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Aurelia Ruffin _ Associates, Inc.
Phone:(910)343-1035
Email:pbruffiniii@att.net
Internet: www.peterruffin.com

U.S. ENVIRONMENTAL PROTECTION AGENCY

HOLTRACHEM SITE

RIEGELWOOD, NORTH CAROLINA

PUBLIC MEETING TO DISCUSS THE PROPOSED	)
HOLTRACHEM SITE CLEANUP PLAN	)
RIEGELWOOD, NC	)

REPORTED BY:

TAMARA A. VIOLETTE, Notary Public and Court Reporter

AURELIA RUFFIN & ASSOCIATES, INC.
215 South Water Street, #104
Post Office Box 2025
Wilmington, North Carolina 28402
pbruffiniii@att.net

TELEPHONE: 910-343-1035

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LOCATION: Riegelwood, N.C.

APPEARANCES

For the EPA: SAMANTHA URQUHART-FOSTER
RONALD TOLLIVER
Environmental Protection Agency
Sam Nunn Federal Center
61 Forsyth Street, SW
11th Floor
Atlanta, GA 30303
404-562-9591

(The Hearing commenced at 7:15 p.m.)

MR. TOLLIVER: Good evening, everyone. Welcome to our proposed plan meeting, and I do want to thank you all for coming out, and I do want to say I really, really enjoy being here in Wilmington. Very nice, very pleasant place. But we're going to get ready to get started with a proposed plan presentation with our project manager here, Samantha Foster. So with our -- the purpose of this meeting is to really highlight our plan for clean up in the Holtrachem site.

So we want to make sure you guys understand where we're coming from so we can get some input also from community members as well. This is really an important time, kind of get the ball rolling and get things started with the clean up and also reuse of the site.

Samantha, the first slide here is from The Superfund Process, and I'm sure most of you are familiar with it, but we start out with kind of like the site investigation phase is in the beginning, down there at the bottom; and then we move on -- once you investigate a site you move on to listing it on the National Priorities List. That way it can get funded.

Then from there we move onto our remedial

investigation. So we investigate the feasibility study, seeing what all the resources that it's going to take to actually clean it up to come up with the best plan to -- plan of action, basically. That's where we're at now, we're at a plan of action, or proposed plan. We want to propose it to the community, and get some input and see how it will impact the community and get some input or comments so that we can take into consideration before we move onto our record of decision; kind of like a finalizing document that says, okay, this is what EPA is going to be responsible in doing to clean up this site here, Holtrachem.

So the rest of it will go into -- and Samantha is going to really describe this, the options that she went through, and also the one that we're going to recommend for this site. So Samantha, do you want to just kind of explain it?

MS. URQUHART-FOSTER: Hi, I'm Samantha Urquhart-Foster for those of you that I haven't met yet. I'm a remedial project manager for the EPA, particularly for this site. We have got a huge team of people that are working with us on this project, but the people that we have here tonight are myself; Ron Tolliver, Community

Involvement Coordinator; I have Dave Mattison with North Carolina; Prashant Gupta with Honeywell; Cynthia Draper and Walker Jones with Amec; and we have got a whole team of people back in the office that weren't able to come here tonite.

The site itself is located in Riegelwood. From where we are now it's -- you shoot down through IP. You have to drive through IP to get there. It's surrounded by International Paper with the Cape Fear River on the other border. The facility was developed in 1963, I believe, and was constructed; they prepared -- manufactured, it was chlor-alkali facility. They manufactured hydrochloric acid, chlorine dioxide and other chemicals to give to IP as well as just to sell to other facilities. It operated until 2000.

EPA has been involved with the site since 1999. Before that, North Carolina RCRO was involved with the project. In 1999 Hurricane Floyd came through and the EPA provided emergency response activities and then the facility stopped operation in 2000. EPA came in and oversaw the removal action that Honeywell's conducting in 2003 and 2004 then, again, in 2008 there was another removal that was done.

Hurricane Floyd came in and there were about 24 inches of rain that fell in that process and it caused the -- a breach of the stormwater retention basin. So the water that was contained on-site breached out of the basin and spilled into the Cape Fear River. It was about 2.2 million gallons of water that was released and a had a small amount of mercury in it.

Then in 2003 and 2004 EPA oversaw the removal action that Honeywell and their contractors did. They tore down the former mercury cell building, they containerized all the waste that was on-site and transported it off-site. There was, we were told, about 4 million pounds of waste that was removed from the site. There was about 34,000 pounds of mercury, a lot of scrap metal; brass, mercury, copper, titanium, as well as other hazardous materials that were transported off-site. So the majority of waste that was at the site has already been removed. What we're dealing with now is residual.

In 2008 we learned that back historically the waste water that was at Holtrachem was transferred to International Paper for treatment before it was disposed or released. International Paper did some sampling in the lagoon where they wanted to build another landfill cell in

and it was found it was contaminated with PCBs. So after they discovered that and let us know, there was a removal action that was done and about 24,000 cubic yards of mercury -- I'm sorry, PCB contaminated soil, sludge was transferred over to the Holtrachem site for storage until we could get to their clean up plan.

The site has been divided in, like, three areas. There's an upland process area, upland nonprocess area and wooded bottomland area. The green is the bottomland area which borders the Cape Fear River. Yellow is a processing area and orange is the nonprocessing area.

So the scope and role to the remedial action is going to address any remaining contamination at the site. Groundwater is contaminated but it's not of usable -- it's not usable. So, I mean, our primarily -- our primary concern is to address the contaminated soil, sediment, surface water and we're going to do groundwater monitoring.

The main risk at the site; land use is currently industrial. We see it being industrial in the future. To get there you have to drive through International Paper. So we don't see any residential use in the future. It will either be industrial or wildlife habitat. Groundwater use hadn't -- I mean, groundwater hasn't been used at the site

ever. Groundwater has been -- drinking water's been provided by International Paper in the past and we see that proceeding into the future.

The exposed populations are industrial workers, trespassers and wildlife. The human health risk associated with the site include industrial work, construction workers or trespassers onto the project. The site is fenced on three sides. You can only get there is to drive through International Paper and then the site's fenced. It's got people on-site managing the property. The only nonfenced side is on the Cape Fear River and there's a huge drop off between the site and the river. So it's like somebody decided to drive their boat up and come up is really the only way they could get access to it.

For the ecological risks, we did an ecological risk assessment. We found the primary receptors that were at harm were the green, Blue Heron, the Carolina Red and amphibian and micro invertebrates, based on toxicity testing.

This is the conceptual site model. The areas in purple are the areas that are primarily contaminated with mercury and PCBs. And as you can see, some of the buildings that are shown in purple. So this building here

by the arrow in purple no longer exists. It was the former mercury cell building. That's been dismantled. The rest of the contamination are the areas in purple.

So our remedial action objectives are primarily cleaning up the site so it's safe for human -- human use and wildlife. The main contaminants are mercury and Araclor 1268 which is a PCB.

We developed remediation goals based on human health and ecological risk assessments. So we came out with these clean up levels. We had concentrations of PCBs or Araclor 1268, for example, in the upland area up to 2700 micrograms per kilogram. We're proposing 11 milligrams per kilogram, so clean up level. We have other mercury clean up level we're proposing is 536 and that's all based on risk assessments, assuming that it's going to be industrial use at the site.

The wooded bottomland area is slightly different. That area there's a lot of wildlife down there; and our goal is to protect the wildlife in that area. So we have lower clean up goals for that. In the wooded bottomland area, for example, we have 3 milligrams per kilogram to clean up for mercury versus 500 something in the upland area.

During the feasibility study of this process the contractors consulted and they looked at different areas and different alternatives and came up with 6 different alternatives for the majority of the site, and I'm just going to hit on the key ones. Our preferred remedy is Alternative 3 and the rest of the alternatives are included in the proposed plan. I don't know if you have a copy of that. If you don't we can give one to you.

So the 6 alternatives for the soil and sediment for the majority of the site include no action, which we have to do as a matter of the National Contingency Plan requires us to look at no action. That's obviously not going to be for this site because of the contamination of the site and that we're not comfortable with.

Alternative 2 is capping with limited excavation with off-site disposal or on-site treatment. Institutional controls and engineering controls.

Alternative 3, which is our preferred remedy, is a combination of capping, excavation, on-site disposal and institutional controls; and A4 is similar but it's, you know, different areas of capping.

A5, excavation and on-site disposal. A6 is excavation with off-site disposal. I'll go into a little more detail

in each of these.

There are two areas at the site which are different than everyone else, F and G; and those have separate alternatives. There's no action for A1 or S1, which we don't agree with. Our preferred alternative is S3, which is capping within in-situ stabilization, solidification and capping and ICs, Institution Controls.

So the common elements, all 6 of the alternatives include capping and erosion control along the berm in the upland nonprocess area. There's one area that needs to be capped. They all include clean out and closing stormwater conveyance system, dewatering and off-site disposal of the materials from the stormwater system; decommissioning the stormwater treatment system; operation and maintenance is substantially controls, engineering controls and five year reviews.

Again, we looked at 6 alternatives. I'm just going to list or show us the one for what we propose. You can -- but I have got other slides if you want to see what the other alternatives are. What we're proposing doing is Alternative A3 and that includes excavation and capping as well as containing the waste, any excavated waste on-site into a landfill. The plan is to create a chemical waste

landfill on-site that's going to be equivalent with the commercial chemical waste landfill. It includes excavating about 15,000 cubic yards of contaminated soil, as well as disposing of 39,000 cubic yards of contaminated soil, sludges into the landfill. It will take about ten -- two years to complete and about 13.3 million dollars.

For the more contaminated areas where the former mercury cell building was here at area G, we don't have a lot of data for that cell. Right now there is a top material on top of it and we're planning on capping it and solidifying the waste in place. As well, in area F where it was the former mercury cell building.

I might have that backwards. I'm sorry, F is where the retort pad area was and G is the former mercury cell building.

So to solidify that waste in place and cap it is gonna be about 2.9 million dollars and take about a year or two. Again, we looked at 6 different alternatives for the upland area and four different areas for F and G and we -- in the National Contingency Plan we're supposed to look at 9 different criteria; and there's a trade off of which alternatives are better than others. And so Alternative 1 is no action. That's not good for any of us.

So, again, our preferred alternative is to excavate the contaminated area, the wooded bottomland areas; bring it up; construct an on-site chemical waste landfill; put the contamination from the wooded bottomland areas, as well as the soil that was excavated from International Paper, and put it into their chemical waste landfill on-site.

This is kind of a conceptual drawing of the actual location, and the area may change during the remedial design; but this is kind of a conceptual idea of what we are planning on doing.

Community participation; we have established an information repository at the public library just across the street, and we're accepting public comments on this until September 14th. So you probably just got a flyer in the mail, which is like a two page summary. If you want to see much more about the project, what's involved as far as the feasibility study and the full proposed plan, it's available in the library if you want to look at it. We're accepting comments here tonite or you can Email them to me or send them through regular mail.

David Mattison is here with North Carolina and part of the nine criteria in the National Contingency Plan is State acceptance.

MR. MATTISON: The State has concurred with the proposed clean up plan.

MS. URQUHART-FOSTER: There are other community involvement activities that we have in the Superfund process. I'll let Ron speak to the groups, they can form and request a technical assistance grant to hire technical consultants to explain things better to the community if community members have difficulty understanding the technical content. Again, we have got the public record or the majority of the documents that are gonna be supporting this decision are in the library.

MR. TOLLIVER: Any questions? Y'all have any questions, would you please say the question and just state your name for the reporter and if you represent an organization just let us know.

MS. SORG: I'm Lisa Sorg, S-o-r-g. I'm from NC Policy Watch in Raleigh. I'm a reporter, and I had a question about surface water in the Cape Fear and fish. You know, is there a fish advisory? I'm wondering if there's sediment issues in the Cape Fear outside the scope of this, or how would that be addressed, if at all?

MS. URQUHART-FOSTER: Yeah, there are fish advisories from the Cape Fear and we did collect sediment

and surface water sampling, but we found that the contamination that's in the river isn't coming from the site. There is existing fish advisories, though.

MR. MATTISON: I believe the fish advisory is for essentially everything east of 95. But that's not site related.

MS. SORG: Okay, got you.

MR. TOLLIVER: Anyone else?

MS. SORG: I think in the documents, maybe it was in one of the documents I read, there was a pipeline. Where is that pipeline located? Is it still in existence? Does it go, like, under --

MS. URQUHART-FOSTER: Are you talking about the pipe that went from Holtrachem to IP?

MS. SORG: I think that's it. It did some kind of discharge.

MS. URQUHART-FOSTER: That was excavated in 2008 when we did the clean up at International Paper. I don't know if we actually found the pipe. I know --

MR. GUPTA: Remnants of it.

MS. SORG: Were there any problems when the tornado hit? Of course, you guys remember Hurricane Floyd did a lot of damage, but the tornado, it wasn't that far

from here. That didn't have any effect at all?

MS. URQUHART-FOSTER: Well, the facility has an ongoing Emergency Response Plan in place. So anytime they know there's going to be a hurricane coming or tornado we gear into action to prepare for that. There's been minor damage throughout the years, but it's all been proactively contained.

MS. SORG: I just have a couple more questions and that was, how close on the landfill, since it's going to be getting -- well possible waiver, how close to the groundwater is that landfill? Can you tell me, like, from the bottom of the landfill to kind of the water table, how far that is?

MS. URQUHART-FOSTER: The water table at the site is about ten feet deep, but that water at that level is not usable. It's not usable for drinking purposes. So they're going to put in a bottom drainage system and liner to get to meet the equivalent for the TSCO Waiver.

MS. SORG: And the only thing -- maybe this is -- did anyone ever follow the workers? When I was looking at the library today there were, I know, some workers back in the late 90s had high levels or abnormal levels of mercury in their urine. Was there any kind of study of -- health

study for anybody?

MS. URQUHART-FOSTER: I know there was a lawsuit. I don't know beyond that. I could ask our ATSDR, Agency for Toxic Substances and Disease to follow-up on that.

MS. SORG: Okay, great. Thank you.

MR. TOLLIVER: That the last question?

MS. FAIL: My name is Kim Fail. I'm with International Paper. I had two questions. One of which I have already asked of Walker, but we'd like to understand the amount of leachate that's going to be generated from the site and how it will be disposed of. So that's one question that we had and I think he answered it for me.

MS. URQUHART-FOSTER: Good, because I can't answer that. He may know.

MR. JONES: My name is Walker Jones. We don't anticipate a significant amount of leachate from the landfill. The bulk of it's going to be sort of -- should be some saturation of soils, but we think we can manage that without waste water treatment. So it will be more of a collection than haul it off-site for disposal.

MS. FAIL: And my second question was about the -- I know there was an underground drainage system proposed as well, potentially proposed for this as well.

So what are your thoughts on -- with, you know, the ground water that pumps down? Where will that go?

MS. DRAPER: Cynthia Draper with Amec Foster Wheeler. I want to make sure I understand. The underground system that you're talking about, it goes -- it's a -- it goes underneath the landfill and it's either a dual liner system or a leachate collection system. It's an extra safety feature should the groundwater, for any reason, come up higher, you get higher than five feet, so that it could come in contact with the landfill. We want to avoid that. So this will not be something that would be generated on a regular basis. And I'm sorry, tell me again the question specifically?

MS. FAIL: Well, I mean, you're obviously going to have to draw down the groundwater, right? To keep -- you're saying no?

MS. DRAPER: No, we do not plan to continually depress that groundwater. For one thing, once you get past that top ten feet you're about 200 feet of very dense clay. It's very permeating from your site. You probably know all about that as well. So we do not plan to draw down the groundwater any further and put an under drain system just in the unlikely event it should rise up to the surface.

MS. FAIL: Thank you.

MR. TOLLIVER: Any other questions?

MS. URQUHART-FOSTER: We appreciate you coming out. Feel free to let your neighbors know about the information. We encourage anyone to comment and provide us feedback on the proposed clean up plan.

MR. TOLLIVER: September 14th, that's the end of the comment period. So we move forward after that. If you have any concerns please let one of us know and we'll answer. That concludes our meeting. Thank you all for coming and we look forward to hearing from you.

(The Hearing concluded at 7:45 p.m.)

STATE OF NORTH CAROLINA)

COUNTY OF PENDER)

CERTIFICATION OF REPORTER

I, TAMARA A. VIOLETTE, Notary Public and Court Reporter, have read the foregoing transcript, which was taken down and transcribed by me for AURELIA RUFFIN & ASSOCIATES, INC., and I find the contents of same to be true and correct to the best of my knowledge and belief.

This the 2nd day of September, 2016.

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Notary Public, 20031180184

STATE OF NORTH CAROLINA)

COUNTY OF NEW HANOVER)

CERTIFICATION

I, PETER BROWNE RUFFIN, III Notary Public, Court Reporter and President of AURELIA RUFFIN & ASSOCIATES, INC., do hereby certify that the foregoing transcript constitutes a true and correct record of the testimony given, the same having been taken down and transcribed by TAMARA VIOLETTE, Notary Public and Court Reporter on the date and at the place set forth in the record and before those persons named therein;

FURTHER, that we are not related to and are not employed by any of the parties to this action, save and except for the explicit purpose of taking down the testimony herein and transcribing same; and that we, in no way, are interested in the outcome of said litigation;

FURTHER, that the original of this transcript will be bound for filing with the Environmental Protection Agency and will be forwarded to ANGELA R. MILLER, Environmental Protection Agency, Region 4, 61 Forsyth Street, S.W., 11th Floor, Atlanta, Georgia 30303.

WITNESS my hand and notarial seal this the 7th day of September, 2016.

Notary Public, #19971470080

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