILCOX: Right, but it's there.

MR. CRAVENS: Yes, and there's a hole in the ground there.

So, optimally, whether there's a hole in the ground or not, I mean, you could say let's leave a hole, and if someone's willing to take on the liability, we have a nice swimming hole there, and you could make it into some kind of a park. I mean, there's plenty of places and other places around the state, and they make it into a national park or donate it to the nearby community and they make a park out of it.

So I don't have any druthers in terms of what to make it into. I'm just saying the dynamic nature of groundwater requires, in my mind, that you do quarterly monitoring upfront to look at what your variability is in groundwater quality, background, and downgradient.

MR. WILCOX: Thank you.

HEARING OFFICER TIPSORD: Go ahead.

MR. HOWARD: Bob Howard, Will County Board Member, District 1.

I have a question. Just -- it's a two-part question. Basically, the first part of it is, let's say the quarry is filled in with construction debris, whether shingles or clean construction debris or whatever it might be, now, what percentage of that is going to be water inside of that?

And the second part is, if it's a higher percentage of water and you get that hydrostatic pressure to where that's going to constantly want to leave that area because it's always going to be at a greater volume --

MR. CRAVENS: Okay, yeah. What's going to drive groundwater from one of these facilities outwards is if the water level in there is higher than off site. So the porosity is not the feature. Typically, porosity of materials is going to be 10, 15, 20; high end, 30 percent maybe. Porosity of something like that, you know, with compaction, demolition debris, I mean, you can't equate soil versus putting in concrete and stuff, but, I mean, concrete is a solid mass, so I hate to even give a percentage of what that porosity would be, but natural materials are going to be, you know, 10 to 25, you know, maybe maximum 30 percent typically, but in terms

of what drives water out into the surrounding area away from these facilities would be if the ultimate water table there is higher than the surrounding area, groundwater is going to flow in that direction. Just like if the river level's here, and the water level in the quarry's here, that water is going to move towards the river.

If you've got a pumping well that's pumping a thousand gallons a minute a mile away and they're creating a big cone of depression that reaches towards that operation, basically that water is then going to want to flow towards that pumping well. So it's going to flow from high water levels to the low water levels wherever that is.

MR. HOWARD: So without compaction, what's going to happen, then? Basically that's going to hold more water than the limestone as --

MR. CRAVENS: Yeah, because of the porosity.

HEARING OFFICER TIPSORD: Let him finish his question because the court reporter can't get you both down if you're talking at the same time.

MR. HOWARD: So what's going to happen is basically that's going to have a higher volume of water in it, so that as you've got the natural bedrock

around it, these wells, once you sink the residential wells, or whatever type of other wells you're going to have, there's going to be a natural movement of water out of that area because that's going to have more water in it than next to it, so it's going to move it towards the wells; correct?

MR. CRAVENS: Only as long as the water level overall, the top elevation of the water in that is higher than the surrounding area. The fact that it's more porous, it does mean there's a lot of water and potentially a lot stored there, but it can't move any quicker than what the permeability is of the surrounding sand and gravel or bedrock.

But correct, though. The water level in there is going to dictate which direction it's going to flow.

MR. HOWARD: Thank you.

HEARING OFFICER TIPSORD: Any other questions?

MR. HENRIKSEN: Good morning. John Henriksen with the Illinois Association of Aggregate Producers.

Going back to your initial part of your paper, Mr. Cravens, you mentioned based on years of

overseeing CCDD fill operations that Will County strongly supports the implementation of groundwater monitoring at these facilities.

HEARING OFFICER TIPSORD: Excuse me, Mr. Henriksen. For the record, that's page 1 of Exhibit 55.

MR. HENRIKSEN: Thank you, Ms. Tipsord.

So during the course of the oversight that you refer to on page 1, has Will County identified instances of groundwater contamination suspected to have been caused by CCDD or uncontaminated soil facilities?

MR. CRAVENS: I would have to recuse myself from that, basically because I was not responsible for overseeing the CCDD facilities in Will County, so I do have someone here from Will County that can speak to that.

UNIDENTIFIED SPEAKER: We've been inspecting them the last few years, and IEPA delegated --

HEARING OFFICER TIPSORD: Excuse me. We need you to identify yourself and we also need to swear you in.

MR. CRAVENS: Well, I can't speak to that basically because I myself don't have the data that

Will County collected. So this statement is on behalf of Will County, but essentially can we point to a specific facility that has groundwater impact, I cannot state a facility that does, because there's no data, there's no groundwater monitoring. So there's no -- there's no there-there, because we don't have any monitoring data.

MR. HENRIKSEN: So you're not aware of any instances of groundwater contamination at this time; correct?

MR. CRAVENS: I am not aware of any contamination at this time; that's correct.

MR. HENRIKSEN: Thank you.

On page 3 of Will County's submittal under Costs of Groundwater Monitoring questions 1 and 2, you -- there's mentioned some specific costs for -- to implement groundwater monitoring at these sites, based on various assumptions.

MR. CRAVENS: Yes.

MR. HENRIKSEN: What assumptions did Will County come up with, or what assumptions did Will County use to determine what it's going to cost to set up a groundwater monitoring program at one of these facilities?

MR. CRAVENS: Okay. Well -- and again, there is -- we referenced previous testimony in submittals dated November 27th from the Will County Executive, Mr. Walsh, okay, the Will County Board Chairman. We provided all that backup in prior testimony and documents, so that is out there, but I will reiterate that it was based on five monitoring wells to 120 feet in bedrock overseen by a hydro geologist using Illinois EPA LUST reimbursement rates, and it was annual cost of sample analyzed for the modified 620 list, and those annual -- that initial round of installation costs reporting came to $156,300. That wasn't an annual recurring cost, but that was an upfront initial cost.

The annual cost of samples and analyzed for the modified 620 list and filed with the Annual Report for those five wells -- and we even put a duplicate sample in there, so it was six analyses -- was $18,700. And again, I've got the backup here. Again, we've got all the backup that was filed previously -- it's in prior documents -- and we can provide that again and break it down, you know, in multiple ways, if that's necessary.

HEARING OFFICER TIPSORD: Excuse me. I

apologize for interrupting again, but for the record, 620 List of Parameters is the 35 Ill. Adm. Code 620 List. That is the Board's rule on groundwater monitoring; correct?

MR. CRAVENS: That's correct. And basically it does not include the correction 1100 Appendix A parameters. Those were removed from what they want required for monitoring.

HEARING OFFICER TIPSORD: And that's the groundwater quality standards.

And the submittal -- you referred to it as testimony a couple of times -- the submittal from November 27, 2012 is actually a Public Comment and not testimony.

MR. CRAVENS: Okay, yeah. Sorry. That was the letter.

HEARING OFFICER TIPSORD: Just to note that for the record. Thank you. Sorry to interrupt.

MR. HENRIKSEN: Thank you.

And these costs are based on annual, an annual monitoring program versus a quarterly monitoring program?

MR. CRAVENS: These original costs which were developed were based on an annual, correct.

MR. HENRIKSEN: So a quarterly program would be more expensive.

MR. CRAVENS: Depending on how it was implemented. And again, we've said upfront background quarterly monitoring, not quarterly each and every year, because what happens is, if you do quarterly initially you get your statistical background, which again, is to the benefit of operators because it gives you a larger range of concentrations by doing quarterly monitoring, and then subsequently it would be, you'd do these parameters, and you could move those down to a semiannual and annual basis, based on the results.

MR. HENRIKSEN: During this oversight, you referred to, has Will County collected tipping fees from these CCDD facilities.

MR. CRAVENS: Again, I can't speak to that. I do not know what Will County charges in terms of tipping fees for these facilities.

MR. HENRIKSEN: Well, my question is, have they been collecting tipping fees?

MR. CRAVENS: I believe so, yeah.

MR. HENRIKSEN: Were any of these fees used to conduct tests on the materials deposited in these

facilities?

MR. CRAVENS: Not to my knowledge, but I can't speak to that whether they have tested or not.

MR. HENRIKSEN: Will County never tests these materials to determine if they contain contaminates that might leach in the groundwater?

MR. CRAVENS: Again, I am not Will County's hydrologist that works with the CCDD operations, so I would not know that.

HEARING OFFICER TIPSORD: I guess we don't have an answer to that.

MR. HENRIKSEN: On page 3 of your testimony, for the Parameters to be Monitored, there's a statement: Rationale: VOCs are not a reliable indicator of the presence of PAHs or other semi-volatile organic contaminants, such as those present in asphalt, roofing materials, and some other building materials.

Now, the PAHs you refer to, that's an acronym for polycyclic aromatic hydrocarbons; is that correct?

MR. CRAVENS: Polycyclic. Some people call them polynuclear, yeah.

MR. HENRIKSEN: PNAs are polynuclear.

MR. CRAVENS: Right.

MR. HENRIKSEN: Okay. And you refer to roofing materials. You're aware that roofing materials are not disposed of lawfully at CCDD sites; correct?

MR. CRAVENS: Currently, under current regulations, correct.

MR. HENRIKSEN: And referring to building materials, under the law, you're aware, I trust, that the only building materials that issued today are, quote, uncontaminated broken concrete without protruding metal bars, bricks, rocks, stone, reclaimed or other asphalt pavement, or soil generated from construction or demolition activities; correct?

MR. CRAVENS: That's correct.

MR. HENRIKSEN: Now, is it your position that the PAHs in the asphalt pavements that are disposed of at these facilities create a threat of groundwater contamination?

MR. CRAVENS: There is a potential threat of contamination by any of these materials put into the ground. That's my opinion.

MR. HENRIKSEN: For asphalt paving in particular? Because that's mentioned in your paper.

MR. CRAVENS: Yeah. Asphalt pavement could actually have the potential to cause impact to groundwater, yes.

MR. HENRIKSEN: Do you have test results showing that asphalt and reclaimed or other asphalt pavement leaches PAHs into groundwater?

MR. CRAVENS: I do not have that evidence with me, no.

MR. HENRIKSEN: Are you aware of any test results showing that asphalt and reclaimed or other asphalt pavement leaches PAHs into groundwater?

MR. CRAVENS: I am aware of documents out there which, again, we can produce, if asked to.

MR. HENRIKSEN: Attached to the --

HEARING OFFICER TIPSORD: Excuse me. The Board would ask that you move.

MR. HENRIKSEN: And, specifically, my question was about reclaimed or other asphalt pavement, because what this is about is, those materials, not asphalt per se, which is, as we'll see later today, that they're different.

MR. CRAVENS: Okay. So you're asking asphalt pavement specifically, not asphalt.

MR. HENRIKSEN: I'm asking what -- the law

refers to reclaimed or other asphalt pavement. So do you have any test results -- and that's what goes into these sites; reclaimed or other asphalt pavement.

MR. CRAVENS: Okay. I will -- if I have that information, I will provide it to the Board.

MR. HENRIKSEN: Thank you.

The last part of your submittal has attachments; one, in particular, is called Figure 1, Permitted Clean Construction & Demolition Debris Sites with Reported Wellhead Locations in Will County, and you're aware of that chart.

MR. CRAVENS: Yes, uh-huh.

MR. HENRIKSEN: So what does this map purport to show?

MR. CRAVENS: The CCDD facilities. It's just basically showing all the facilities in that portion of Will County, and their location, their size, and what waterways they're adjacent to. You're looking at Figure 1; correct?

MR. HENRIKSEN: Yes, sir; Figure 1.

MR. CRAVENS: It's just a demonstration of the facilities in Will County.

MR. HENRIKSEN: And also, I guess, well locations?

MR. CRAVENS: That was Figure 3.

MR. HENRIKSEN: Figure 1 says Permitted CCDD sites with Reported Wellhead Locations.

MR. CRAVENS: Oh, yeah. That came from Will County. That one's got wellhead locations, correct.

And then there was another figure, Figure 3, which showed other water supplies in Will County, the community water supplies.

MR. HENRIKSEN: Did you plot the locations of these sites on this map?

MR. CRAVENS: No, I did not.

MR. HENRIKSEN: Who plotted these locations?

MR. CRAVENS: Those were provided by Will County.

MR. HENRIKSEN: So you don't know if these are an accurate depiction of these site locations or not, do you?

MR. CRAVENS: Well, typically, when you have well locations, you get them from a database, and you can ground truth those, but essentially when you plot those data points, you can sometimes find even more wells out there. Whether they're accurate to within 100 feet or 200 feet, I can't speak to that.

MR. HENRIKSEN: And forgive me. I'm not

being clear. I'm specifically talking about the CCDD sites that are shown in this map. Are those sites -- is this an accurate depiction of where those sites are located, to your knowledge?

MR. CRAVENS: To my knowledge, they are, yeah.

MR. HENRIKSEN: And have you gone out and looked at these sites to see?

MR. CRAVENS: No, I have not. No.

MR. HENRIKSEN: So -- but it's your understanding this is a correct depiction of the location of these sites?

MR. CRAVENS: Yes, that is correct.

HEARING OFFICER TIPSORD: Mr. Henriksen, before you move on from that figure, I would like to ask this question. This is not just Will County, though, in this depiction, correct? I mean, Naperville, Bolingbrook are shown?

MR. CRAVENS: Yes. That map extends beyond Will County, yeah.

MR. HENRIKSEN: Thank you. Thank you.

And again, just so I understand, you're not aware of any test results that Will County has showing that the CCDD or uncontaminated soil facilities that

are proximate to these water sources have caused contamination; correct?

MR. CRAVENS: Correct.

MR. HENRIKSEN: Thank you. And thank you.

HEARING OFFICER TIPSORD: Mr. Huff, do you have questions?

MR. HUFF: Mr. Cravens, have you --

HEARING OFFICER TIPSORD: Mr. Huff, identify yourself for the court reporter.

MR. HUFF: James Huff, Huff & Huff, Incorporated, H-U-F-F.

Have you read the Agency's Response to Prefiled Questions?

MR. CRAVENS: I read a good portion of the Response.

MR. HUFF: So they talk about they provided some additional data on a CCDD facility that installed monitoring wells. There are eight monitoring wells that they put in, and all eight exceed the manganese and iron 620 standards. Would you have any explanation for those exceedances, what could be the possible causes of those?

MR. CRAVENS: Did you have -- which facility was that, first of all, that you're referring to?

MR. HUFF: The Bloom Township, the Einoder site, E-I-N-O-D-E-R.

MR. CRAVENS: And which county is that in?

MR. HUFF: Bloom Township. I'm not sure what county. But it's just the presence of iron and manganese in every single well.

MR. CRAVENS: Yes, which is the reason to do background groundwater monitoring.

Manganese and iron are also naturally occurring, and you see those naturally in groundwater at the low and high concentrations.

You see them -- also manganese can be naturally occurring in sediments and adjacent to rivers. Under high reducing stations, you get more manganese. So, essentially, you can have exceedances of manganese and iron naturally occurring in wells in the middle of an open field, even, conceivably. But, again, that speaks to why you need to do background sampling to show that they are naturally occurring versus if they're being affected by some other source of impact that's elevating them naturally.

MR. HUFF: Do you have any --

MR. CRAVENS: Or unnaturally occurring.

MR. HUFF: Do you have any opinion on

dissolved versus total metals?

MR. CRAVENS: Yes. My opinion is, when you're actually doing groundwater modeling and transport equations, when you're actually monitoring at the facility that I'm -- I'm perfectly happy with monitoring for dissolved, but the bottom line is, when people drink water out of a well, they're not drinking dissolved, they're drinking total. They're drinking everything that's in the water, not just the dissolved.

But in terms of background, statistical monitoring, and for groundwater transport equations, I'm perfectly comfortable with just dissolved.

MR. HUFF: So under the drinking water standards for community water supplies, is there a turbidity standard?

MR. CRAVENS: For -- I am not sure for public water supply. I can't -- EPA, I'd hope that they can say. I don't know if there is a turbidity standard for public.

MR. HUFF: If we assume that there is one NTU standard on public water supplies, then that would be a relatively low sediment concentration, to give you one NTU?

MR. CRAVENS: Yeah, that is a very low turbidity.

MR. HUFF: So if that's the standard, then go back to the question that is total dissolved, whether total is really appropriate in a monitoring well where you can potentially have very high levels of sediment.

MR. CRAVENS: Yeah, but when I've done -- I've done a lot of total dissolved monitoring, and when I have high turbidity or low turbidity, in terms of doing the total dissolved, I don't see -- typically, I haven't seen a big change in terms of total dissolved content, so.

I mean, turbidity definitely has an impact on certain things, and metals and what not, so turbidity is a big deal to worry about, but in terms of, as long as you do good background groundwater monitoring, and you develop the wells correctly and do a good job, I think turbidity should not be an issue. Especially in the bedrock terrain, I would think turbidity would not be a big issue in terms of monitoring.

MR. HUFF: If the wells are screened into a silty clay over the bedrock, same?

MR. CRAVENS: Yeah. Then turbidity would be an issue. Yeah, I would probably push for low flow groundwater monitoring to minimize that turbidity.

MR. HUFF: As opposed to dissolved monitoring.

MR. CRAVENS: Why I say low flow is just when you actually pump the well, just pump at a very slow rate so you don't create a lot of turbulence in the well, so I would minimize my flow rate so that you get a good groundwater sample that's very representative, limiting turbidity basically, so.

MR. HUFF: Thank you.

HEARING OFFICER TIPSORD: Mr. Howard, do you want to talk?

MR. HOWARD: Bob Howard with the County Board again.

Just for clarification in my mind, let's say a building is demoed, and there's a lot of materials that are crushed as you started to tear down the building and you go down, and we're going to take the brick and we're going to take the mortar, the remnants of it, we're going to take the concrete, and we're going to dump it into the quarry. But the clean -- the name clean, they don't clean that debris before

they bring it to the quarry, so anything that's attached to the brick, whether it's plaster, whether it's paint, whether you get remnants of the roof in there, as far as dust or anything like that, that's going to be dumped into the quarry. So the term "clean construction debris," unless it's physically cleaned is really not a true term?

MR. CRAVENS: It's a relativistic term. I would say by definition of the Board's own definition of clean construction debris, they call it clean, but there are going to be corollary materials associated with that. It won't just be necessarily purely concrete. There's all the normal things that happen around the job site.

MR. HOWARD: Could that actually enter into the water supply if it was inside that debris?

MR. CRAVENS: Yes.

MR. HOWARD: Could it actually contaminate the water?

MR. CRAVENS: Yes. Anything in contact with that water would impact it.

MR. HOWARD: Let's say I purchased a piece of property adjacent to a quarry. Is there any restriction on me drilling a well?

MR. CRAVENS: No, not at all.

MR. HOWARD: Currently?

MR. CRAVENS: No.

MR. HOWARD: Is there -- so there's no safety zones, anything as far as that?

MR. CRAVENS: Well, when you put in a well, there's a standard 200 foot setback from that.

MR. HOWARD: Okay.

MR. CRAVENS: But when you put in a well, there's no restriction for you to put in a well whatever distance from a quarry.

HEARING OFFICER TIPSORD: And just one point. The definition of clean construction and demolition debris is a legislative definition.

MR. CRAVENS: Yes.

MR. HOWARD: Thank you very much.

HEARING OFFICER TIPSORD: Are there any other questions?

MR. HENRIKSEN: Just a couple follow-up ones.

You mentioned, I thought, when you were testifying, Mr. Cravens, that quarries do not maintain the cone of influence all year. How did you determine this?

MR. CRAVENS: I believe you're referring to -- would you refer to the page?

Oh. Yeah. I mentioned that in my written testimony that --

So your question is, do they not maintain a negative groundwater withdrawal rate all year?

MR. HENRIKSEN: By review of this, we take away that you don't think that quarries maintain the cone of influence all year. How do you come to that conclusion?

MR. CRAVENS: There's no way to guarantee that. I can't say they don't or they do. I'm saying that quarries, they -- they would need to have a pretty good extensive level of monitoring to show that they're maintaining a negative drawdown into the quarry year round. I mean, basically, if they say they do, what's the proof that they are maintaining that year round?

MR. HENRIKSEN: Are you aware that the quarries pump year round so they don't fill up?

MR. CRAVENS: Correct. I am aware of that, yes.

MR. HENRIKSEN: So -- and they maintain the cone of influence through that.

MR. CRAVENS: Yeah, but pumps go down. I mean, things -- are they actually literally maintaining that cone 365 days a year. I don't know. That would be for them to demonstrate, I would imagine.

MR. HENRIKSEN: When you're speaking about the assumptions of costs of a water monitoring program, I believe I heard you say that the assumption was the wells are to be at 120 feet deep.

MR. CRAVENS: Yes. That was just a conservative assumption made that you were going to be getting down to the base of some of these deeper facilities. So it's just meant to be conservative and not say 30 foot wells that you might see in sand and gravel or something. We went deeper down, just to be conservative, into the bedrock. We could have used 100, 120; we just used 120.

MR. HENRIKSEN: So it's your thinking, Mr. Cravens, that a 120-foot well would be sufficient?

MR. CRAVENS: For some locations, it might be sufficient. For some locations, it might be too deep. You know, I would tend to think in most places, 120 feet would probably be sufficient, but again, each individual quarry, how deep it is, you know, I

can't -- you know, I have wells that are anywhere from 10 feet deep to 400 feet deep, so I can't speak to any specific facility in the state or any given location, and that was just a generic number we came up with that seemed reasonable for a slurry Dolomite.

MR. HENRIKSEN: Did that number, this generic number, was that generated by the average depth of quarries that exist in Will County?

MR. CRAVENS: No. It was not based on any depth of any quarry.

MR. HENRIKSEN: Thank you very much.

HEARING OFFICER TIPSORD: Anything further?

MR. RAO: I do.

Mr. Cravens, you talked a lot about establishing background in these monitoring wells around the CCDD facilities.

I just want to clarify whether you're suggesting that we establish background levels for all the wells, if there are five or eight wells, or just upgradient wells.

MR. CRAVENS: My suggestion would be that you'd actually establish a background for all your wells; so you go out, you do four quarters of monitoring would be a minimal, so you have four data

points, and you do your background and your downgradient. That would be optimal.

MR. RAO: Okay. And once you establish the background, then you can switch to --

MR. CRAVENS: Yes. Once you establish that background and you've looked at, oh, okay, 80 percent of our parameters are non-detects, then you can pare that down and do semiannual or annual for a smaller subset of parameters, and even conceivably a smaller subset of wells.

Like, the idea if you put in X number of wells that you have to keep those wells forever, you know, I think it's a thing that you get that initial data, it's very interactive. Oh, okay. We don't have these parameters. Let's knock that down. Let's knock down on monitoring.

But that initial background is key; it's key to a full hydrologic year, what's happening over a whole year, seasonal, with the local water levels. There's more pumping.

One example, down in Kankakee County, we did a study down there and the water was always flowing into the Kankakee River year round, and there was a regular flow there, but during the summer when there

was massive pumpage from irrigation, there was actually -- the river became a losing river and fed out into the surrounding aquifer and into these irrigation wells.

So it's a very dynamic system, especially with increased groundwater usage. So I think you need four quarterly monitoring events at the get-go and then you can move on from there.

MR. RAO: Thank you.

HEARING OFFICER TIPSORD: Anything further? Thank you very much. Oh, I'm sorry.

MR. SYLVESTER: I have one quick follow-up question.

HEARING OFFICER TIPSORD: Mr. Sylvester?

MR. SYLVESTER: Mr. Sylvester from the Attorney General's Office.

You talked about the four quarters of groundwater monitoring in the first year. Is there a situation where you need to continue to do quarterly groundwater monitoring?

MR. CRAVENS: Oh, yes. I mean, there is plenty of facilities where we continue to do quarterly, and then at some point when we've shown that where we do have contaminants, that those

contaminants have been declining, we decrease the monitoring.

But, yeah, we do have quarterly that continues on beyond the first year, if there is impact. If there's no impact and it's been shown there's no impact, then that could be over time knocked down to semiannual or annual, and I've got plenty of sites through Illinois EPA where we've knocked down over the years to lower levels of monitoring and parameters over time because we're not seeing anything there, so.

MR. SYLVESTER: What would the circumstances be if you had to check for, say, two quarters? How many more quarters would you need before you'd feel comfortable going to either a semi or annual evaluation?

MR. CRAVENS: For me, if you're in a quarterly monitoring mode and you have impact, once you've shown that you have impact for the environment or into a downgradient monitoring well or a compliance monitoring well, typically, that's going to go on. You know, I always put in our documents three to five years you're going to do that, and then you can pare down from there, then go to a semi-annual or an

annual.

You don't particularly go from quarterly final to impact and go straight down to annual monitoring. Typically, you're going to go, you know, five year increments. You're doing quarterly monitoring, and as you've done remediation or as those contaminants are, you know, decreased over time for whatever reason, then you can go to a lower level of frequency.

MR. SYLVESTER: That's all. Thank you.

HEARING OFFICER TIPSORD: Anything else? Thank you very much.

Mr. Hamper, we'll go to you. And do you have a clean copy of your testimony?

Okay. If there is no objection, we will admit Mr. Hamper's testimony as Exhibit Number 56. Seeing none, it's Exhibit 56.

(Exhibit Number 56 was marked for identification and admitted into evidence.)

(Witness sworn.)

MARTIN HAMPER, called as a witness herein, having been first duly sworn, testified as follows:

MR. HAMPER: All right. Thank you for the opportunity to speak here today. My name is Martin Hamper. I'm a board member for the American Institute of Professional Geologists, the Illinois/Indiana section, and I'm here to request that the professional geologists be added as another licensed professional under Section 1100.710 regarding supervision and certification of groundwater monitoring programs.

Professional geologists have the training, education, experience, and Illinois licensure to supervise and certify groundwater monitoring programs under Section 1100.710.

Thank you.

HEARING OFFICER TIPSORD: Are there any questions of Mr. Hamper?

Thank you very much for your renewing your comments. Thank you.

MR. HAMPER: Thank you.

HEARING OFFICER TIPSORD: With that, then, we move on to Mr. Lansu, Brian Lansu, L-A-N-S-U.

(Witness sworn.)

BRIAN LANSU and GREGORY WILCOX, called as witnesses herein, having been first duly sworn, testified as follows:

HEARING OFFICER TIPSORD: If there's no objection, we will enter Mr. Lansu's testimony on behalf of the Land Reclamation & Recycling Association as Exhibit Number 57. Seeing none, this is Exhibit 57.

(Exhibit Number 57 was marked for identification and admitted into evidence.)

Would you like to offer a short summary?

MR. WILCOX: Yes. My name is Greg Wilcox. I was asked to give a more detailed breakdown of the costs of monitoring, and I think some of the key points I'd like to point out in this, and throughout most of the testimony I've seen, that a lot of people have been focusing on the cost of implementing the wells, putting the wells in the ground. I did try and break those costs down. I did get costs from the Bluff City Materials Corporation that actually did some work at one of their CCDD sites. The cost I'm giving you is over ten years old, so please keep that

in mind, that this work has begun ten years ago, so these costs are going to be slightly lower than what they are today.

But one of the things that I wanted to point out, and I think in the Huff testimony that comes up, that in doing groundwater monitoring, it is not a two-dimensional system, but they were actually required to put in eight different wells of different heights to try and get a feel for the three-dimensional flow of the groundwater and try and model it, and I think as Will County pointed out, and as what's shown in these costs, there's significant effort, almost triple the amount of costs of installing the wells in just doing the groundwater monitoring, trying to monitor the levels on a continuous basis to find out what is upgradient, what is downgradient, how does the groundwater flow through this, and it took several years to determine this using groundwater monitoring.

So when we talk about groundwater monitoring, I think it's important that the cost not be just talked about wells and installing wells, but the actual modeling effort to develop how this groundwater flows and where is it coming from, and as

Will County's pointed out, that can change from year to year or season to season, so it's a lot of continuous monitoring by professionals to try and figure these directions and models out.

So that's the first part. The second comment we made is, looking at one of the members of our association, the Reliable Lyons Quarry, which has an inward gradient that they maintain year round, and they've been testing the water coming from this inward gradient to see if they could detect anything.

Reliable Lyons is one of the largest, if not the largest, CCDD site in the State of Illinois. It is in a very urbanized area. It takes soil primarily from the Chicagoland area, very developed area, and we thought this would be a good one to monitor to see if there's any potential impacts.

One of the questions that's always come up is that in an inward gradient, the water we're sampling, is often diluted from incoming groundwater.

Since my last testimony we provided, Reliable Lyons has been monitoring the amount of water pumped and has been recording the amount of rainfall and snow melt entering the quarry, so they're able to give an indication of dilution, and it is significant.

It's about 2.3 to 1 dilution. So they are able to quantify that dilution, that there is dilution, but we did also present the data and, again, I found no detects of any material other than barium, which is probably coming from the groundwater flow coming in because it's naturally occurring. So that's our testimony.

HEARING OFFICER TIPSORD: I have a couple of questions that I would like to ask.

Just to be clear, Reliable Lyons, is that in Lyons, Illinois?

MR. WILCOX: That is in Lyons, Illinois, yes.

HEARING OFFICER TIPSORD: I just wanted to get that on the record.

And does it have an NPDES permit?

MR. WILCOX: Yes, it does.

HEARING OFFICER TIPSORD: Are there any other questions for Mr. Wilcox? Mr. Clay?

MR. CLAY: Mr. Lansu's testimony, and I'll direct this to you --

HEARING OFFICER TIPSORD: Doug, can you identify yourself?

MR. CLAY: Doug Clay with the Illinois EPA.

I'll direct this to either Mr. Lansu or Mr. Wilcox. What was the reason that you did not sample for volatiles in the Reliable Lyons sampling data provided? You said that you sampled for RCRA metals and semi-volatiles.

MR. WILCOX: Yeah, RCRA metals and SVOCs is what they sampled for.

MR. CLAY: Right. Was there a reason you didn't sample for volatiles?

MR. WILCOX: Just costs of sampling. The potential of contaminants, they felt that the highest would be the metals in the groundwater and the SVOCs. Generally, the monitoring of each and every load with a PID meter and the installation of this material being spread out over a large area, the odds of having any volatiles of any significance is highly unlikely, much more highly that we would have some PNAs or SVOCs or RCRA metals. That's what they were looking at.

MR. CLAY: Thank you.

HEARING OFFICER TIPSORD: Thank you very much. Oh, I'm sorry. Mr. Rao has a couple of questions.

MR. RAO: Mr. Wilcox, you just now emphasized the cost of groundwater modeling involved

in the location of these wells and direction of flow, and looking at the numbers that you've presented in your testimony, you indicated the modeling costs were somewhere in the range of $364,000.

Would you consider that kind of a cost as typical for a CCDD site, or is this site that -- is this Bluff Springs facility, is that, would you consider it as a unique situation?

MR. WILCOX: As I stated in my previous testimony, I did talk with the engineers involved with this and asked them, was this modeling a little more significant because of the Bluff City spring and the detail that they needed to get, and they did say that, yes, this was much, much higher.

But they did an estimate, and I did provide that in my previous testimony, that a typical modeling cost could be easily 360,000, based on their experience at this. So it would be less, but not significantly less.

MR. RAO: And what kind of modeling are we talking about here? Is this some kind of a groundwater assessment modeling to show that the facility would not have any impact, or is it just to figure out the direction of groundwater flow at the

facility?

MR. WILCOX: Actually, this modeling was a combination of not only finding out the direction, but also trying to quantify the flow rates and the volumes moving through the soil.

MR. RAO: And also estimating facts of the facility?

MR. WILCOX: No.

MR. RAO: No?

MR. WILCOX: No. The numbers here really involve very little testing of water quality. It was all modeling. And, again, they were looking at more of the volume of flows and what aquifer that these flows were coming from towards the fen.

MR. RAO: Thank you.

MR. CRAVENS: I have a question.

So was the modeling they did, was that like a USGS mod-flow type modeling?

MR. WILCOX: I didn't actually do the modeling, so I don't know if I'd be really qualified to give you the exact details of that.

MR. CRAVENS: Are you aware of some modeling, if there's some very simple models that you can do in an hour that just, you know, might take a

person half a day to run, and then some models it can take weeks or months to get data for and to run that could run up into a hundred thousand dollars versus ten thousand dollars.

MR. WILCOX: Well, I'm sure there's people who do very cheap models and some who do very expensive.

But if you're going to try and determine what is truly upgradient and downgradient, especially in the sand and gravel aquifer that this is, what they told me that this takes significant modeling effort on a year round basis to determine how these flows change seasonally and with time and rain events.

MR. CRAVENS: At this specific location, though.

MR. WILCOX: At this specific location.

MR. CRAVENS: Which is a fen, correct?

MR. WILCOX: It's a sand and gravel quarry, yeah.

MR. CRAVENS: Right.

MR. WILCOX: And, again, I'm not trying to say that this would be the same at a limestone quarry or anything else. We were just trying to present data of an actual quarry what they actually did.

MR. CRAVENS: Okay.

HEARING OFFICER TIPSORD: Mr. Wilcox, just to clarify, you referred to your previous testimony. You were talking about previous testimony in the root docket R12-9?

MR. WILCOX: I was.

HEARING OFFICER TIPSORD: Anything else? Okay. I think this time we're really done. That takes us to Mr. Huff.

MR. HUFF: I have a copy this time.

HEARING OFFICER TIPSORD: If there's no objection, we will enter Mr. Huff's prefiled testimony as Exhibit 58. Seeing none, it's Exhibit 58.

(Exhibit Number 58 was marked for identification and admitted into evidence.)

Mr. Huff, if you'd like to give a brief summary.

(Witness sworn.)

JAMES HUFF, called as a witness herein, having been first duly sworn, testified as follows:

MR. HUFF: Sure. My name is James Huff.

I'm with the consulting firm Huff & Huff, Incorporated.

I went through and attempted to answer a number of the questions that the Board had asked in its prefiled questions. I also included as Attachment 1, the Illinois Integrated Water Quality Report and Section 303(b) lists 2012 volume groundwater, which basically goes to the question of what the Agency routinely monitors for in the groundwater across the State of Illinois, and that report focuses on volatile organic chlorides -- I'm sorry -- volatile organic compounds, chlorides, nitrates and herbicides, with the nitrates and herbicides associated with the agricultural areas, and chlorides are associated with highway deicing practices, the use of potassium chloride fertilizers, livestock waste, and water softening.

So, really, the primary focus with respect to CCDD in that report would be the volatile organic compounds that were there.

I also attempted to put in a little additional information on why dissolved metals are really a more appropriate metal than the total metals; primarily, so that you don't get false positives, and,

you know, there's been a lot of discussion on cost. Once a positive hit is made, then there's going to be an additional round of testing and maybe multiple rounds to try address those false positives, which you can eliminate by just testing for dissolved metals as opposed to the total metals there.

The Board asked about the front end screening, and I had testified in R12-009. Previously, I had recommended that the semi-deflection on a photoionization detector is really problematic because of the false positives, humidity being the largest one and, sure enough, the first day of construction season at a job site we were doing in a strictly residential area, we got a call that there was deflection on the PID. It was a cold, wet rainy day. The soil was wet that went in there from the rain, and that then just snowballed to where we went from a Form 662 to a requirement for a Form 663; and, of course, there was nothing detected in that sample, and that's just, I think, a typical example where if we're going to do monitoring with monitoring wells here, some relaxation from the semi-deflection on the photoionization detector would be appropriate.

Remediation options. I also put in a second

attachment on Superfund sites on typical costs for pump-and-treat, and I think that's pretty analogous to exactly what would happen here, and that cost was 2.9 million dollars for installation in 2013 costs in there.

And then I also lifted up, iron and manganese are two parameters. We've got this exception listed on parameters that we perhaps shouldn't be monitoring, and those two are at the absolute top of the list. The MAC table as currently written has set the limit at the median concentration in the State of Illinois.

So, effectively, you've got a 50/50 chance if you test for iron, it's going to pass, and a 50/50 chance with manganese that it's going to pass.

And then there's a number of other metals; chloride, sulfate, and total dissolved solids; fluorides, nitrates and perchlorate that I really don't think are appropriate when you're talking about clean construction demolition debris. If there's going to be contamination in the urban areas, it's going to be going by the gas station, the dry cleaner facility there, and the volatile organic compounds would really address that.

And the final comment was just, the Board in the final regulations included a maximum pH of 9.0, and to the extent we're putting this uncontaminated soil in with concrete, the pH is well above 9 in the material going into these CCDD facilities, and a lot of the quarries themselves that are developing will also have a pH of 9.

That's really caused a problem because we have limestone base force under these roadways, and if we take shallow samples, if we're not very careful, we get a little limestone dust in the samples, and we're getting pH routinely above 9. It really is a false positive. It's the stone and not the soil, and I don't believe there's any technical support for that upper pH one, and so I would ask the Board to reconsider that.

And then I think on the MAC table that was there, that was left to the Agency, but we clearly have problems with iron and manganese.

The total chromium they've set at basically what was in TACO is a hexavalent chromium, and between those three and the arsenic, which was discussed extensively, if you test for those four parameters and assuming they're randomly distributed, only 14 percent

of all the clean soil in Illinois will pass those four parameters.

So I'd really like to have some dialog about whether we shouldn't move MAC into the Board regulations and have more discussion on those, would be my thought.

And that concludes my summary.

HEARING OFFICER TIPSORD: Thank you, Mr. Huff. Are there any questions for Mr. Huff? Mr. Wight?

MR. WIGHT: Mark Wight, Illinois EPA.

Mr. Huff, I was just wondering, earlier in the proceeding when you would testify, you were representing a fairly sizable coalition of county and municipal departments and so on. Are you still representing those, or who are you representing today?

MR. HUFF: I'm basically here on my own time, sir.

MR. WIGHT: Okay. Thank you.

HEARING OFFICER TIPSORD: Any other questions for Mr. Huff?

MS. LIU: Good morning, Mr. Huff.

MR. HUFF: Good morning.

MS. LIU: On page 3 of your prefiled

testimony, you state that, quote, I do not believe four monitoring wells will be sufficient to meet the regulations as currently drafted and a minimum of eight monitoring wells will be required, end quote.

The proposed regulations refer to both requirements for determining the quality of groundwater downgradient in horizontal and vertical directions.

On page 6, you indicate that it's the vertical component that would be more difficult to assess and would require an extensive hydro geologic study.

The first question: If the horizontal component is determined using a monitoring well that's screened to capture groundwater from a wide range of depths, do you think it's necessary to determine the precise vertical component for the purposes of monitoring and demonstrating compliance?

MR. HUFF: That's really a good question.

I was responding to the regulation as drafted includes this vertical component in there, and so I think that's really a great question for the Agency, what exactly does that mean? But, to me, that means I have to have wells screened in at least two

different intervals to determine the vertical component, as opposed to screening perhaps the first groundwater that's encountered or groundwater that's at the base of the CCDD at the same elevation.

So your question is, really, could I just put in -- we heard testimony earlier of 120 foot well as an example, could you screen that over 100 feet and take a sample of that, and would that satisfy the requirement for vertical characterization, and I would defer to the Agency on that question.

MS. LIU: My second question would be, do you think the vertical component would only be necessary if remediation were to be contemplated?

MR. HUFF: Well, I think the intent of the vertical was to make sure that if there is contamination, that that is being detected.

So if the question on vertical is only from a remediation point of view, that clearly would reduce the front end cost here for monitoring. And, again, I would defer to the Agency because they're going to be the ones that are imposing their interpretation of what that means.

MS. LIU: Earlier, IEPA had presented some ranges of cost estimates for establishing a

groundwater monitoring network. In your professional opinion, would you be able to comment on IEPA's cost estimates?

MR. HUFF: Really, I did not look at that. I think as we heard Mr. Wilcox, there's a lot of additional decisions that have to go into that, and we heard where they had to go out and retain a hydro geologist firm to develop what is a complex groundwater model, and so I think those kind of costs clearly were not factored into what the Illinois EPA's cost estimates were.

MS. LIU: On page 8 of your testimony, you recommend that the Board eliminate the restriction on uncontaminated soil with pH values above 9.0 to address concerns with the aggregate limestone used beneath roadways and buildings.

You note that the, quote, aggregate limestone used beneath both roadways and buildings can have a pH as high as 12.45, end quote.

Instead of the prohibition that CCDD fill operations must not accept uncontaminated soil with pH outside the range 6.25 and 9.0, should the range of the pH be limited to 6.25 and 12.5?

MR. HUFF: Oh, I think that would be fine.

Absolutely. 12.5 is the threshold for a characteristic hazardous waste due to corrosivity, so 12.5 would be absolutely appropriate.

MS. LIU: Section 742, Appendix B, Table C, which is Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route, Class I, does not provide data for pH ranges greater than 9.0.

If the pH range of uncontaminated soil was limited to between 6.25 and 12.5, should the Maximum Allowable Concentrations, or MACs, in uncontaminated soil still be determined based on the lowest pH dependent value in 742, Appendix B, Table C, between the column ranges 6.25 and 9.0?

MR. HUFF: Another very good question that I'm sure Dr. Hornshaw will -- would be appropriate to answer.

But with the exception of two of the metals, chromium being one of those, they tend to be more mobile at low pH, so the 6.25 is used for all but two of the metals, which are the chrome and one other metal, and with the chrome, it's a function of whether it's a hexavalent or trivalent as well. So there may need to be some adjustment on those, but it goes back

to if we've used a hexavalent chrome limit, when the naturally occurring chrome is predominantly in the trivalent, that's clearly created a problem where we're seeing a lot of failures for chromium, and you're using that pH 9 value there.

MR. RAO: Mr. Huff, the Board in its second notice opinion in Docket R12-9 stated that, quote, the Board believes that Section 1100.205(a)(4), as proposed, allows for treatment of soil with limestone to increase pH, so that soil initially rejected solely on the basis of pH could subsequently be accepted by a fill operation, unquote.

Please comment on the types of amendments that could be used to decrease pH in cases where soils have pH greater than 12.5.

MR. HUFF: 12.5?

MR. RAO: You can also comment on 9, also, if you want, yeah.

MR. HUFF: Well, 12.5, you're starting to get into, are you now becoming a treater of a hazardous waste. So I think the more appropriate question would be, where you have pH greater than 9, are there treatment methods to reduce that. And, sure, if your soil mixes out in the field because the

highest pH tends to be near the surface, that would bring it down, and then you could always add things like alum that would bring that soil pH down as well.

MR. RAO: What would be the cost of treating soils with pH around 9 to bring it down below 9?

MR. HUFF: Well, I think it's a better question whether -- like, on a typical highway job when there -- if you tell the contractor he's got to stop and they now find an area of the soil mix, it's going to go to a landfill. I mean, that's the truth. You're going to pay the landfill price.

He's not going to slow down. He doesn't have the area to mix that soil adequately, and then he's going to have to have somebody standing out there with potentially a lack-of-proof laboratory that's going to run soil pH on those.

MR. RAO: All right. I think that's about it. Thanks.

HEARING OFFICER TIPSORD: Does anyone have any questions?

Thank you again, Mr. Huff. It's good to see you. Let's move on to the People.

(Witness sworn.)

Mr. Sylvester, if there's no objection, we

will mark the prefiled testimony of Stephen Sylvester on behalf of the Attorney General's Office as Exhibit Number 59. Seeing no objection, it's Exhibit Number 59.

(Exhibit Number 59 was marked for identification and admitted into evidence.)

Do you want to give a short summary?

MR. SYLVESTER: Sure.

STEPHEN SYLVESTER, called as a witness herein, having been first duly sworn, testified as follows:

MR. SYLVESTER: The Attorney General's Office has been involved in this rulemaking since it was with the Illinois EPA and was part of the stakeholder process, and throughout this process, our office has been very adamant for the need for groundwater monitoring. Nothing's changed since July, or even in 2011 to the present. Throughout our testimony and public comments our office has advocated that groundwater monitoring should be a necessary component to CCDD operations.

For this particular set of questions, we

answered a few of the questions, and just as a synopsis, like Will County, we would prefer a quarterly groundwater monitoring at the site, at least in the initial phase.

Let's get down here a little further.

Also, regarding the timeframes for the planning, our office would prefer to see those tightened somewhat just generally.

As far as the alternate compliance program, I think that that could be kind of combined with the other compliance program to make it that the information would be submitted along with the compliance plan. You could have the choice of doing either one.

Regarding whether or not anything should be changed from the rulemaking that went final last August, our position is obviously that the soil certifications are a great step in the right direction.

If you look back at the history of CCD filling, in 1997 to 2005, there were no requirements for PID screening, no reporting requirements whatsoever, and then in 2005, you had the limited PID screening, which you heard testimony from both the EPA

and engineers about certain shortcomings involved with PID, both false positives and false negatives. So it wasn't until 2010 that there was a certification requirement for soils that were brought there, which gave a much more accurate depiction of what was actually in the CCD quarries. Of course, that's couched on, you know, people actually providing accurate certifications, which is probably more than 90 percent the case, but even in the time between the amendment in 2010, our office has a case for enforcement where soil certifications weren't provided at two CCD facilities.

Also, regarding the data that has been provided for CCD facilities, I think the Illinois EPA also provided data from the same site. It was an enforcement action in Lynwood. They call it the Einoder site; we call it the Lynwood site, but it's the same facility.

During the initial process, Mr. Purseglove had testified that it was a site that had allegedly taken some improper materials. Well, the case was tried before a judge in circuit court, and the findings of it was that the material at the site was all CCDD. The reason why it was a, quote, improperly

run facility, was that they didn't stop filling the former quarry. They kind of did the Matterhorn and went up a hundred feet, and that's why it was an illegal facility. So in terms of any kind of findings by the Court, that was the basis for it being an improperly run facility.

As you can see, both our office and the Illinois EPA attached the data for the first quarter of groundwater sampling. Obviously, there are more quarters. The Court ordered that there be four consecutive samples of below standards. So, obviously, there are some issues with the first quarter, and the sampling should be being conducted in the near future, which we would certainly supplement the record once we get that data as well.

The other thing that's somewhat concerning is the self-implementing nature of the program at this point in the proposed Subpart G. For the most part, once again, there's professionals involved, and you get a very excellent product in terms of groundwater plans and what not, but being in the enforcement area, the environmental cases, all of our settlements and court orders, when there's investigation to be done always provides for if plans and submittals are

rejected by the Illinois EPA, and in my experience, that has happened, whether it's comment letters. Even in something like the site remediation program, it's a voluntary program, that provides the same type of oversight and the ability for the Illinois EPA to comment on those submissions. So our position is that the plans should be subject to the review of the Illinois EPA.

Also, kind of along that line, the groundwater monitoring data, you know, because of areas like Will County where there's a lot of -- you've heard testimony about how many people are relying on the groundwater for their drinking water, one of the kind of important parts of the community's right to know what's in their water is the ability to obtain data in Illinois and other government contacts within the federal level that's gone through the Freedom of Information Act, and it would be -- I think it would be of public benefit that that information be somewhere where the citizens could have access to it and review it.

That's all I have.

HEARING OFFICER TIPSORD: Are there any questions?

Mr. Huff, we'll start with you.

MR. HUFF: You've presented data on eight monitoring wells at the Lynwood site?

MR. SYLVESTER: Correct.

MR. HUFF: That was out of how many wells at the Lynwood site?

MR. SYLVESTER: Give me a second.

MR. HUFF: Or nine wells. I'm sorry, there were nine wells and you presented the data on nine. Was there nine total?

MR. SYLVESTER: I don't have my material handy. I apologize. Whatever the information was submitted there between the Illinois EPA and -- I don't know if there was exceedances in every well, if that's what you're asking.

MR. HUFF: There were exceedances in every well, iron and manganese, so which one of these is the upgradient well? Which is your background well?

MR. SYLVESTER: Just to be fair, I would defer to the Illinois EPA for the technical matters. Being an attorney, I typically would put the Illinois EPA in a chair and allow them to testify, or yourself.

MR. HUFF: But you felt obligated you could put this in the record as saying here's your data, but

you really don't have any understanding of the data.

MR. SYLVESTER: I didn't say that we didn't have the data. The data, there's -- Illinois EPA has obtained the data and I've identified exceedances.

MR. HUFF: So you're deferring to the Illinois EPA.

MR. SYLVESTER: For the most part. That's the substance of my technical expertise --

MR. HUFF: Thank you.

MR. SYLVESTER: -- that there were exceedances identified.

HEARING OFFICER TIPSORD: Mr. Henriksen?

MR. HENRIKSEN: Thank you.

Looking at your submitted testimony, on page 2, you state that CCDD includes asphalt a source of PNAs.

MR. SYLVESTER: Bear with me here. I'm trying to get to the page.

MR. HENRIKSEN: Second line, top of page 2.

MR. SYLVESTER: Okay.

MR. HENRIKSEN: Are you there?

MR. SYLVESTER: I am.

MR. HENRIKSEN: Perfect. By asphalt, do you mean asphalt pavement, or liquid asphalt?

MR. SYLVESTER: Well, obviously, we're talking about the asphalt pavement in the context. To the extent that any liquid asphalt got in there, the answer would be the same. Although it's not permitted to be there, it doesn't mean it wouldn't end up in a CCD quarry.

MR. HENRIKSEN: So it's your testimony that the -- that asphalt pavements are a source of what you refer to as PNAs.

MR. SYLVESTER: Correct.

MR. HENRIKSEN: And PNA refers to polynuclear aromatics?

MR. SYLVESTER: Yes.

MR. HENRIKSEN: And that's equivalent to polycyclic aromatic hydrocarbons, or PAHs? That's the same --

MR. SYLVESTER: That's what I've learned. Just to further clarify that, though, I would also say that the soils that were around the road material may also be a source of PNAs from the road work itself.

HEARING OFFICER TIPSORD: You need to speak up, Mr. Sylvester. We're losing your --

MR. SYLVESTER: Certainly.

HEARING OFFICER TIPSORD: Thank you.

MR. HENRIKSEN: All right. Just so I understand what you're saying, when you say CCDD includes asphalt, a source of PNAs, you're referring to asphalt pavement?

MR. SYLVESTER: Correct. Yes, I'm sorry. That wasn't spelled out in the testimony.

MR. HENRIKSEN: On page 7, are you there?

MR. SYLVESTER: Almost. Go ahead.

MR. HENRIKSEN: Thank you. At the bottom of page 7, Finally, CCDD is not actually clean, as CCDD by its very definition may lawfully contain carcinogenic compounds in the form of PNAs, PNAs, i.e., reclaimed or other asphalt, without reference to any regulatory levels.

Is it your testimony that the PNAs in the asphalt pavements that may be disposed of at these facilities create a threat of groundwater contamination?

MR. SYLVESTER: Yes.

MR. HENRIKSEN: Does the Office of the Attorney General have test results indicating that reclaimed or other asphalt pavement leaches PNAs into groundwater?

MR. SYLVESTER: I don't have any technical

data on that.

MR. HENRIKSEN: Thank you. Going back to page 4 of your Response, at the top, you refer to a total of 13 cases. It appears that 11 of the cases were the cases that were outlined in your March 5th document.

MR. SYLVESTER: Correct.

MR. HENRIKSEN: And then two cases were also mentioned that are pending cases filed -- filed this year; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: So you refer to a total of 13 enforcement actions against permitted or unpermitted CCDD sites after the Part 41 regulations went into effect; correct?

MR. SYLVESTER: Part which regulations?

MR. HENRIKSEN: Part 1100 regulations.

MR. SYLVESTER: Correct.

MR. HENRIKSEN: Okay. However, none of these cases alleged that materials deposited at these sites resulted in groundwater contamination; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: Going to page 8 of your document you filed.

MR. SYLVESTER: If I may just follow up on that, I believe one of the cases may have -- no, strike that. Never mind.

MR. HENRIKSEN: Thank you.

On page 8 of your filing, referring to the Lynwood case, or the J. T. Einoder case, because they're the same case, you refer to the Lynwood, Illinois case operated by J. T. Einoder in Cook County; correct?

MR. SYLVESTER: Yes.

MR. HENRIKSEN: This site accepted materials from 1997 to 2003; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: And this was prior to the Part 1100 rules being in effect; correct?

MR. SYLVESTER: Yes.

MR. HENRIKSEN: And this is not one of the 13 cases that you've cited.

MR. SYLVESTER: No.

MR. HENRIKSEN: And according to the EPA's prefiled testimony, this site received materials in addition to CCDD; correct?

MR. SYLVESTER: That's the Illinois EPA's testimony, yes. I mentioned in my testimony, that's

not what the Court found.

MR. HENRIKSEN: Correct. But the EPA stated and testified that they found -- they saw evidence of non-CCDD materials being deposited there; correct?

MR. SYLVESTER: That was their testimony. They testified in that case and the Judge said that it was only CCD at the site.

MR. HENRIKSEN: The last three pages of your Response outlines a series of exceedances in Class I standards from the Lynwood site; correct?

MR. SYLVESTER: Yes.

MR. HENRIKSEN: And this, again, is a site that accepted materials from 1997 until 2003 prior to the part 1100 rules; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: Then at the bottom of page 10, you compare two CCD facilities operating after the Part 1100 rules were in effect that had no evidence of groundwater contamination, but then you said that this is a CCD facility that shows an exceedance, and then you said, based on the foregoing data from the three CCD facilities, the data shows that one-third of the CCD facilities show groundwater contamination; correct?

MR. SYLVESTER: Based on the three that have groundwater monitoring data, that's correct.

MR. HENRIKSEN: But only two of these three sites, you know, were operating after the Part 1100 regulations were in effect; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: And these are the two sites that didn't have groundwater contamination; correct?

MR. SYLVESTER: Correct.

MR. HENRIKSEN: And they had screening that's required by law; correct?

MR. SYLVESTER: With PID, potentially.

MR. HENRIKSEN: And also, depending on when the cases were, also LPC 662 and 663, those certifications; correct?

MR. SYLVESTER: I couldn't tell you that, whether that's true or not at this point. The testimony of the one facility was from Mr. Hock, and that was -- there wasn't a whole lot of information provided there.

With the facility, the Reliable facility, obviously the information could be from when they started operating around 2005/2006 through the present.

MR. HENRIKSEN: So if you exclude the Lynwood site, a site that hasn't taken material for ten years and a site that operated prior to the Part 1100 rules going into effect, the only groundwater monitoring data in the record shows absolutely no contamination; correct?

MR. SYLVESTER: I don't think you can take that data away, but I would agree with your statement. You know, the CCD facility, if it accepted CCD, just like these other facilities, and there were groundwater impacts.

MR. HENRIKSEN: Even though they last accepted CCDD prior to the Part 1100 rules came into effect.

MR. SYLVESTER: I don't think that makes any difference. They took CCDD. In fact, it's almost worse. You have here ten years later they're still impacting groundwater.

MR. HENRIKSEN: No further questions.

HEARING OFFICER TIPSORD: Any other questions?

Mr. Sylvester, I do have a question, and it goes to some arguments that the People made in the root docket here in R12-9 about federal law and the

definition of Clean Construction or Demolition Debris.

In Section 3.160 of the Act, the Environmental Protection Act, states that these items that we're dealing with that are regulated by Part 1100 are not waste, unless federal law says they are, and the Board found that in this case things regulated under 1100 are not waste because of the legislation.

Given the Attorney General's comments here again, which continue to talk to and ask that we almost treat that as inert waste, and given some of the press that we see from the Attorney General's Office, my question is, has the Attorney General's Office considered a legislative change?

MR. SYLVESTER: I couldn't speak to that. I'm only an environmental enforcement attorney. But I can tell you that inert waste is also considered CCDD, as you've probably imagined, that you've seen our testimony. It includes bricks, masonry, and concrete. It doesn't include asphalt, which makes it, in our position, more benign than CCDD.

And to answer your question, I don't have information on that.

HEARING OFFICER TIPSORD: Okay.

MR. SYLVESTER: Could I ask one

clarification, just to make sure? Did the Board say that federal law is consistent? Is that what you --

HEARING OFFICER TIPSORD: I'd have to go back and read the Opinion and Order again. We did address your argument. I don't have that Opinion and Order in front of me so -- but I know we did address that argument.

MR. SYLVESTER: I'm with you. The way you phrased it was different than my recollection.

HEARING OFFICER TIPSORD: Are there any other questions?

MR. TRAYLOR: I have a question. My name's Marvin Traylor with the Illinois Asphalt Pavement Association. Can I ask a question now?

HEARING OFFICER TIPSORD: Yes, absolutely.

MR. TRAYLOR: I guess I'm inquiring as to your level of knowledge of the difference between crude petroleum and asphalt cement.

MR. SYLVESTER: Asphalt cement? Or are you talking about the road material with the aggregate and asphalt?

MR. TRAYLOR: Do you know where gasoline comes from?

MR. SYLVESTER: Petroleum.

MR. TRAYLOR: Do you know where asphalt cement comes from?

MR. SYLVESTER: Petroleum.

MR. TRAYLOR: Do you know how you take a barrel of crude petroleum, and you break it down into the different volatiles that we sell -- to jet fuel, naphthalene, kerosene, diesel fuel, lubricating oils -- do you know what's left?

MR. SYLVESTER: Generally. You know, I'm not technically competent to testify to that -- to any of the specifics of the petroleum industry, no.

MR. TRAYLOR: A refinery takes crude petroleum and breaks it down into products that have a very high value, like gasoline, jet fuel, kerosene, naphthalene.

HEARING OFFICER TIPSORD: Excuse me. We need to have you sworn in.

MR. TRAYLOR: Yes.

(Witness sworn.)

MARVIN TRAYLOR, called as a witness herein, having been first duly sworn, testified as follows:

HEARING OFFICER TIPSORD: And you can stay

right where you. Once you start giving us facts, we need to have you sworn in.

MR. TRAYLOR: I'm trying to explain that when the oil comes out of the ground, and it's crude petroleum, that's what was on the Exxon Valdez that wrecked and ruined the bay, that product is taken to a refinery. It might be owned by Exxon, Shell, BP, Amoco, and so on. It's broken down into these elements, and the way they break it down is, they heat the product to a thousand degrees Fahrenheit, they put it under vacuum. Fumes come off of this stuff. They distill it, condense it, divide it into components for sale. What's left is asphalt cement, which is the glue that holds the rock and the sand that came out of these quarries together for asphalt roads. It is inert. It is non-leachable. There is nothing -- it's already been exposed to a thousand degree temperature in a vacuum.

So I have two studies that I shared with the Illinois EPA in my efforts to get asphalt pavement added to the Clean Construction Debris legislation, which actually got done in 1992. There are numerous other national studies that shows asphalt cement contains no PAHs, no PNAs. So it is just a commonly

known fact that asphalt cement is inert and not a threat to the groundwater, but it's not clear to me that the Attorney General's Office understands what asphalt cement is.

MR. SYLVESTER: Is that a question based on your testimony? Do I agree? Is there a question pending?

MR. TRAYLOR: I've just always wondered why in all of your concerns you list asphalt as the problem.

We also did a study -- the Illinois Asphalt Paving Association hired a USEPA approved laboratory out of Indianapolis called Heritage Research and coordinated sampling with the Illinois EPA and the Illinois Department of Transportation to see if there was any significant difference on leachate tests run between concrete, asphalt concrete pavements, asphalt pavements, the rock and the soil alongside the roads, and the answer was, there was no significant difference.

Those research documents have been given to Illinois EPA, and that was the basis upon which they added reclaimed asphalt pavements to the list of clean construction debris. So I'm just --

HEARING OFFICER TIPSORD: Do you have those studies for the Board?

MR. TRAYLOR: I have them with me today.

HEARING OFFICER TIPSORD: Could we have those copies for the Board for the record?

MR. TRAYLOR: I've got other copies.

HEARING OFFICER TIPSORD: The first document I've been handed has Attachment 15 at the top of it. It is by the Heritage Research Group, "Evaluation of RAP for the Use as Clean Fill," by Anthony J. Kriech, K-R-I-E-C-H. It's dated January 30, 1991.

If there's no objection, we will enter that as Exhibit 60. Seeing none, it is Exhibit 60.

(Exhibit Number 60 was marked for identification and admitted into evidence.)

The second one is "Leachability of Asphalt and Concrete Pavements," March 5, 1992, also by Anthony J. Kriech, K-R-I-E-C-H. This one has Attachment 16 at the top, and it's March 5, 1992.

If there's no objection, we'll mark that as Exhibit 61. Seeing none, it is Exhibit 61.

(Exhibit Number 101 was marked for identification and admitted into

evidence.)

MR. TRAYLOR: So am I still up?

HEARING OFFICER TIPSORD: Go ahead.

MR. TRAYLOR: I'd also like to perhaps leave you with a letter that I wrote in 1992, which addresses this issue and summarized some of the things that I just told you, about what asphalt cement is, and the fact that it's inert, and it's the end product. At room temperatures, it's a solid and inert.

I wrote this letter in 1992 because the Tribune ran a story, whose headlines are: "Dumping of Asphalt Stirs Up Water Fears." Okay? And then it goes on, and this is right after the Illinois EPA agreed in testimony to support a legislative change that added reclaimed asphalt pavement to the legislative definition of Clean Construction and Demolition Debris, and I have the newspaper article here. And the letter goes on to talk about the misunderstandings about what asphalt cement is, and the fact that asphalt -- asphalt pavement is basically used to line the bottom of drinking reservoirs in southern California, because without that lining in there, the soil is so porous that they wouldn't retain

the water.

It goes on to say that the fish hatcheries in Oregon, whose fry are extremely sensitive to contaminants in the water, are lined with asphalt mixtures.

So I would like to leave a copy of this letter because it's pretty much layman's terms as to why reclaimed asphalt pavement shouldn't have any effect on drinking waters, as opposed to those two documents which are extremely highly technical chemical laboratory analyses.

MR. HENRIKSEN: And let me just -- the letter is addressed to Senator Doris Karpiel, who is the sponsor of legislation that added reclaimed asphalt pavement to the definition of CCDD.

MR. TRAYLOR: And it also copied Representative William Petersen, Representative Larry Winland, who sponsored the legislation, Representative Lee Daniels, Senator Pate Phillip, Ms. Mary Gaede, and Mr. Kirk Brown.

HEARING OFFICER TIPSORD: I would also note that Senator Karpiel was a former Board member.

MR. HENRIKSEN: Correct.

HEARING OFFICER TIPSORD: If there's no

objection, we will mark the November 4th, 1992 letter to the Honorable Doris Karpiel from the Illinois Asphalt Pavement Association, specifically Mr. Traylor, as Exhibit Number 62. Seeing none, it is Exhibit 62.

(Exhibit Number 62 was marked for identification and admitted into evidence.)

Were there any other questions for Mr. Sylvester?

MR. SYLVESTER: I have one other statement to make.

During previous testimony, we supplied the Lynwood results, and during examination by Mr. Huff, he identified PNAs and he asked me if the PNAs could be from asphalt, the source of PNAs, so I'm not the only person in this room that thought that same thing. Mr. Huff is an engineer, so there you have it.

HEARING OFFICER TIPSORD: Thank you, Mr. Sylvester.

It's 12:30. I think we'll take a short break. We only have the IEPA, and I think Mr. Henriksen has indicated to me that he would like to present some testimony as well.

So if it's all right with everyone, let's take about a 15-minute break. If you need a snack, there's a vending machine, and let's come back in and power through so those of us from Chicago can go home today.

(A fifteen-minute recess was taken.)

(Following are introductions from IEPA witnesses.)

MR. MORROW: My name is Les Morrow.

MR. CLAY: Doug Clay.

MR. WIGHT: I'm Mark Wight, W-I-G-H-T.

MS. FLOWERS: Stephanie Flowers.

MR. LIEBMAN: Chris Liebman.

MR. COBB: Rick Cobb, C-O-B-B.

MS. BLAKE MYERS: Terri Blake Myers.

MR. NIGHTINGALE: Steve Nightingale.

MR. HORNSHAW: Tom Hornshaw.

HEARING OFFICER TIPSORD: Mr. Wight, do you have a clean copy of your testimony?

MR. WIGHT: Yes, I do. Do you need just one?

HEARING OFFICER TIPSORD: Just one. If there's no objection, we will mark the Agency's Prefiled Testimony as Exhibit 63. Seeing none, it's

Exhibit 63.

(Exhibit Number 63 was marked for identification and admitted into evidence.)

MR. WIGHT: We have an additional document that is a correction to some of the data that was presented in Exhibit 63.

HEARING OFFICER TIPSORD: Okay. And this one, we'll need at least four or five copies.

MR. WIGHT: Okay. I'll explain briefly what this is and why we're submitting this.

In our response to the Board's Question 3A, the question was about the prevalence of the 620 parameters in CCDD and uncontaminated soil materials, and we've presented some data in response to Question 3A from a sampling exercise that was done in the fall of 2012 at twelve CCDD fill operations, and some of the data summary that we've presented was erroneous, so what I've done is prepare a corrective document that shows what the data should have been. There are about five corrections in that data, so I'd like to have that introduced as an exhibit.

HEARING OFFICER TIPSORD: All right. If there's no objection, we'll mark Correction to

Illinois Environmental Protection Agency's Responses to Prefiled Question No. 3A as Exhibit 64. Seeing none, it's Exhibit 64.

(Exhibit Number 64 was marked for identification and admitted into evidence.)

MR. WIGHT: I'll also mention that there are some additional copies of this correction on the back table, so anybody who would like to pick one up can get one. I'll have a few more here. I'll just put these on a stack, and there also was a small stack of copies of the Agency's Prefiled Response, and I inserted one of those in each of those copies, so anyone who picked up the larger copies of the Agency Responses already has one of these.

HEARING OFFICER TIPSORD: Then, Mr. Wight, did anyone want to present a summary of the testimony?

MR. WIGHT: I don't think we have a summary of testimony. We responded to pretty much everything we had an opinion on, and it became quite a lengthy document, so I don't think we'll attempt that, but we would like to make just a brief opening statement.

HEARING OFFICER TIPSORD: Okay.

(IEPA Witnesses sworn.)

IEPA WITNESSES LES MORROW, DOUG CLAY, CHRIS LIEBMAN, RICHARD COBB, TERRI BLAKE MYERS, STEVE NIGHTINGALE and THOMAS HORNSHAW, called as witnesses herein, having been first duly sworn, testified as follows:

MR. WIGHT: And Doug Clay.

MR. CLAY: Doug Clay with the Illinois EPA, and as Mark said, you know, we did respond to the questions as best we could, and we'd be happy to respond to any additional questions orally.

However, based on some of the recent testimony, I just wanted to clarify that the Agency, and what we believe is the need for groundwater monitoring as part of CCDD fill operations -- CCDD facilities and uncontaminated soil fill operations has nothing to do with the fact that asphalt is included in the definition of CCDD. It's solely because of the soil that is part of CCDD and the contaminants that would be carried by that soil. So that's the point that I wanted to clarify.

HEARING OFFICER TIPSORD: Okay. With that, are there any questions for the IEPA?

Mr. Huff, we'll start with you.

MR. HUFF: So I think I'd like to talk about the Lynwood site results first, and if I heard Mr. Sylvester correctly, the agreement that's been reached is they basically have to meet the 620 standard for four consecutive samplings.

So if you look at these results, you have nine out of nine wells that you received iron and manganese in all nine of those.

Let's assume that you see the exact same thing over the next three rounds. What are the remedial options that they could look at there in the Agency's mind?

MR. NIGHTINGALE: Well, I think the remedial options would really be based on the site specific conditions. I mean, we couldn't -- pump-and-treat would be one option, of course, but the type of treatment would be dependent upon the type of contamination that there was.

MR. HUFF: Let's focus on the iron and the manganese.

MR. NIGHTINGALE: Okay. Are you asking -- I guess it would be dependent upon where that water was going to, if we are pumping it up, or if they would discharging into the stream, the limitations would be

dependent upon where it's going.

MR. HUFF: Well, you have it in nine out of nine wells. I assume that these -- Lynwood, these nine wells are around the perimeter of this site.

MR. NIGHTINGALE: As far as -- I don't really have any background on the Lynwood.

MR. WIGHT: If I could intervene just momentarily. None of us were involved in the enforcement action, and we're not sure what the consent order provides for at the Lynwood facility. None of these people were involved in the enforcement case directly. So I don't think we can answer specific questions about Lynwood.

The data that we presented was submitted to the Agency from field operations staff that are interacting on that site, and those folks are not here to testify today. The data was submitted to Paul Purseglove, who also has been unable to attend today. So we really can't speak to the specifics of the Lynwood site.

We would be able to answer some additional questions in post-hearing comments, if that would be acceptable.

MR. HUFF: Well, given that Mr. Sylvester

said technically he couldn't answer any of these questions, I think that would be absolutely appropriate. So yes, please.

MR. WIGHT: Okay. It may be that the corrective action has not been determined at this point. It may be that they're just in the monitoring stage to determine what's going on.

MR. HUFF: I'm sure that's the case. My question is, what possible remedial options are there out there?

So we've established one from Mr. Nightingale, pump-and-treat. I was kind of looking through this list here of what other options you'd have for iron and manganese.

MR. WIGHT: So the question is generic, essentially. It wouldn't have to be iron -- or what would be a solution for any facility.

MR. HUFF: With iron and manganese, correct.

So continuing with Lynwood then, what was the development of these wells? How deep are they screened? Can you answer those two questions?

MR. CLAY: Once again, you know, we didn't design those. Our field staff was the geologist that was part of that and part of that approval. We can

provide that information in the post-hearing comments.

MR. HUFF: Which are the upgradient monitoring wells; that would be another question.

And then you noted in the Field Inspector's Report that Monitoring Well 8 contains wood debris, stained soil, items that I guess I wouldn't expect to be in a CCDD and uncontaminated soil fill.

In the Field Biologist's Report, he recommends to the Agency's geologists that the samples be collected on a filtered basis going forward. Is that basically consistent with Agency policy?

MS. BLAKE MYERS: Again, we don't know the specifics of that particular program and the groundwater monitoring specifics. It depends on what they are comparing those results to. Typically, you would collect totals to compare with 620 and then use dissolved for any specific analysis.

MR. COBB: 620 parameters were based on totals, but the methods and incorporations by reference allow you to use either approach.

MR. HUFF: Either approach being you couldn't take those out?

MR. COBB: Depending on what the program calls for. So if you need to do statistics, then you

need to do them --

MR. HUFF: So in the CCDD program, if I understood Mr. Sylvester right in his testimony and your Response to Prefiled Questions, they had violations of the 620 standards in all nine monitoring wells here, and they used total metals. So am I -- is it, then, the Agency position that total metals is what needs to be tested for CCDD?

MR. COBB: Once again, I have no knowledge about this particular case. We'll have to follow up in questions. We did respond to that, I believe, in answering the Board's prefiled questions.

MR. HUFF: Well, I asked the question again because I didn't understand the response.

So can you use the dissolved metals in the CCDD program to establish --

MR. COBB: You have to do both. The groundwater standards are based on totals, but if you're doing statistics, you would also do dissolved, just like I answered in the --

MR. HUFF: And I still don't understand that. So my question is, I do total, and then that determines that I have an exceedance, if it's over those numbers; correct?

MR. COBB: The standards apply also excepting of natural causes, so that's part of your determination, too.

MR. HUFF: Would sediment in the sample be deemed natural causes because the well couldn't be developed sufficiently to get rid of the sediment?

MS. BLAKE MYERS: Not necessarily. I mean, that would be a case-by-case basis.

MR. HUFF: How does one establish that kind of case-by-case basis at CCDD facilities?

MS. BLAKE MYERS: Well, just like you would with any groundwater monitoring well. A sample would have to be made to remove the sediment and redevelop the well.

MR. HUFF: And your experience is that in wells being in silty clay soils, you can remove that sediment sufficiently to achieve that?

MS. BLAKE MYERS: You know, I can't make an across-the-board statement in regards to that. I think, you know, again, that's going to depend on the site and specific geology.

MR. HUFF: So there's some geologies that you can't get that sediment level sufficiently low?

MS. BLAKE MYERS: In my experience, no.

MR. HUFF: Really.

MR. RAO: I have a follow-up question, based on the Agency's response about this issue of dissolved metals.

In response to Board Question 3C, the Agency states that compliance determination may be made by following the incorporated analytical methods under 620.125. That provides for both total and dissolved analysis.

Please clarify whether Agency will allow compliance determinations to be made on the basis of dissolved metal analyses, if they are conducted in accordance with the analytical methods incorporated by reference.

MR. COBB: To do those statistics, you would follow those analytical appropriations by reference, including the Practical Guide for Groundwater Sample Collection, which is also incorporated by reference in 620.125.

MR. RAO: And can you elaborate a little bit more about what it means to do the statistics? Is it part of the compliance monitoring?

MS. BLAKE MYERS: In my experience, yes.

MR. NIGHTINGALE: If they were doing their

initial sampling, and if they initially determined that they had an exceedance, they would be required to notify us, and that would be based on the total amount. It wouldn't be based on the dissolved.

MR. RAO: So there may be an initial sample, a total sample, that if it's above the standards, and then if they could go back and do additional samples, would that be based on dissolved metals?

MR. NIGHTINGALE: For the statistical approach, yes, it would be based on dissolved.

MR. RAO: And that's acceptable to the Agency?

MR. NIGHTINGALE: It would be acceptable to us, but I don't think it would be necessary because if they would -- if they didn't -- well, if they did exceed it, yeah, that would probably be their first approach, they would do the statistic analysis to show that it was not significantly increased above that.

MR. HUFF: And you're talking about dissolved metal at that point --

MR. NIGHTINGALE: Yes.

MR. HUFF: -- independent of the total result.

MR. RAO: Thank you.

MR. HUFF: Response to Question 3A lists the results of some metals that were found at CCDD sites in some of the materials that were there.

On iron, you found levels as high as 29,700 versus a MAC of 15,000. What is the naturally occurring range of iron and uncontaminated soil in Illinois?

MR. CLAY: I don't know.

MR. HUFF: Same question with aluminum?

MR. MORROW: I'm Mr. Morrow, and the aluminum value and the iron value are based on a median.

MR. HUFF: A median value.

MR. MORROW: For background concentrations.

MR. HUFF: So that would be 50 percent of all those samplings --

HEARING OFFICER TIPSORD: Mr. Huff, let him finish, please. Go ahead, Mr. Morrow.

MR. MORROW: That's based on the median value for the entire State of Illinois.

We segregated MSA counties, metropolitan statistical areas, and non-MSA values for our counties, so we have two background values for each one of those methods.

MR. HUFF: So 50 percent of the soil in Illinois would exceed the iron MAC value; is that correct?

MR. MORROW: Roughly, yes.

MR. HUFF: Roughly. Same question with aluminum?

MR. MORROW: Correct.

MR. HUFF: How about magnesium?

MR. MORROW: Correct.

MR. HUFF: And manganese?

MR. MORROW: Same.

MR. HUFF: Same. And hexavalent chrome versus total chrome MAC, we have a MAC value of 21 milligrams per kilogram total chromium. What percentage of the state naturally exceeds that 21 milligram per kilogram?

MR. MORROW: I couldn't say.

MR. HUFF: Could the Agency get back to us on that? Because you have the statistical data when those numbers were put into TACO.

MR. MORROW: Certainly.

MR. HUFF: Thank you.

And you also found a pH of 10.2 in, I believe, one of sites that you found, and could that

be due to the concrete that was also contained in the CCDD facility?

MR. CLAY: I don't know what it was due to.

MR. HUFF: Page 17 of the Agency's response, end of the first paragraph, it says, quote: If after completion of the corrective action under the GMZ the groundwater quality has not been restored, the concentrations determined by groundwater monitoring may become a new standard within the GMZ.

Could you expand on that, what you anticipate the process is going to be? A CCDD facilities goes out and samples, they find an exceedance, let's say, of iron, and they report that to the Agency. They do their verification sample and it has iron in there. What, then, are the next steps?

MR. NIGHTINGALE: Well, the next step would be that they would have -- generally, they'd have 120 days to submit to us their Corrective Action Plan and to also have it implemented within 120 days.

MR. HUFF: So you would expect within 120 days, if they chose pump-and-treat, that they would install pumping wells, get their MPDS permit or pretreatment permit, and be operational?

MR. NIGHTINGALE: Well, they would have to

begin corrective action of the component. So I would imagine that the way that it's written is, yeah, they would have to have everything done and in place, or at least started, I guess.

MR. HUFF: And then where does the GMZ come into play, then, in that sentence? After they pump for a while and they aren't meeting the iron number, then when does the GMZ come into play?

MR. NIGHTINGALE: Well, I think the GMZ would come into place along with the corrective action. You would apply for the GMZ to give you relief from the limitations during your corrective action.

MS. BLAKE MYERS: And it also would give you relief from enforcement.

MR. COBB: Let me mention one other thing, too, Mr. Huff. You're using the example of iron. The Board's groundwater quality standards do apply subject to natural causes, so if the exceedance was due to iron, it would be coming from the unit, not naturally occurring. I.

Just wanted to make sure that was clear for the record.

MR. HUFF: I didn't understand that,

Mr. Cobb. I'm sorry.

So to go back to your example in Lynwood here where we have nine out of nine wells --

MR. COBB: I can't answer anything on Lynwood.

MR. HUFF: So you have a site that has high iron in their monitoring wells. I go out, I do a dissolved, and it's all dissolved because you've got reducing conditions there, what is the next step, then, for the CCDD facility?

MR. COBB: The Board's groundwater quality standards apply subject to natural causes, so if it's not due to natural causes, then your next approach would be to come in and apply for a GMZ and look at your corrective action options.

And then after applying those, then, you know, if you got to a certain point, under Section 620.450, the alternative standards, then you would be looking at it if you'd minimize the exceedance to the extent practicable or all those kind of reasonable things that you do under the GMZ.

MR. HUFF: I was wanting to establish that it's naturally occurring and not due to the fill material that has been placed in that quarry.

MR. COBB: I believe the rules allow you to establish background, what's coming in, what's upgradient of your site, what's downgradient of the site. So that's certainly one of the things you would look at is what's the chemistry coming in and what's the chemistry going out.

MR. HUFF: We've had the --

MR. COBB: And that could be anthropogenic, or that could be in some cases naturally occurring. More than likely, you may not have a lot of other anthropogenic sources of iron, you might, but one would expect that certain levels would be naturally occurring.

MR. HUFF: We've had testimony over the proceedings here that a lot of times some of these quarries when they turn off the pumping, it becomes more of a radial flow, so it's not that easy to establish upgradient on background concentrations.

So I'm back then to the question, how does one establish that this is a background concentration in that scenario where they put in four, five, eight wells, and just like Lynwood, they all show elevated iron.

MR. COBB: I believe there's also an

alternative corrective action, if it can't be a provision that shows that you're not -- if you're not the source, then maybe that's the scenario you're describing where you just can't figure it out. You can't figure out background, it's not you, so you do have an opportunity to make an alternative corrective action determination.

MR. HUFF: What kind of data would they need in order to come in and satisfy the Agency on that?

MS. BLAKE MYERS: Typically, you're going to have the groundwater monitoring; you're going to have, you know, what alternative sources it could be.

There are times that in other programs, for example, in RCRA, background doesn't have to be true upgradient. It could be unaffected by the facility. You can find an area of background that, you know, under radial flow is indicative of that area. It would have to be close enough.

I mean, there are a lot of different ways that you could go about doing that, and it would be site specific.

MR. HUFF: So far more extensive than the first quarter of sampling when they first put these monitoring wells in. I mean, it would require a fair

amount of additional work to investigate.

MS. BLAKE MYERS: Potentially, but potentially not.

MR. HUFF: Moving on to page 19, PC #59 at 4. The Agency notes: With no intervention other than groundwater use prohibition, the offending materials already within the fill operations would continue to leach contamination, and the resulting groundwater contamination plumes would continue to migrate and expand until reaching some sort of equilibrium at an unknown time and distance.

And we're referring here, I believe, to the question about some kind of grandfather idea that I had floated.

My question is, wouldn't the same statement be true if the quarries elected basically to vacate this marketplace, where to the extent that if there's a preexisting condition for material that they took in there, possibly improperly over the last umpteen years since CCDD material was brought into these fills, that's one of the options they have. They can walk away and not put these monitoring wells in, and the Agency's concern is then still spot on point. You're not going to have any monitoring data to say there is

an impact; is that correct?

MR. CLAY: The -- what happened at these mines, quarries, or other excavations that are regulated under 1100, prior to the 1100 rules going into place, it does not alleviate or excuse contamination that may have been put in place.

So, in other words, you can't just close a facility and say, I'm not liable. If you cause groundwater contamination, whatever was put in there, then conceivably you could be responsible for that.

I mean, the standard, prior to this current rulemaking, there were no numbers, but the standard was uncontaminated CCDD going into these facilities. So as far as we're concerned, there shouldn't be any grandfathering of contaminated materials being put into those facilities.

MR. HUFF: Page 20, Response to Question Number 12, the Agency writes: However, there may be other options to a pump-and-treat remediation, such as hooking up existing contaminated or threatened potable water systems to alternative safe and reliable sources of drinking water and adopting groundwater use prohibitions to restrict new drinking water uses.

So that one kind of confuses me, also. If

we assume that there are no public or private water supply wells that are impacted by CCDD, but their groundwater monitoring program shows an exceedance of 620, can they go directly to a groundwater use restriction to prevent new wells from that area?

MR. COBB: Number one, the Board's groundwater classification system in Class I applies to existing and potential uses of groundwater as a potable resource of groundwater. So right off the bat, your example only includes existing uses.

MR. HUFF: Well, but that --

MR. COBB: At least, that's the way you stated it.

MR. HUFF: If I put in a prohibition for new monitoring -- new drinking water wells inside the area of impact.

MR. COBB: That would certainly not be following the preventive nature of the Illinois Groundwater Protection Act, nor would it follow Section 12(a) that you can't threaten the preclusion of a use, and a preclusion of the use can include things even such as taste and odor. I know you're kind of stating no problem with chlorides, TDFs, sulfates. You know, those could threaten a preclusion

of a use, especially if it's potentially going to be used by a private well owner out there, they don't treat for that nasty stinking water like that.

MR. HUFF: Mr. Cobb, first of all, my statement on those was those compounds aren't related to uncontaminated soil and concrete. It wasn't to minimize those. This is not just -- we're not taking everything in there. It's just not waste that we're taking in here. So I go back and I want to read this sentence again to you.

However, there may be other options to a pump-and-treat remediation, such as hooking up existing contaminated or threatened potable water systems to alternative safe and reliable sources of drinking water and adopting groundwater use prohibitions to restrict new drinking water uses.

MR. COBB: The intent of the GMZ is to mitigate, not just write off groundwater. So, but, yeah, we don't expect the impossible to happen, and that's why Section 620.450 is written the way it is that, you know, you may not be able to get back to the miracle, so you may get at some level where you've done all you can mitigation-wise, and so that's the way the GMZ is written, to mitigate an impairment, not

just right upfront put a restrictive use ordinance in and automatically write the groundwater off.

MR. HUFF: So if I keep going back to the sentence: And adopting groundwater use prohibitions.

MR. COBB: "And." That means in condition with other methods.

MR. HUFF: Well, and the other methods were to basically take any threatened or impacted potable water systems off.

MR. COBB: Sure, there's other ways. You could put a cap on it, you could remove it, you could do a lot of different things. Those are all site specific and based on the approved corrective action that the Agency would be looking at.

MR. HUFF: What I'm trying to understand is the last part of that sentence, that "adopting groundwater use prohibitions to restrict new drinking water uses."

MR. COBB: Let me explain it one more time. Number one, you'd look at all options for mitigating the impairment. That would be the very last thing we would look at, and that's why it says "and" we would expect some other type of mitigative approach. But then at the very last, if you "all bets are off" then

that might be we don't expect the impossible, and I think the Section 620.450 is very clear on that, that you have other options in terms of obtaining the standards, and that could be one under a certain set of conditions.

So it's an "and," not just a statement by itself.

MR. HUFF: The "and", if you read the sentence, is an alternative to pump-and-treat, such as taking existing and potentially impacted groundwater.

MR. COBB: Let me go back to that. When you do pump-and-treat, sometimes you reach an acetonic level where you can't go down any farther, and that's what I'm saying. Once again, you may have gone as far as you can with that mitigative effect, and then to assure the threat of preclusion of use off site, then that is where you may come in with that "and."

MR. WIGHT: If I might just add momentarily, 620.450 --

MR. HUFF: Excuse me. Have you been sworn in?

MR. WIGHT: Well, I was going to read the law here on that. I'm not testifying as to facts.

620.450, it is titled, Alternative

Groundwater Quality Standards. So this is part of your corrective action process, and as Rick said, it's meant to improve groundwater quality.

It says, under Subsection (a)(4): After completion of a corrective action, as described in Section 620.250(a), the standard for such released chemical constituent is (a) the standard is set forth for the applicable -- I'm paraphrasing here -- (a) the standard is set forth for the applicable groundwater quality standard under 620, whether that's 410, 420, 430 or 440, or the concentration is determined by groundwater monitoring if such concentration exceeds the standard for the appropriate class set forth in Part 620 and, to the extent practical, the exceedance has been minimized and beneficial use as appropriate for the class of groundwater has been returned, and any threat to the public health or the environment has been minimized.

MR. COBB: So under that Board standard, if you can't get down to that with the mitigation, like a pump-and-treat, or the cover, or whatever, then to further meet the standard, we would consider a restricted use ordinance; not at the beginning.

MR. HUFF: Thank you.

HEARING OFFICER TIPSORD: Mr. Henriksen?

MR. HENRIKSEN: Yes. I have some questions.

Going to the first page of your Responses, response to question one, it stated that: Part 1100 regulations and the proposed Subpart G groundwater monitoring regulations generally apply to all excavations that are CCDD fill operations that are required to be permitted pursuant to Section 22.51 of the Act, and it goes on to say: However, Section 1100.101(b)(2) and (b)(3) contain exclusions from the Part 1100 regulations for some excavations accepting CCDD as fill material.

I guess I'll direct my questions to Mr. Clay, if I could.

So reading this, then, as Part 1100 rules, therefore, the proposed Subpart G groundwater monitoring rules would only apply to permitted CCDD sites; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: I read your -- I went on your website yesterday and I counted that there are 69 permitted CCDD sites. Is that about accurate?

MR. CLAY: I believe there are 49 permitted CCDD and 18 uncontaminated soil fill operations.

That's the number that we have. We can look at that. Total is 67.

MR. HENRIKSEN: Thank you. I was just going off your website.

So total of -- so 49 CCDD sites that are permitted, and you said 18 permitted soil fill operations.

MR. CLAY: Well, notified, yeah.

MR. HENRIKSEN: Thank you.

And you stated there are exclusions from the Part 1100 regulations for some excavations accepting the CCDD as fill material; correct?

MR. CLAY: Yes.

MR. HENRIKSEN: Now, these are in addition to a farm field or other naturally occurring depression that CCDD can be deposited into without permits by your agency; correct?

MR. CLAY: Well, what I was referring to was the commonly referred to as the IDOT exemption for filling a former borrow pit, for example.

MR. HENRIKSEN: We'll get to that, but I just want to put this into context.

There are -- currently people can dispose of CCDD or clean soil and not be regulated by the EPA in

a farm field with a naturally occurring depression, ravine; correct?

MR. CLAY: Yeah, as long as it's not above the surrounding topography.

MR. HENRIKSEN: So this borrow pit you're talking about, this is something in addition to what's been -- you know, in addition to farm fields or ravines that takes CCDDs; correct?

MR. CLAY: Yeah, it would be a low lying area.

MR. HENRIKSEN: I'd like to put a copy of the Agreed Order into the record, and so I'll give copies to the EPA so we'll be on the same page here.

HEARING OFFICER TIPSORD: Okay.

MR. HENRIKSEN: What I'd like to discuss now --

HEARING OFFICER TIPSORD: Before you begin, this is Memorandum and Order. It's number 11-MR-280, Circuit Court of Third Judicial District, Madison County, Illinois, and the date is February 15, 2013.

If there is no objection, we'll mark this as Exhibit 65. Seeing none, we'll mark this as Exhibit 65.

(Exhibit Number 65 was marked for

identification and admitted into evidence.)

MR. HENRIKSEN: I made extra copies so you could share it. I'm going to refer to this as the Maclair Asphalt case.

MR. CLAY: John, before you do that, can I make a clarification statement?

MR. HENRIKSEN: You certainly may, Mr. Clay.

MR. CLAY: The exemption I believe you were referring to when you talked about low lying areas in farm fields is in Section 3.160(b) of the Environmental Protection Act, and it does allow for those uses, and there are a number of conditions they have to meet as part of that, such as not going above the surrounding elevation.

MR. HENRIKSEN: But they're not under a permit body by your Agency; correct?

MR. CLAY: They're not under permit, correct.

MR. HENRIKSEN: Or they don't have to register with your Agency.

MR. CLAY: That's correct.

MR. HENRIKSEN: Thank you.

Now, I've handed you the Memorandum and

Order for the Maclair Asphalt Sales case, and it refers to a borrow pit. You know, just -- and we had a discussion about this at your office.

Let's please, if you would, outline, you know, what this particular enforcement action is about that is referenced in this particular order that's part of the record.

MR. CLAY: I believe this particular Maclair Asphalt Case involved our field staff noticing that an area -- I think it was an area had been filled, a former borrow pit had been filled or partially filled, and they went out, did an inspection, and at the time believed there was material taken that was not CCDD, and so a violation notice was submitted.

Upon, you know, the further investigation, it was determined that it was CCDD, and that as part of the case, that it was IDOT was the one that had put the material there and that it did fall under the IDOT exemption requiring a permit for this type of facility.

Further, there were depositions taken, I believe, from the IDOT engineers identifying that the material was uncontaminated.

MR. HENRIKSEN: Now, so, given this case,

these -- the exceptions that you refer to from your Agency's regulation would now extend to borrow pits approved by IDOT or counties or municipalities, to approve the CCDD for road projects; correct?

MR. CLAY: Well, I think that's what the exemption specifically is for, is for IDOT, counties or municipalities, and there are other conditions as part of them using these borrow pits for that material.

MR. HENRIKSEN: That's what this case makes clear. Because prior to this case, we were under the understanding, and the EPA was under the understanding that the IDOT exemption applied only to CCDD and clean soil disposed of on site; correct?

MR. CLAY: Yes. There was some confusion by the Agency as far as what that application was.

MR. HENRIKSEN: But since the Maclair Asphalt case and since the work you all did to understand what they were doing, borrow pit operators can take CCDD from an IDOT job or a county job or a municipal job, and not have to get a permit from you all.

MR. CLAY: That's correct, as long as they meet other criteria, such as the material needs to be

uncontaminated, they need to have documentation of that. They need to -- you know, they should keep that material on site, that documentation on site, and an engineer still has to -- a professional engineer still has to sign off. Not a professional engineer, an engineer. So an IDOT, municipal, or county engineer would have to sign off on that.

MR. HENRIKSEN: But the people that might operate one of those borrow pits, they're not required to have a PID or FID on site to see if there's any VOCs in that material; correct?

MR. CLAY: That's correct.

MR. HENRIKSEN: And the people at the site are not required to collect your LPC 662s or 663s; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: And once these are filled and the road job's over, the proposed groundwater monitoring rules that we're talking about would not apply to these particular holes in the ground; correct?

MR. CLAY: That's correct.

MR. HENRIKSEN: And there are borrow pits -- I mean, we've all -- you've seen borrow pits in your

long career as an esteemed worker for the Illinois Environmental Protection Agency; correct?

MR. CLAY: Yes, just driving along the highway.

MR. HENRIKSEN: There are borrow pits everywhere in this state when you need to create an embankment to put a road over a highway; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: Would you say there's hundreds? Do you have any idea of how many of these structures have been created over the years in this state?

MR. CLAY: I have no idea about how many.

MR. HENRIKSEN: Would you be surprised to learn that the IDOT approves roughly 200 of these sites, new borrow pits, every year?

MR. CLAY: I was not aware of that. I really hadn't thought about it.

MR. HENRIKSEN: But none of these sites are required to be permitted by your agency.

MR. CLAY: That's true.

MR. HENRIKSEN: And you don't really know what's going in there, other than what, you hope, someone tells you.

MR. CLAY: Well, we're relying on the -- like you said, the IDOT engineer, the county engineer, or the municipal engineer, and I might point out that those -- that exemption for those borrow pits is a statutory exemption. It wasn't something the Agency proposed.

MR. HENRIKSEN: Right. I just want to just make it clear, or at least to our understanding, these groundwater monitoring rules that would apply to these 49 CCDD permitted sites, however many there are in the next year or so, those rules would not apply to these many borrow pits that could take this material; correct?

MR. CLAY: They would not apply to those.

MR. HENRIKSEN: Thank you. Going to page 9 of --

HEARING OFFICER TIPSORD: Mr. Henriksen, before you move along too far, I believe Ms. Glosser has a follow-up question.

MR. HENRIKSEN: Oh, sorry.

MS. GLOSSER: I believe it's related to the same question.

Now that I understand this case, the Maclair Asphalt, you may not know the answer to this question,

but do you know how many DOT only -- or maybe I should say -- transportation-related sites there are in the state right now? Do you know how many there are?

MR. CLAY: The borrow pit types?

MS. GLOSSER: The borrow pit types.

MR. CLAY: No, I do not.

MR. GLOSSER: In your response to the question that I raised, you said that one of the reasons why those sites were exempted, why they're statutorily exempted, were due to geologic conditions; and so I'm really curious whether or not a statewide assessment has been done of these sites to understand the geology of the transportation-only related sites. I mean, do we know what the geology is of these sites to actually know they're different from quarries and other excavations that require a CCDD permit?

MR. CLAY: What are you referring to as far as --

MR. GLOSSER: These are your questions and responses on pages 1 through 8 of the questions that IEPA asked about these exemptions, and you cited geologic differences.

MR. CLAY: Could you give me one occasion?

MR. GLOSSER: On page 3, for example, it was

actually repeated various times, IEP Response: Geologic differences aside, the primary blah, blah, blah.

So geologic differences were cited multiple times as a reason why these sites could be exempted, and I don't understand what the geology is, and I'm hoping that there is a set of data somewhere that shows what the geology is of these sites, as compared to quarries and other excavations, that would warrant exempting them.

MR. CLAY: There's not a study or anything we did. What we were trying to do is respond to the question above, which is what prevents CCDD or other materials from IDOT projects that are dumped into excavations and causing an exceedance of Class I groundwater quality standards, Illinois Administrative Code 620.410.

I'm simply stating there that the -- other than geological differences aside -- in other words, the geology may prevent it from contaminating groundwater, but other than that, there is a statutory exemption.

MS. GLOSSER: Well, I understand the statutory exemption. I was just concerned about

citing the -- I was wondering what information there was to support the statement that there were geologic differences that -- I assume there would be some study or some report or something to say we've examined this, and geologic conditions would warrant an exemption of these facilities. But if there's not, then that's fine.

MR. WIGHT: There's not. It's just an abundance of caution to say those factors aside, because we don't know what those factors are.

MR. COBB: It's because your question used Class I, which is based on certain geologic knowledge, and exactly -- in other words, you look at the Board's groundwater classification system, Class I, it's all based on geologic information, and since we don't know that, geologic differences aside, it's statutory. In other words, it might be Class II, or it might be -- we don't know. So it's just the way the question was written.

MS. GLOSSER: Okay.

MR. COBB: Because Class I is based on geology, which would assume that you had all the data there and every case known, it was Class I when, in fact, we don't.

MR. GLOSSER: Okay.

Well, I have another question related to the same topic, and that's, another reason that was given in the response for exempting these sites from accepting materials from DOT counties, municipalities, and townships, is that DOT has its own procedures and engineers, which I understand they do, to implement their own procedures, as opposed to going through IEPA.

Do you know whether IDOT staff implements these procedures, then, for county, municipal, and township projects as well, or are the townships responsible for doing their own testing and their own methods before they can deposit the material?

MR. CLAY: It's my understanding that they are -- they follow the IDOT specifications, the counties and the municipalities.

MR. GLOSSER: And townships.

MR. CLAY: And townships.

MS. GLOSSER: And we assume that they have the professional staff, the engineers, etc., to do these?

I mean, I know that statutory exemption is nothing that you can really explain too much, but I'm

just trying to figure out how this huge number or this huge class of material gets exempted, particularly when I hear conversation from people today, often times what gets referenced as being put into permitted CCDD sites is highway construction materials; and yet then you end up discovering that these can actually go lots of other places that are not permitted or not regulated in any way at all, except by DOT doing their procedures.

I was just concerned. I'm just concerned about how they get to be exempted.

Another question, IEPA notes that transportation-related excavations are exempt, apply only to CCDD facilities, but the exemption was extended by EPA to the uncontaminated soil fill operations as well to maintain consistency with DOT operations, and I'm just concerned that given the concerns that have been raised about the potential for groundwater contamination, particularly from soils, can you explain and provide other information about why that exemption was extended to soil fill operations?

MR. CLAY: Well, again, to be consistent, because putting the same type of groundwater

monitoring and other conditions for uncontaminated soil fill operations, the statutory exemption, at the time there was no -- there wasn't a definition of a contaminated soil fill operation. It didn't exist.

So to be consistent, the exemption from being regulated under 1100, we thought only made sense to extend that exemption to uncontaminated soil fill operations.

MR. GLOSSER: Do you think another way of being consistent might have been to extend the same protection to soil fill operations, given the concerns raised about soil going into quarries and other excavations? That's another way of being consistent.

MR. CLAY: Same protection. I mean --

MS. GLOSSER: I mean, if you extended the same protections, the same regulations to soil going into DOT-related sites, that would be being consistent with the concerns that you're having with soils going into quarries.

MR. WIGHT: Do you mean adding groundwater monitoring requirements?

MS. GLOSSER: Well, what you've extended, the soil fill operations apparently are not exempted statutorily. That's a decision that EPA made. So

another way of being consistent would be to say, we're really concerned mostly or primarily about soils, and so we're going to apply these same regulations to these soil sites that have DOT material as we would the ones that are going into quarries because we are concerned about soils, so we are going to be consistent about soils, not the process.

MS. FLOWERS: Soil is a component, though, of CCDD. The soil is a component of CCDD, so if you just threw some concrete in --

MS. GLOSSER: Well, I understand that, but there are soil-only sites, I mean, that only take soils, so I just was wondering why we didn't extend these regulations to those sites because we're concerned about soils.

Just an observation, and that's my last question.

MR. HENRIKSEN: Speaking about what IDOT requires, are you aware of what IDOT requires before they will allow material to go in a borrow pit?

MR. CLAY: It's been a while but, I mean, I've read the specification that IDOT has. I mean, they do sampling. They have extensive specifications in what they do and, you know, investigating whether

there's contamination, and then whether or not it can go into one of these facilities. I can't speak specifically to what that is, though.

MR. HENRIKSEN: But those requirements, those due diligence requirements or upfront requirements, that doesn't extend to including somebody at the borrow pit itself to see what comes in; correct?

MR. CLAY: That's correct.

MR. HENRIKSEN: And that doesn't include, you know, any kind of paperwork similar to your 662s or 663s; correct?

MR. CLAY: They don't have to have those forms, no.

MR. HENRIKSEN: And it certainly doesn't involve any sort of groundwater monitoring after the hole is filled.

MR. CLAY: No, it doesn't. No.

MR. WIGHT: They're clearly unregulated facilities, we've stipulated that, so none of the things in the regulations would apply.

MR. HENRIKSEN: Thank you.

Going on to page 9 of your submittal, it talks about, Inspectors went to twelve sites

collecting random samples of recently deposited surface soil from the active fill face at the sites. These samples are sent to the Agency's lab and analyzed for pH, metals, and semi-volatiles. At ten of the twelve sites sampled, exceedances of the MACs were found.

So in reference to a list of metals where exceedances were found, did the IEPA run extractions in any of these samples?

MR. MORROW: Excuse me, while I go through the data set.

No. They're all totals.

MR. HENRIKSEN: Totals. Why were extractions not run?

MR. MORROW: I can't answer that question. These were performed by the field office, and I do not know.

MR. WIGHT: Mr. Purseglove was unable to attend today, but we would answer that question in post-hearing comments, if that would be acceptable.

MR. HENRIKSEN: Let me ask this. Are totals that are in the report, or results that are in the report, are totals a good indicator of what would leach into groundwater?

MR. MORROW: Not necessarily.

MR. HENRIKSEN: It's my understanding the EPA encourages contractors to reanalyze failing total metal samples with an extraction method to determine if there's an actual risk to groundwater; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: And that's because an extraction is a good indicator of impacts on groundwater; correct?

MR. CLAY: That's correct.

MR. HENRIKSEN: And totals in and of themselves are not; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: And the data that's referred to are -- the results are totals.

MR. CLAY: That's correct.

MR. HENRIKSEN: Thank you.

MR. RAO: May I have a few follow-ups on that last response --

MR. HENRIKSEN: Please.

MR. RAO: -- on Mr. Purseglove and respond to your comments.

Would it be possible for the Agency to provide additional information about the types of

facilities that were sampled, whether they were CCDD or uncontaminated soil facilities, and also their locations?

MR. WIGHT: Yes.

MR. CLAY: Yes.

MR. RAO: And we'd also like to get some additional information about the sampling protocols that were used at each of these facilities and whether those samples were taken to be representative of what's present in those facilities.

MR. CLAY: Okay.

MR. RAO: And I think you may have answered this question before, but we'd like the Agency to comment on whether any comparisons were made of the sample metal concentrations with background soils in the state. I thought you earlier mentioned that maybe no comparisons were made, or if you did, that would be helpful.

MR. CLAY: We can respond to that.

MR. RAO: And do any of these ten facilities monitor groundwater?

And the last question is, if the facilities were in compliance with existing regulations, can the Agency speculate on the reasons for exceedances of the

MACs?

MR. CLAY: We can respond to all those in final.

MR. HENRIKSEN: Thank you.

On page 14 in response to question 8 regarding the lack of data showing contamination associated with CCD facilities, it says: New information is presented on the first groundwater monitoring results from the J. T. Einoder site in Bloom Township, Cook County, Illinois.

And it concludes that: The data show exceedances of the Part 620 groundwater standards for three metals and eight semi-volatiles.

Now, this J. T. Einoder site, that's the Lynwood site that the Office of Attorney General is referring to.

MR. CLAY: That's correct.

MR. HENRIKSEN: And this is the same Lynwood site that accepted materials from 1997 to 2003?

MR. CLAY: Yes.

MR. HENRIKSEN: This specific time period is prior to Part 1100 rules being in effect?

MR. CLAY: That's correct.

MR. HENRIKSEN: And this is the same site

that accepted materials other than CCDD, according to Agency enforcement staff; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: So the only test results the EPA has gathered showing exceedances of Part 620 groundwater standards were generated from a prelaw site that took materials in addition to CCDD; correct?

MR. CLAY: Well, actually, the law at the time was that the CCDD had to be uncontaminated.

MR. HENRIKSEN: Thank you. Let me ask that question a little clearer. So the only test results the IEP has gathered showing exceedances of Part 620 groundwater standards were generated from a site in existence prior to the Part 1100 -- Part 1100 rules were in effect; correct?

MR. CLAY: That's correct.

MR. HENRIKSEN: So none of the upfront controls that my members have to have to be lawful were in effect at that Lynwood site.

MR. CLAY: That's correct.

MR. WIGHT: You're just speaking as to the specific controls required under Part 1100 and not to what controls an individual might have placed on a facility in order to comply with the statutory

requirement?

MR. HENRIKSEN: That is correct. In this case, it evidently is not very rigorous.

Now, since you all began work on these Part 1100 regulations, has your Agency's -- your Agency contacted other states or the USEPA regarding acceptance requirements for CCDD, how they regulate this material?

MR. NIGHTINGALE: I don't have a real clear answer for you on there. We did at one point do a search from some of the other states in what was being regulated and how it was being regulated, but we didn't come up with anything that was being -- or any programs where they were being regulated quite like Illinois.

MR. HENRIKSEN: So you're not aware of any states that require sites that accept CCDD to comply with the environmental controls contained within the Part 1100 regulations.

MR. NIGHTINGALE: That's correct.

MR. HENRIKSEN: And are you aware of any state that would require groundwater monitoring at a facility that accepts clean construction or demolition debris?

MR. NIGHTINGALE: We're not aware of that, but at the time, we were really searching to find out if anybody was regulating through a permitting process, so we never got past that point because we didn't really get ahold of anybody who was permitting them, so we didn't ask that next question on how you would regulate them.

HEARING OFFICER TIPSORD: Could I have a follow-up on that?

Does USEPA have any regulations for Clean Construction or Demolition Debris?

MR. NIGHTINGALE: Nothing that would be in conflict with what we've found.

MR. WIGHT: I believe that I considers construction or demolition debris waste, in general, but generally solid waste issues are a state issue under federal law, and consequently Illinois has gone well beyond anything you will find in federal law, to my knowledge, about how the materials should be managed.

HEARING OFFICER TIPSORD: And I think with this, we need to have you sworn in. You've made several factual statements, so --

MR. WIGHT: It's just a discussion of what I

believe the law is.

HEARING OFFICER TIPSORD: I still believe you would need to be sworn in at this point.

MR. WIGHT: All right.

(Mr. Wight sworn.)

MR. CLAY: I might clarify, too. I mean, as Mark said, USEPA, I believe, regulates CDD, construction demolition debris. That's different than CCDD, clean construction demolition debris, which is a definition in our Act.

MR. HENRIKSEN: Again, you're not aware of any other state that has taken it upon themselves to regulate Clean Construction Demolition Debris the way your Agency does; correct?

MR. CLAY: Correct.

MR. HENRIKSEN: Thank you.

MR. RAO: I have follow-up.

Do any other states have a subset of construction and demolition debris, like clean or uncontaminated debris, are you aware?

MR. NIGHTINGALE: It's been a while since we've looked at that. I'd have to go back and see what we might have found as far as how they were regulated.

I think, in general, they would regulate it as under the definition of construction and demolition debris, and so it would be a subset similar to like what we have, but most of them have separated it from construction and demolition debris.

MS. FLOWERS: We could find that out and follow it up, if that's what you would like.

HEARING OFFICER TIPSORD: We'd appreciate that.

And just for the record, too, any of the questions that we've asked today, if anyone wants to weigh in on, or if anyone has additional information, in final comments, we would really like for you to continue to provide that sort of information to us.

Mr. Sylvester.

MR. SYLVESTER: Just a quick question. Are you going to put those questions in a separate document or just pull them out from the testimony?

HEARING OFFICER TIPSORD: From the transcript.

MR. SYLVESTER: Would the Board put them in a document so that everybody could have an opportunity to review those questions or --

HEARING OFFICER TIPSORD: I mean, I don't

know that we really have something, other than what's going to be in the transcript. I mean, I can go through the transcript when it comes in and do that, if that would be helpful. I mean, that would be what I would do, but I'll do that, if that would be helpful. I can do that.

All right. I will put something together when the transcript comes in.

MR. SYLVESTER: I didn't mean to give you extra homework.

MR. TRAYLOR: A comment on any other states, if you will check the letter that was written to The Honorable Doris Karpiel. On the second page, the second paragraph, it says -- this was written in 1992.

We also pointed out that Pennsylvania says uncontaminated soil, rock, stone, gravel, brick, block, concrete, and used asphalt, may be used as clean fill.

HEARING OFFICER TIPSORD: And that's Exhibit 62.

Does anyone else have questions for the Agency?

MR. RAO: I have a few more questions.

I have some questions based on Mr. Huff's

testimony to kind of get a feeling for the way the Agency stands on some of the recommendations.

On page 6 of Mr. Huff's testimony, he states that in order to obtain samples representative of groundwater quality that are downgradient, including both horizontal and vertical directions, a minimum of eight monitoring wells would be required to be sampled.

Please comment on whether Mr. Huff's statement is consistent with the Agency's proposed groundwater monitoring requirements. If so, would the cost estimates provided by the Agency need to be revised to account for additional wells.

MS. BLAKE MYERS: Not necessarily. That's going to be on a site-by-site basis, and if you're talking both in the horizontal and vertical direction, it may be as few as four, and it may be more, but that's not something that could be determined ahead of time across the board.

MR. RAO: So what you have proposed in the estimates of cost that you have given accounts for obtaining samples representative of groundwater quality, that includes both horizontal and vertical directions?

MS. BLAKE MYERS: Both vertical and horizontal was taken into account. So yes, the answer would be yes, our cost estimates would still be appropriate.

MS. LIU: To follow up on Mr. Rao's questions, you mentioned that it would be based on the site particulars. Could you describe a site where four wells would be sufficient and a site where eight wells would be needed, geometrically speaking?

MS. BLAKE MYERS: Geometrically speaking, it would really speak to the size of the CCDD unit. The purpose of getting a groundwater monitoring system is to sample the groundwater and determine what's coming --

Well, usually beneath the facility in the case of CCDD units, they're not lined, so you're going to need to know what is affecting groundwater, and it's going to depend on the dimensions of the CCDD unit, it's going to be dependent on the uppermost aquifer and what its vertical extent is, and whether or not you need to screen wells and have nested wells. It's really going to be very site specific.

I don't know that I could give you a typical arrangement on a groundwater monitoring system because

I don't know that you could say that there is a typical CCDD unit.

MS. LIU: On page 4 of Mr. Huff's testimony, Mr. Huff recommends a PID response value of five parts per million to eliminate most false positives. Would the Agency please comment on whether you have any concerns regarding that recommendation?

MR. WIGHT: Can we do that in final comments, please?

MS. LIU: Of course.

MR. WIGHT: Thank you.

MR. RAO: Mr. Huff urges the Board to eliminate the restriction on uncontaminated soil with pH values about 9.0 since the limit has created problems for some of these generators of the CCDD in uncontaminated soil. Will you please comment on whether Mr. Huff's statement is -- wait. I'm reading the wrong question.

Please comment on whether the Agency has any concerns with revising or eliminating the upper pH limits for uncontaminated soil, based on recent soil testing conducted by the Agency.

MR. MORROW: Based on the recent sampling?

MR. RAO: Yeah, conducted by the Agency.

You presented some information from ten facilities.

MR. MORROW: Yeah. There was one sample that had a high pH at one facility. There were no exceedances of any -- maybe I should check that. Well, I'll condition it. I don't believe there were any exceedances of any MACs in that sample, so no. The answer would be no.

MR. RAO: Okay. When you say the answer is no, are you saying that the Agency has no concerns about revising the limits, or are you just saying that you haven't seen a lot of data that shows exceedance of the pH level?

MR. MORROW: Well, I did find that analytical result, and there were some exceedances; however, we're concerned, as Mr. Huff, I think, pointed out, we're concerned with two metals -- chromium and selenium -- and for that sample, there were no exceedances for those parameters.

Does that answer your question, or do you want to restate your question?

MR. RAO: Yes. I think the concern was the upper pH limits of 9.0, whether the Agency has any concerns with revising or eliminating that limit.

MR. MORROW: Well, excuse me.

MR. HORNSHAW: Tom Hornshaw.

One of the concerns with going above pH 9 is that we don't have pH specific migration data that we got from the USEPA documents for soil screening guidance, so we don't have any confidence in the behavior of a metal, once it gets beyond what the table designation shows. So the metal can be more mobile or less mobile in soil once you get beyond pH 9, but we don't have confidence in answering that.

MS. LIU: Is there any way to find out what the MAC would be for numbers above 9.0?

MR. HORNSHAW: Not really.

MR. MORROW: Is there a modeling exercise? We've never done that.

MR. HORNSHAW: We haven't done that, no.

MR. RAO: Also, has the Agency received any information from these -- at least the permitted sites -- that they're having problems with this pH limit or rejecting loads?

MR. CLAY: We get a report on rejected loads. I don't know if that has increased, but we can review those and respond to that in final comments.

MR. RAO: That would be helpful.

MR. CLAY: But if the rejected loads have

been rejected solely for pH.

HEARING OFFICER TIPSORD: Could you also check? Because one of the things that Mr. Huff talks about are false positives on the PIDs, and as long as you're going through that information, could you check and see if there are a lot of false positives coming back on the PIDs?

MR. CLAY: Yes.

MR. WILCOX: If I could just do a follow-up on that. I don't think either of those questions will show up on the reports.

When you have a false PID, sometimes they're just rejected, but on the pH for sure, that's pre-application. That's when it's being submitted before it ever comes to the gates, but the pH rejections will not show up on the reports.

HEARING OFFICER TIPSORD: And as with the other questions, we do encourage anyone who might have additional information on those two subjects to please provide those to us in final comments.

MR. CRAVENS: Could I comment on the PID?

HEARING OFFICER TIPSORD: Uh-huh.

MR. CRAVENS: Because they mentioned five parts per million.

Typically, in health and safety plans for impacted sites that I've worked at, at five parts per million, we upgrade to air purifying respirators, and that's an automatic. We would put out respirators only at five parts per million. Since we don't know what those would be, we would automatically, out of concern for people working at the site, have an air purifying respirator. So if there's a guy monitoring at one of these CCD sites and you have five parts per million, they conceivably would have a health and safety plan and they'd have a respirator on at that point.

MR. GOBELMAN: I have a question. Steve Gobelman, IDOT.

Tom, you just confused me with your pH analysis, because prior in the R12-9, prior to when we put pH in as the 6.25 to 9, I believe the Agency's stance was that the pH value that we were going to use as the line in the sand was going to be at the lowest pH number; correct?

MR. HORNSHAW: You mean 6.25.

MR. GOBELMAN: 6.25. Before we put the pH in. There was no pH requirement, correct, of what was going to be allowed?

MR. HORNSHAW: As far as I remember, yes.

MR. GOBELMAN: But the analytical number that was going to go in to be used was at the most stringent pH value.

MR. HORNSHAW: Actually, we went to 4.5, I think.

MR. GOBELMAN: Whatever it was.

MR. WIGHT: I think went to the bottom of the table. It was a full table range.

HEARING OFFICER TIPSORD: One at a time. Go ahead.

MR. WIGHT: It was the full table range from the bottom of the table to the 9 point, which was the top of the table, and the most stringent value, whether the chemical was more mobile at the higher or the lower level.

MR. GOBELMAN: Correct.

MR. WIGHT: So yes, we defaulted to the most stringent level.

MR. GOBELMAN: And that table showed the most stringent.

MR. WIGHT: Yes.

MR. GOBELMAN: But now you're stating that if you're looking at -- since now there a pH

requirement that now is between 9 and 12.49, that there may be some indication, since we don't know anything, that now these parameters could be even more mobile than what you had previously prior to having a pH value in the system?

MR. HORNSHAW: That's possible.

MR. GOBELMAN: But, previously, we had no pH requirement, so we could have taken any pH value, and now you're saying that that was not a correct method back then even.

MR. HORNSHAW: I'm not sure how to answer that. When we put the bottom end of it, I think we had to put a top end, too. Was that the thinking?

MR. MORROW: We took the lowest value of that, of the table, and the table was bracketed by 9 and 4.5.

MR. GOBELMAN: Right. And only two parameters got worse as pH went up; that was selenium and chromium.

MR. MORROW: Chromium. That's all we knew.

MR. GOBELMAN: Right. But under the previous proposal, we could have taken 11.5 pH soil, as long as it met the pH -- as long as it met whatever the most stringent pH number was.

MR. HUFF: That's the metals.

MR. GOBELMAN: Of the metals.

MR. MORROW: Correct.

MR. GOBELMAN: But now you can't do that because now magically somehow the analysis doesn't exist that determined that all of a sudden that lead is going to become highly leachable beyond at a pH of 11.5 than it did at 4.25, because there's no data to support anything, and that doesn't make sense to me that on one hand, previously this is what you wanted, and now that range is, you know.

MR. WIGHT: Well, we went as far as we could go with the table that was available in TACO. If you recall, that was our starting place, is what are they doing in TACO and how can we translate that into the MACs in order to be protected. So we went as far as the available information took us.

Now the discussion has preceded beyond that, and we're more uncertain about that, and that's why the issue has arisen.

So I don't really see that as a contradiction. I just think it was -- I mean, we never anticipated there would be a pH limit. That was something that the Board added, so we didn't really

look into it that way.

MR. GOBELMAN: But you assumed at the time that you were putting those numbers together based on TACO that there isn't, therefore, a pH problem outside the TACO table for pH.

MR. WIGHT: Well, we had upper and lower limits, which are the hazardous waste limits. That's where we put the limit.

MR. GOBELMAN: But now you're stating that soil can be more leachable at a higher pH than it would show at 4.25.

MR. WIGHT: I think he's stating that he just doesn't know. It could be higher or it could be lower.

MR. GOBELMAN: I just wanted to state I'm confused on why it's a problem now but it wasn't a problem when the initial table was put in prior to the pH being in there.

MR. WIGHT: Okay. And I understand. It's because we didn't consider it in this context at that time.

MR. GOBELMAN: But it's a pH table.

MR. WIGHT: Yes. It stops at 9.

MR. GOBELMAN: Okay.

MS. GLOSSER: I have another question.

In Public Comment 65, the nature preserve center has provided additional information on Class III areas contributing to dedicated nature preserves along with CCDDs and USFOs located within a one-mile radius of dedicated nature preserves.

Further, INPC states that a setback outside of the contributing area of a Class III area similar to the well setback prohibition at Sections 1100.201 and 11.500 would provide protection to dedicated nature preserves from fill operations.

In your responses, you said that that, indeed, would provide protection, but I was wondering if you'd comment on the Agency's position of adding this as a setback, whether you're pro or con of adding this as a setback in these regulations.

MR. COBB: Given that these are such large areas, quite a bit different than the prohibition small areas around wellheads, I think there might be some potential legal issues that were certainly looked at when we did the small setbacks, and I just don't think we have enough information in that area to have an opinion on that. These are large areas.

MR. WIGHT: Specifically, what he would be

referring to, legal issues, would be takings issues, restricting property, uses of which there's been a substantial amount of U.S. Supreme Court activity on that, much of it fueled by environmental regulation. So that would be something that probably would take quite a bit of research.

HEARING OFFICER TIPSORD: Are there any other questions for the Agency?

MR. WILCOX: One quick one.

The site that had an exceedance of pH, was that a CCDD permit site, or a clean fill site? And my follow-up to that would be, if it was a CCDD site where they normally take limestone and concrete, how are you able to test just the soil and not test the soil mixed in with the limestone aggregate?

MR. MORROW: The first part of your question, it was a CCDD facility. And the second part, I don't know.

MR. WILCOX: My follow-up is, I don't know from an enforcement action, how in a site that I've seen when they're bulldozing the dirt and the limestone and all the materials together, how do you go about testing the pH of that soil for compliance when it's all mixed together? I guess I'll just leave

that as the question.

HEARING OFFICER TIPSORD: Thank you.

I believe the Aggregate Producers have some witnesses they wold like to put on, and I'll check to see if anyone else has signed up.

Let's take a couple of minutes while we do some switching around and come back in about five minutes.

(A brief recess was taken.)

HEARING OFFICER TIPSORD: I think we're ready to go.

Mr. Henriksen, would you like to introduce your witnesses?

MR. HENRIKSEN: Bret Hall and then Josh Quinn.

HEARING OFFICER TIPSORD: Okay.

MR. HENRIKSEN: I'm going to put on Mr. Bret Hall first, and then Josh Quinn with very similar testimony. I thought you ought to hear from people who run from CCDD operations for a living.

MR. WIGHT: We're having a hearing problem.

HEARING OFFICER TIPSORD: They can't hear you back there.

MR. HENRIKSEN: Yeah. Why don't we go over

there.

HEARING OFFICER TIPSORD: That way they won't have their backs to everybody.

MR. HENRIKSEN: No problem.

(Witness sworn.)

BRET HALL, called as a witness herein, having been first duly sworn, testified as follows:

EXAMINATION

BY MR. HENRIKSEN:

Q. Mr. Hall.

A. My name is Bret Hall. I work for Hanson Material Service. I've been involved in CCDD management for several of our facilities for approximately 13 years now. I went to school at Illinois State University. I graduated in 1994, and I've been involved in the environmental field ever since.

Q. Now, are you familiar with the Hanson Material Service CCDD site in Will County that's shown on Mr. Cravens' map?

A. Yes.

Q. And where is this site located?

A. It is on Route 53 and Taylor Road in

Romeoville.

Q. Okay.

A. But that's the entrance of our facility. The map's not entirely accurate at representing where the actual CCDD unit's located.

Q. Well, where -- so, but the map, Figure 1, purports to show the Hanson Material Service operation; is that correct?

A. Yes.

Q. Is that -- does the location of your site on the map, is that accurate?

A. No. No. The map itself represents our CCDD unit as being on the west side of the Des Plaines River, but the unit itself is actually on the east side of the river between the river and the canal.

Q. What distance are we talking about that's inaccurate?

A. It's the difference of approximately a quarter of a mile.

Q. Okay. And why is this difference in location of what's shown on their map and where you're actually shown, why is that of significance?

A. Well, there are several wells on the west side of Route 53 north of Airport Road, and the way

that the map is set out, it indicates that we're directly adjacent to these wells when, in fact, we are not.

Q. Okay. So the water wells shown on their map relating to your site are not accurately depicted; is that correct?

A. Correct.

Q. And you know that because you work there?

A. Correct.

Q. Okay.

HEARING OFFICER TIPSORD: A point of clarification. Are the wells not accurately portrayed, or is the facility not?

THE WITNESS: The facility itself. The location of the CCDD facility itself; correct.

BY MR. HENRIKSEN:

Q. So how far away are you actually from water wells that you might impact?

A. Oh, I would estimate just roughly about a half a mile.

Q. Now, you mentioned you've been involved with the implementation of CCDD well disposal at Hanson Material sites; correct?

A. Correct.

Q. And how long have you been doing that?

A. For approximately 13 years. I started with the company in July of 2000.

Q. And so you were involved in the implementation of CCDD before they were part of the 1100 world; correct?

A. That's correct. We instituted best management practices in the industry prior to the development of the rules; and we did, in fact, use PIDs. We screened every load.

Also, as a best management practice, we performed due diligence in the field and on properties where we received the material from, so we do quite a bit of -- put a quite a bit of upfront work.

Q. And since the 1100 rules went into effect, did you also help implement those requirements?

A. Yes. I oversee that on a daily basis. I correct the soil certification; I make sure they're accurate. I also investigate or overview the analytical that's included on the LPC 663 reports, in addition to doing field instructions on every property we receive material from, regardless of which soil certification form is used.

Q. Do you have an opinion regarding the upfront

controls in place that are Part 1100, whether or not it provides adequate groundwater protection?

A. Yes. I think the way that they're implemented, you know, from my experience, they are quite adequate. We do pretty extensive due diligence work on each of the sites, as I said, in addition to site inspections ensuring that we have analytical data, and that analytical data does, in fact, meet or fall below the maximum level of concentrations for chemical constituents and uncontaminated soil.

Q. And your company does that to ensure that they comply with the Part 1100 rules; correct?

A. Correct.

Q. Now, we've talked about -- or there's been testimony about the costs of groundwater monitoring; correct?

A. Yes.

Q. Is there also concerns about liability for groundwater monitoring test results that might stem from pollution caused by off-site sources?

A. Yeah. In fact, I think that's not really a very tangible cost, but potentially it's of a much greater concern, even, than the upfront costs.

If there are contaminants, like you said,

that could be coming from off site, there's a possibility that we could have some sort of liability for that, and that's a significant concern.

Q. And that's part of why your company is concerned about having to install a groundwater monitoring regime?

A. That's correct. That's one of the concerns, yes.

Q. Because you might be held liable for someone else's pollution?

A. Correct.

Q. Something that you did not cause?

A. Correct.

Q. And it's something that you can't fix?

A. That's right.

Q. We've heard also from the EPA that disposal of CCDD in farm fields in naturally occurring depressions, that's not regulated by that agency; correct?

A. That's right.

Q. You have also heard testimony today concerning the Maclair Asphalt Agreed Order. It's their thinking that they also cannot regulate the disposal of CCDD in borrow pits; correct?

A. Right.

Q. Now, do you have a concern from an environmental standpoint regarding the unregulated disposal of CCDDs in farm fields?

A. Oh, certainly. Sure. They could -- I mean, without the sort of controls that we are required to have at our permitted CCDD facilities, I don't really see how they could avoid some of the contaminants that we are able to, by implementation of the CCDD rules, our own policies, best management practices as well, that these places really don't have to follow at all.

Q. And now, how about the disposal of CCDD in borrow pits? Do you have the same concerns?

A. Oh, certainly. Sure. They not only -- I mean, those probably would be even a greater concern because they're aggregating the much larger quantity of material, especially with regards to Maclair Asphalt over a long period of time, too, so they have a potentially great quantity of material, all of which is largely unregulated.

Q. So unlike farm fields and unlike borrow pits, you're looking at, or the EPA wants to impose upon your company, groundwater monitoring.

A. Right.

MR. HENRIKSEN: That's all I have.

HEARING OFFICER TIPSORD: Mr. Hall, just one more question about the location of the Hanson Material Service yard. It's on the other side of the Des Plaines River from where it's located.

MR. HALL: Correct. You can see on the map, it's almost -- it's directly adjacent to the Des Plaines River on the west, and a little further to the east, you'll see another bit of water. That's the sanitary and ship canal, and our -- the unit where we receive CCDD is between the river and the canal, so it's directly east of the river.

HEARING OFFICER TIPSORD: Okay. Thank you. Does anyone have any questions of Mr. Hall?

Thank you, Mr. Hall.

MR. HENRIKSEN: Josh Quinn.

(Witness sworn.)

JOSH QUINN, called as a witness herein, having been first duly sworn, testified as follows:

EXAMINATION

BY MR. HENRIKSEN:

Q. Mr. Quinn.

A. My name is Josh Quinn. I am a Principal

Environmental Specialist for Vulcan Materials. I've been involved in the CCDD portion of the aggregate industry for approximately 12 years. I'm a graduate of Knox College, with a degree in Elementary Education and Environmental Science. I am also a graduate of North Central College with a Master's in Business Administration.

Q. And you're familiar with the Vulcan CCDD site in Will County?

A. Yes, I am. Part of my duties with Vulcan Materials, I'm responsible for compliance monitoring of all aspects of a permanent CCDD and registered uncontaminated soil fill only sites.

Q. And like Mr. Hall, who you've heard testify, you've also been involved in the development of industry best management practices to handle CCDD; correct?

A. That's correct.

Q. And also part of the process, the long process, to create and come into compliance with the Part 1100 rules; is that correct?

A. That's correct. It's my professional opinion that the upfront controls in place under Part 1100 provide adequate protection to the environment.

Q. Now, in addition to -- we've heard, as I was also asking Mr. Hall, Mr. Quinn, we talked about the just financial costs of groundwater monitoring, which can be substantial, but does your company have also concerns about liability associated with putting in place a groundwater monitor regime?

A. Our concern stems from the fact that groundwater monitoring test results may not be indicative of our contribution through our CCDD or soil fill only operations.

Q. So the monitoring also might pick up contaminants from sites that have nothing to do with your operation?

A. There is that potential, and that is a concern of ours.

Q. Now, you've also heard about the -- and you may very well be aware of the ability in the State of Illinois to dump CCDD in farm fields without any regulation from the Agency, as long as the CCDD does not exceed grade; correct?

A. We feel that there is an elevated and concerning risk with the unregulated CCDD disposal in farm fields, or IDOT, county, or municipal borrow pits.

MR. HENRIKSEN: Thank you. No further questions.

HEARING OFFICER TIPSORD: Are there any questions?

MS. GLOSSER: I have a question. Related to the issue of farm fields depositing this material in farm fields or in borrow pits, do you think that there is a difference because of the volume of material that would be involved, that these borrow pits are smaller, than, say, a quarry might be, and so would it be the volume of material that would allow that to be exempt, as compared to what would be going into a quarry?

MR. HALL: Yeah, I could answer that.

I think that's probably one of the reasons. A typical quarry would be much larger, in general, than a borrow pit, although this Maclair pit, I don't really know the exact size of it, but that was pretty substantial.

Still, yeah, you're probably not going to approach the size and the volume that you would be able to use a CCDD for in a quarry.

MR. QUINN: May I also respond? I believe that even though the borrow pit may be smaller than a quarry or mined-out excavation of some kind, I still

feel that you have a lot of material that's ultimately going to go into that pit, and my experience in the 12 years in the industry is that it takes a lot of time to manage the due diligence aspect of this, but it also takes a lot to fully train a staff to carry out all of these upfront controls and load checking procedures outlined in Part 1100.

So while the borrow pit scenario may be smaller than that of a quarry, the risk is still there, and without those controls in place, I believe there's, again, an elevated risk with that type of setup.

MR. GLOSSER: Thank you.

HEARING OFFICER TIPSORD: Are there any other questions? Mr. Wight?

MR. WIGHT: Yeah. Mark Wight, EPA.

I was just wondering if either of the witnesses might elaborate on why you think that with groundwater monitoring, you have elevated concerns that you would be tagged with contamination that you're not responsible for.

I mean, clearly, that's a tool that's used widely throughout the environmental area to identify groundwater monitoring contamination that comes from

sources, and yet you seem to be saying that your concern is that you will end up being responsible for contamination that you didn't cause.

Is there something different about your facilities that leads to that conclusion, especially in light of the provision in the rule that does allow you to demonstrate if the contamination is coming from background or upgradient of the fill operations.

MR. HALL: Well, I just -- I guess I'm kind of thinking about this from the standpoint of where our facilities are located. Some of them are in heavy industrial areas, and I think there's a greater potential, especially in those as it would be opposed to sand and gravel operations in a rural setting.

I guess I've just -- it's just a lingering concern of mine. Even though you said that there is the opportunity to demonstrate the background, I don't know how we would adequately do that, since it's all in-gradient. We are constantly pumping out water. It's always coming into our pit.

MR. WIGHT: Yeah. Well, the groundwater monitoring doesn't really apply until you've stopped the de-watering, so I don't think that would be a concern during the de- watering, but I know there

would be an equilibrium that would have to return before you could get accurate readings.

Anything more than that? I mean, you know, other facilities are located in industrial areas as well, and somehow that seems to get sorted out, so -- I mean, other types of facilities, not just CCDD facilities. We rely heavily on groundwater monitoring to determine where contamination is coming from. It's true that it's not always easy to figure out, so.

MR. HENRIKSEN: Well, let me ask a follow-up question.

After these pits or quarries are filled in, okay, you know, will it then make a difference? You know, there is a time where the groundwater monitoring might be, you know, suspended where you can -- where this in-gradient aspect is taken into account, but there does come a point where this hole in the ground is filled; correct?

MR. HALL: Yes. There could potentially be that.

MR. HENRIKSEN: And in fifty years, a hundred years from now, somebody would have to be there to make sure that this monitoring picks up; correct?

MR. HALL: Sure, right.

MR. WIGHT: I think it's three years. You have to have three years without exceedances, and then you can close the facility.

MR. HENRIKSEN: The problem is, the facility, or some of our facilities, may not have to be filled for fifty or a hundred years, and that three years may not start for half a century, and the problem is, that's the concern is that these guys have to maintain this level of due diligence for 25 years, 50 years, or longer, versus as opposed to the people that don't want to pay tipping fees, or like to dispose of the stuff in a borrow pit. Once it's deposited, they're gone. There's no due diligence. There's no post-dumping monitoring at all, and that's what we're -- that's part of the concern that we have, you know, creating for our industry a cradle-to-grave liability for something, and they pull in something 25 or 50 years from now that we did not create and we can't fix, as opposed to the fact that the -- the state has elected to go after us and is not going after this totally unregulated disposal of CCDD in rural areas, and now the very lightly regulated disposal of CCDD in the borrow pits that dot this

state in hundreds and thousands.

HEARING OFFICER TIPSORD: And Mr. Henriksen, with that, we need to have you sworn in.

MR. HENRIKSEN: Thank you.

(Witness sworn.)

JOHN HENRIKSEN, called as a witness herein, having been first duly sworn, testified as follows:

MR. WIGHT: Well, given the fact that the legislature has created these inconsistencies, I mean, what would you have the Board do?

It's your point that you shouldn't be regulated to any greater extent than facilities that the legislature created exemptions for; that if not everyone is required to do it, then no one should be required to do it? Or where do we go in light of what the legislature has stated?

MR. HENRIKSEN: And that's an excellent question, and here's what I think.

First off, uncontaminated soil fill operations, the General Assembly specifically did not mention groundwater monitoring, and they did that for a reason. It was not the intent of the General

Assembly to mandate groundwater monitoring for uncontaminated soil fill operations. That's the first point.

The second point, for CCDD, our industry can accept, it will accept, upfront controls that these professionals implement to make sure that groundwater is not impacted so they don't pollute. We could accept that. But to then layer upon that the groundwater monitoring, is just is that area that we think is totally unacceptable. It's unacceptable for us to add something additional to our industry that might drive us out of business to make these guys quit taking this, because if you look at the list of CCDD sites, they're not increasing, they're declining.

The material was deposited at the Maclair Asphalt site because downstate Illinois has few, if any, CCDD sites. That's why it was picked.

What I'm suggesting is, the more you tighten up on our industry beyond the due diligence that we've put in place that we've shown does not cause groundwater monitoring, or at least you all can't show causes the groundwater contamination, the more you go beyond what we believe is reasonable, you get to the point where we have to make good business decisions

that we have to get out of business. And then this material is still going to be generated. It will go to the solid waste facilities, and they'll make money. That's fine. They're in business to do that. They do a good job. But it will also go to farm fields, forest reserve districts. There's lots of places that have taken this stuff over the years, and now it's going to go to borrow pits.

What's interesting about the Maclair Asphalt case, that was a borrow pit that wasn't created for that project that the CCDD was coming from. That was a borrow pit that was created 40 years ago when the interstates were first constructed that was around that was available.

What I'm concerned about -- and, Mr. Wight, you've raised some really good questions from a policy standpoint -- I think the EPA and the Board has to put reasonable requirements on us, and we're telling you that the Part 1100 rules, they do a darn good job making sure we don't have exceedances of groundwater, and I think the test results that are out there show that. That's enough. But you start going beyond that and putting regime on us that would cause some of our people to just walk away, which the policy decision is

that's a bad decision because that leaves the field open to folks that don't care so much, because IDOT does a very good job of doing what they do, making sure that material that goes in the hole is clean, but that's just IDOT. If you have a hole that goes in the ground, I mean -- excuse me -- CCD that goes in the ground, you know, that does not have upfront monitoring, that does not have groundwater monitoring, you have absolutely no assurance that the groundwater is going to be protected, and that's a concern to these gentlemen as environmental professionals, and it's concern me as an industry representative that I see this universe, a small universe of sites, that have an enormous regulatory burden on them, a burden that's not reflected in any state in the nation, yet the EPA wants to add another burden to our load, and that's -- I know I've gone on a bit, but I feel passionate about this. I've been involved with this issue, just like these gentlemen, from the beginning, almost as long as Marvin Traylor, and we feel strongly that the Part 1100 regulations are enough. They protect the environment. They assure that groundwater does not get contaminated, and I'm very serious about the concern about my industry for the segments of my

industry walking away and then taking away -- leaving it to maybe two or three CCDD sites in northern Illinois, and that's it. That's what we're faced with here and it's real.

HEARING OFFICER TIPSORD: Are there any other questions?

MR. SYLVESTER: This is just more of a procedural thing. You brought up questions with reference to Maclair Asphalt case, and I didn't know if somebody had answered that or not.

MR. HENRIKSEN: Well, that was brought up and I submitted that. That was attached to the record as, I believe, Board Exhibit -- that was the exhibit that was with regard to the Maclair Asphalt case. I neglected it. It fell off my pleading. I filed it, and that's one of the reasons I submitted it to the hearing.

HEARING OFFICER TIPSORD: It's Exhibit 65.

MR. HENRIKSEN: Exhibit 65.

MR. SYLVESTER: Thank you.

HEARING OFFICER TIPSORD: Are there any other questions?

Okay. Let's go off the record for just a moment.

(Off-the-record discussion.)

After discussion off the record, the comment period will close on August 1st.

I will -- when we get the transcript, I will go through the transcript and put together the questions that the Board has asked that we would like to see all of you comment on, or provide comments where you would like to; and, of course, as always, please, any information you can give us that will help us make our decision, we'd greatly appreciate it.

Is there anything else? I want to thank you all and I apologize. I thought we'd be done by 2:00 or I wouldn't have gone without lunch, but thank you very much, and we're off the record.

(End of Proceedings.)

STATE OF ILLINOIS)
) SS
COUNTY OF MACON)

I, LISA K. HAHN, do hereby certify that I am a Certified Shorthand Reporter and Notary Public in the State of Illinois and that I reported in shorthand the foregoing, taken on the 20th day of May, 2013, and that the foregoing is a true and correct transcript of my shorthand notes so taken.

Lisa K. Hahn
Notary Public -- CSR, RMR
CSR #84-2149

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