ORIGINAL

ILLINOIS POLLUTION CONTROL BOARD
July 18, 2007

IN THE MATTER OF:	)	
	)	
PETITION OF JOHNS MANVILLE	)	
FOR AN ADJUSTED STANDARD	)	
FROM: 35 Ill. Adm. Code	)	No. AS 04-04
811.310, 811.311, 811.318,	)	(Adjusted
and 814,	)	Standard - Land)
	)	
	)	

REPORT OF PROCEEDINGS held in the above-entitled cause before Hearing Officer Bradley P. Halloran, called by the Illinois Pollution Control Board, taken before Laura Bernar, CSR, a notary public within and for the County of Cook and state of Illinois, at the Lake County Administrative Building, 18 North County Street, 10th Floor, Waukegan, Illinois, on the 19th day of July, 2007, commencing at the hour of 9:00 a.m.

A P P E A R A N C E S:

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BY: MR. EDWARD P. KENNEY
Appeared on behalf of Johns Manville;

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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BY: MR. PETER E. ORLINSKY
Appeared on behalf of the Illinois Environmental Protection Agency;

HEARING OFFICER HALLORAN: Good morning. My name is Bradley Halloran. I'm a hearing officer with the Illinois Pollution Control Board. I'm also assigned to this case entitled in the matter of Petition of Johns Manville for an adjusted standard from 35 Illinois Administrative Code 811.310, 811.311, 811.318, and 814. It's docketed with the board as AS 4-4.

Today is July 19 it's 9:20. I apologize for my lateness. There are no members of the public here, but if there were they'd be allowed to say their piece. We're going to run this hearing pursuant to Section 104 Subpart D and Section 101 Subpart F of the board's procedural provisions. I also want to note for the record that this hearing was properly noticed up. The hearing is intended to develop a record for the Illinois Pollution Control Board. I will not be making the ultimate decision in the case. That's left up to the five members of the board. I'm here to rule on any evidentiary matters and make sure the hearing goes

without a hitch. And a brief note, on July 9, 2007, I forwarded and filed possible questions from our technical units to the respected parties. And to that end we have Miss Alisa Liu from our technical unit that may or may not be asking questions of the witnesses.

With that said, Mr. Kenney, would you like to introduce yourself.

MR. KENNEY: Yes. Good morning, Mr. Hearing Officer. My name is Edward Kenney from Sidley Austin in Chicago. I'm here representing Johns Mansville. With me today is William Bow from LFR and he'll be providing some testimony today. In addition I have Denny Quinton, manager of engineering from Johns Manville, and David Petersen, who is one of JM's consultants. For short, I think I'd like to refer to John Mansville as JM. It's fairly typical for the company to be known that way. And what we're here to talk about is a petition for adjusted standard involving the Johns Manville property that's located a short distance from

here, just off of Greenwood Avenue, probably less than a mile from here. It's -- the Manville property is approximately 350 acres, and it formerly held a large manufacturing plant that dated back to the early part of the 20th century. The landfill that is the subject to this proceeding is a relatively small part of the entire facility. Johns Manville ceased manufacturing at that site about ten years ago, and the manufacturing buildings, which comprised about 1.9 million square feet under roof, were demolished over a period of years. That project was completed in 2001. This site is somewhat unusual in that it has been subject over the years, for about the last 20 years, more than 20 years, to a great deal of oversight under the Federal Superfund Program, and the State has also -- Illinois EPA has also been involved in overseeing various activities at the site over the years. And just to provide a short summary of the remedial activities, they primarily involved consolidation of asbestos-containing waste materials on the

eastern part of the site and construction of cover over that material. So the eastern part of the site is -- and Mr. Bow will give us an overview of the site as a picture to show it, is essentially a large asbestos landfill with engineered cover over it. This petition involves a relatively small part of the eastern part of the site, and Mr. Bow will show us where that is and involves essentially two major elements: One is providing for an adjusted standard for gas, landfill gas, monitoring and management requirements of the Board's regulations, and also the other major area is ground water monitoring. That adjusted standard seeks to provide alternative placement for ground water monitoring wells.

We have previously submitted written testimony and exhibits to the Board. We had previously discussed that with the Illinois EPA over the year -- Actually, we've been in discussions with Illinois EPA about this adjusted standard petition over the years and submitted written testimony to

them. Illinois EPA submitted a recommendation that the adjusted standard be granted. And pursuant to your request, we submitted our written testimony exhibits at the end of June, on June 28 or 29, I believe. For convenience sake, I think, why don't we have Mr. Bow sworn after any statement that Illinois EPA would make, and then we can have him vouch for his testimony.

HEARING OFFICER HALLORAN: I agree with Mr. Kenney. Thank you, Mr. Kenney.

Mr. Orlinsky?

MR. ORLINSKY: I'm Peter Orlinsky, Illinois EPA division of legal counsel. As Mr. Kenney just mentioned, over the course of at least the last two years there have been several back-and-forth meetings and information exchanges between Illinois EPA and technical personnel of Johns Manville. As a result of that information, the agency was able to come to the determination that the -- that this adjusted standard should be granted and that by doing so there would be no adverse effects to the environment. We

want to just hear what Mr. Bow has to say today. We may have very a few questions.

HEARING OFFICER HALLORAN: Terrific. Miss Court Reporter, swear in Mr. Bow, please.

(Witness sworn.)

MR. KENNEY: Good morning, Mr. Bow.

MR. BOW: Good morning.

MR. KENNEY: I'm going to ask you to look at this. This is the written testimony that we had submitted to the Pollution Control Board along with the exhibits. You should have -- I've got some extra copies if anybody needs one.

HEARING OFFICER HALLORAN: I believe I have that. Thank you.

MR. KENNEY: This is testimony that you prepared in consultation with me and others, correct?

MR. BOW: It is.

MR. KENNEY: Is this testimony true and correct as you sit here today?

MR. BOW: It is.

MR. KENNEY: Are the exhibits -- You're

familiar with the exhibits that are attached to it as well?

MR. BOW: I am.

MR. KENNEY: And they are as represented in the testimony?

MR. BOW: They are also correct, yes.

MR. KENNEY: Mr. Hearing Officer, I would ask that this be, to the extent it's not already, that it be introduced into the Board's administrative record for this proceeding.

HEARING OFFICER HALLORAN: Mr. Orlinsky?

MR. ORLINSKY: I have no objection.

HEARING OFFICER HALLORAN: Want to mark it Exhibit A then.

MR. KENNEY: I think that would be fine then. For purposes of the hearing, it has sub exhibits, and we may make reference to some of them, but I think we can make it clear as to what we're talking about.

HEARING OFFICER HALLORAN: Okay. We'll mark it group -- Petitioner's Group Exhibit A and that will be admitted into

evidence.

MR. KENNEY: Thanks very much.

Now, Mr. Bow, you've brought some pictures of the site with you today; is that correct?

MR. BOW: I have.

MR. KENNEY: Why don't we mark this one as -- this would be Exhibit B.

HEARING OFFICER HALLORAN: Sure.

MR. KENNEY: We'll mark this exhibit B for identification. And we can -- we have some extra copies of this, too, if you want to take a look at it. I think what we'll do, if it's all right, Mr. Hearing officer, to the extent we need to identify particular parts of this, we can maybe make distinctive marks on it so that it'll be clear for the record.

HEARING OFFICER HALLORAN: Terrific.

MR. KENNEY: Mr. Bow, to the extent we need to identify particular areas, we can make marks on it and we'll just indicate what kind of mark we're making on it.

MR. BOW: That's fine.

MR. KENNEY: Could you, for the benefit of the Board, sort of describe the site? And if you could hold up the exhibit and show what you're talking about.

MR. BOW: Sure. This is a site aerial photograph of the Johns Manville property that was taken on October 5, 2005. The dashed outline with the double dots between them is the property line that encompasses the entire Johns Manville site. You can see in the lower right corner of the photograph is Lake Michigan which is the eastern property line of the Johns Manville property. The western property line is along some railroad tracks that exists essentially along Pershing Road which runs south of the city of Waukegan. The property itself is roughly 350 acres in size. The former manufacturing area is shown on the western side of the site which is in sort of the upper left corner of the property. It shows the former building pads of the manufacturing buildings that were removed, as Mr. Kenney stated, in 2001. The eastern portion of the site, roughly 130 to

140 acres in size, is a former disposal area that was closed pursuant to a federal consent decree in -- The closure was completed in roughly 1992 through the placement of a two-foot thick engineered soil cover over the entire former disposal area, and that is shown also in a dashed outline in the photograph. Nested within that former disposal area are two units that were closed or are being closed pursuant to this proceeding, an onsite landfill that was used for the disposal of non-asbestos waste by the plant while it was still in operation post 1992, and those disposal areas are shown within the overall CERCLA closed disposal area. They're shown as Fill Area 1 and Fill Area 2 on this particular photograph. And, again, I point out that they are nested within the closed CERCLA landfill, and that has some significant relative to the adjusted standard that we're asking for today.

The Fill Area 1 is roughly ten acres in size and was also known as the former miscellaneous disposal pit. Fill Area

2 is roughly three and a half acres in size, and it was formerly known as the collection basin. There was a body of water that existed to the east on the eastern end of the former CERCLA landfill, the former disposal area, and that was filled in in roughly 1996 and is known as Fill Area 2.

MR. KENNEY: Now, the -- This large blue area, what is that?

MR. BOW: The large blue area is a 35 acre former settling basin that was used as part of the plant's waste water treatment system. Water would be used in the manufacturing process in the former manufacturing area. That water was subsequently pumped upwards, and, again, it was -- it is pumped in the disposal area and was pumped into this former lagoon, again, 35 acres in size, former settling basin, where various products including asbestos and other entrained debris in the waste water would drop out within the settling basin. That water was then recycled back through the plant as an ongoing waste water treatment

system. This particular lagoon, 35 acres in size, is currently being closed pursuant to a first amended consent decree which is also part of the submitted testimony. This was allowed to remain open after the 1992 closure of the land areas so that the plant could continue manufacturing. And when manufacturing ceased during the 1990s, it was no longer needed for manufacturing; therefore, it is now being closed pursuant to a first amended consent decree under a federal and a state consent order.

MR. KENNEY: So what is the physical state of that -- of that feature at this point?

MR. BOW: Okay. The -- This particular photograph happened to have been taken on a day where we were actually pulling across a very large geotextile across the entire settling basin, and I'll show you. The geotextile was placed on the western bank of the former settling basin, and on this particular day, October 5, 2005, it was pulled across the water surface in order to

provide a substantial base upon which we could place sand and clay cover, because the underlying sludge was quite weak and could not hold up equipment placing sand and clay. So we put a geotextile across, and it was pulled across the basin on this particular day. And on this photograph you can actually see the leading edge at approximately this location. This was 90 percent across the basin as the photograph was taken. Subsequent to this within an hour it was pulled up on to the bank. Presently the water level in that basin was originally approximately 600 to 603 feet above sea level. Lake Michigan current level is approximately 577 feet above sea level. So you have about a 26 foot difference between the water level in the settling basin versus the surrounding ground water in the area. Previously we used to pump -- JM used to pump water up to the settling basin to keep it full because there was asbestos fiber in the bottom, and it needed to be kept wet. With this closure, pumping to the settling basin

has ceased and water is -- has been allowed to drain as it has always drained for the past 80 plus years out the bottom; however, it's not being replenished. And as the water then exposes the now sunken geotextile at the bottom, on the bottom surface of the sludge, as that geotextile becomes exposed as the water drains, sand is being placed over the top of it. And so the current photograph would actually show sand, very nearly half way across from the southwest corner of the settling basin toward the northeast as it drains and covers -- sand cover is placed on top.

MR. KENNEY: Now, you had mentioned, I think, that there was another body of water that existed to the east of Fill Area No. 2.

MR. BOW: Yes. It was actually to the east of the former settling basin. There was an interim basin called the collection basin, and it received water from the settling basin. The collection basin was a rectangular body that was roughly the same north/south dimension as the settling basin.

However, it was much narrower in the east/west dimensions. It was only, perhaps, 150 feet in width in the east/west direction. That used to contain water, and we did some engineering work several years ago to prevent water from filling the collection basin. And subsequent to that we filled it in with quite a bit of clay. And the -- therefore, there was no standing water in the collection basin any longer.

Fill Area No. 2 is comprised of roughly the southern one-third of the former collection basin.

MR. KENNEY: Okay. What were the purposes of the settling basin in that portion of the collection basin that formerly had water?

MR. BOW: They were both used as part of the waste water treatment system at the JM plant during manufacturing.

MR. KENNEY: When the plant was operating in terms of manufacturing?

MR. BOW: Correct.

MR. KENNEY: And those were allowed by

the original consent decree?

MR. BOW: Yes.

MR. KENNEY: Now, the first amended consent decree which is an exhibit to your testimony, it's Exhibit No. 4. You were involved in the negotiations process for that that resulted in that, correct?

MR. BOW: I was.

MR. KENNEY: Okay. Now, did the -- What's the overriding purpose of that consent decree?

MR. BOW: The purpose of the consent decree is to obtain final regulatory closure on the settling basin, the former collection basin, as I had mentioned, the onsite landfill, some smaller waste water ponds located west of the former settling basin, and two long linear bodies of water called the industrial canal and the pumping lagoon that are located roughly along the northern property of the JM property.

HEARING OFFICER HALLORAN: Mr. Kenney, I guess just for clarification, that would be No. 4 of Group Exhibit A.

MR. KENNEY: That is correct.

HEARING OFFICER HALLORAN: I'm trying to make it clear to the board.

MR. KENNEY: That's correct. And the Board had asked -- During the course of those negotiations, was the idea of an adjusted standard discussed with the USEPA, the IEPA the Justice Department, and the Illinois Attorney General's Office representatives who were involved in that?

MR. BOW: Yes, it was.

MR. KENNEY: Is that reflected in the consent decree?

MR. BOW: Yes, it is.

MR. KENNEY: The idea that the adjusted standard would be necessary?

MR. BOW: It is.

MR. KENNEY: Do you know where?

MR. BOW: I believe it was on Page 24 under Subitem C on that page.

MR. KENNEY: Again, that's Exhibit 4 to Group Exhibit A. Do we need to read that into the record? We can if you'd like.

HEARING OFFICER HALLORAN: We don't

need to.

MR. KENNEY: Okay. There was also somewhat contemporaneously with the negotiation of the amended, first amended consent decree, there were negotiations with the state on a consent order; is that correct?

MR. BOW: There were.

MR. KENNEY: I don't believe this is -- It's in the -- this document is in the record to the extent we submit it as an exhibit to Mr. Orlinsky's -- to the IEPA's recommendation, we can either submit it as a separate exhibit here or we can just reference that. The Board also asks if that consent order addresses -- because I believe it was in Mr. Campbell's comments, if that consent order also addresses the adjusted standard, and it does. Maybe it would make sense to just introduce this as a separate exhibit and just indicate where it is, if that's okay?

HEARING OFFICER HALLORAN: Exhibit C.

MR. KENNEY: I'm going to mark a

consent order dated January 6, 2005, People of the State of Illinois, ex rel, Lisa Madigan versus Johns Manville, No. -- it's Circuit Court of Lake County No. 01 CH 857 and identify that as -- ask Mr. Bow to identify that.

MR. BOW: This is the state consent order.

MR. KENNEY: And look at Page 13.

MR. BOW: Item No. 2 references closure of the miscellaneous disposal pit and a portion of the collection basin where waste was disposed.

MR. KENNEY: Does that acknowledge that an adjusted standard might be necessary?

MR. BOW: It does. It says that Mansville should either file a petition with the board for an adjusted standard for closure of the landfill.

MR. KENNEY: Okay. I'm going to ask that that be introduced -- that that be entered into evidence as Exhibit C.

HEARING OFFICER HALLORAN: Any objection?

MR. ORLINSKY: No objection.

HEARING OFFICER HALLORAN: So admitted.

MR. KENNEY: I'll also ask that Exhibit B be entered into evidence.

MR. ORLINSKY: No objection.

HEARING OFFICER HALLORAN: Admitted.

MR. KENNEY: So the adjusted standard proceeding that we're here today, that involves Fill Area No. 1 and Fill Area No. 2, correct?

MR. BOW: Correct.

MR. KENNEY: Okay. About how big are those two features?

MR. BOW: Fill Area 1 is the former miscellaneous disposal pit is approximately ten acres in size and Fill Area 2, the former collection Basin, is roughly three and a half acres in size.

MR. KENNEY: How were those landfills operated, during what period?

MR. BOW: When the CERCLA action was completed in 1992, the facility filed an initial facility report to provide for the

disposal of plant-generated waste that were not asbestos contained within former miscellaneous disposal pit which was located roughly the eastern one half of Fill Area 1. The miscellaneous disposal pit was a pit, because the surrounding area had been built up during the CERCLA landfill work leaving a pit that was subsequently filled in with plant wastes in Fill Area No. 1.

MR. KENNEY: Now what kind of plant wastes were those?

MR. BOW: Largely two kinds with some additional materials: The two were calcium silicate, which was essentially limestone, crushed lime and sand that was made as part of the insulation material. There was some roofing materials, some granules, and then there was miscellaneous and smaller amounts of paper, cardboard, occasional pieces of wood; but largely calcium silicate and the rolled roofing or roofing granules. No asbestos materials were disposed in the miscellaneous disposal pit or the Fill Area 2 in the collection basin.

MR. KENNEY: The consent decree prohibited that, didn't it?

MR. BOW: That's correct. And as part of that during the 1992 and 1991 CERCLA closure activities, a layer of sand was placed at the direction of the U.S. EPA at the bottom of the former miscellaneous disposal pit as a cover layer over any materials at the bottom that may have contained asbestos.

MR. KENNEY: Okay. Now, Johns Manville, through consultants such as yourself, did some work to evaluate and verify what was in that landfill, those Fill Area 1 and Fill Area 2, correct?

MR. BOW: That's correct.

MR. KENNEY: And did --

MR. BOW: The waste materials that were discovered during the investigation that were reported in one of the exhibits to Exhibit A were well -- results from well drilling showing the materials that were disposed in the pit were consistent with what they had said was going to be placed in the

pit during the -- in the initial facility report that was filed in 1992.

MR. KENNEY: Does that material generate much in terms of landfill gas?

MR. BOW: It does not.

MR. KENNEY: And was work done to verify how much landfill gas was being generated?

MR. BOW: Yes, there was. There was a landfill gas monitoring well that was installed in miscellaneous disposal pit through the waste materials. There was landfill gas drawn from that, and there has been monitoring of landfill gas. It is very low pressure and is not indicative of a typical chemical in a landfill.

MR. KENNEY: Does that gas monitoring continue or has it continued since the original work -- when was the original work done?

MR. BOW: For the landfill gas monitoring?

MR. KENNEY: Yes.

MR. BOW: I believe -- Let me find it.

April 2003.

MR. KENNEY: Okay. And has there been ongoing gas monitoring since then?

MR. BOW: Yes. Since that time, the regulations call for monthly monitoring of landfill gas. That is -- That continues to this day. One of the adjusted standards is to call for reduction of frequency of that monitoring, but until that is resolved, we're continuing the monthly monitoring.

MR. KENNEY: Okay. What is that monthly monitoring showing?

MR. BOW: It is consistent with the original investigation showing very low gas pressures within the landfill itself and have been no detections of landfill gas pursuant to the standard monitoring that is done that would indicate any migration of landfill gas.

MR. KENNEY: Okay. What does the adjusted standard provide for?

MR. BOW: The adjusted standard provides for two things: One is the -- a reduction in the frequency of landfill gas monitoring from a monthly period of

monitoring for a minimum of five years. It provides to go to semiannual monitoring for a total of five years, after which if no detections are noted, monitoring will cease.

The second standard provides for the location of the subsurface monitoring devices which would normally be placed at 100 feet away from the edge of the waste; however, in this case, because that would place us within some asbestos waste materials along the side slopes of the CERCLA landfill, we have asked that those monitoring locations be allowed to be placed somewhat further out to get away from having drilled through the side slopes of the landfill.

MR. KENNEY: Okay. Now, you've mentioned, I believe, a couple of times that there is an asbestos landfill that was constructed pursuant to the superfund consent decree. Could you give the board an idea of where that is.

MR. BOW: Sure.

MR. KENNEY: Using Exhibit B. If you have another drawing that shows it, that

would be okay as well.

MR. BOW: I'll take a look at both. Using Exhibit B, the former CERCLA landfill, again, is located on roughly -- it's distorted from the photograph, but it's roughly the eastern half of the property itself, and it is shown by this dashed outline, and it can be seen essentially as the green vegetated area on the landfill itself. This is the former CERCLA landfill outline as shown by this double dashed line surrounding this area. The settling basin is within that, as we've discussed, and the two units for the onsite landfill being closed pursuant to this proceeding and this adjusted standard are nested within the former CERCLA landfill in both areas, Fill Area 1 and Fill Area 2. To further depict that, I have a cross-section that is a west-to-east cross-section. This cross-section is located -- it may be found within the exhibits --

MR. KENNEY: That would be Group Exhibit A.

MR. BOW: Group Exhibit A. This cross-section is shown within that.

MR. KENNEY: Just for clarification, I believe that is Group Exhibit A, and it's Figure --

MR. BOW: Figure 2B.

MR. KENNEY: Figure 2B.

HEARING OFFICER HALLORAN: Thank you, Mr. Kenney.

MR. BOW: This particular cross-section, east/west, is shown through the -- starting at the western edge of the former CERCLA landfill as shown on the aerial photograph, and it runs towards the east and terminates at the edge of Lake Michigan. The cross-section itself shows several units within it. First of all, it's a closed CERCLA landfill shown in the green hatch. The native ground comes up to approximately 580 to 585 feet above sea level above which is the former CERCLA landfill which we identified previously as part of the disposal area shown in the green hatch. On top of that particular unit is an engineered cover

consisting of six inches of sand overlaid by 15 inches of clay overlaid by three inches of topsoil upon which there is a vegetative layer placed upon that. That CERCLA cover extends from the west to the east to the edge of the former miscellaneous disposal pit. The former miscellaneous disposal pit, again, was left open to allow for ongoing disposal of nonasbestos plant waste post 1992. However, within that area you can see there is a sand layer depicted that has been verified through drilling; sand layer depicted at the bottom of the miscellaneous disposal pit and has cover over any asbestos wastes that were going to be located below the former miscellaneous disposal pit. And then at the far eastern edge, the CERCLA cover picks up again outside of the limits of the former miscellaneous disposal pit, and it extends down to the closure area, the edge of the former superfund site.

Above the CERCLA landfill and CERCLA cap are miscellaneous disposal pit wastes for on-site landfill waste material,

and that's shown in the brown hatching as depicted above the cover on the CERCLA wastes. And above the miscellaneous disposal pit wastes is a clay cover that was used as interim cover on top of the wastes that were placed in the miscellaneous disposal pit. That clay cover varies, currently varies between anywhere, from, say, three feet and upwards of 18 feet in thickness.

MR. KENNEY: So at present the Fill Areas 1 and 2 have cover on them?

MR. BOW: They do.

MR. KENNEY: They're not open waste?

MR. BOW: They are not. There are no waste materials at the surface. There is a second cross-section Figure 2D located within Exhibit A.

MR. KENNEY: That's Exhibit A, Group Exhibit A, and that's Exhibit 2 to that and it's Figure 2.

MR. BOW: This is Figure 2D. This is, again, also a west-to-east cross-section through the miscellaneous -- I'm sorry -- through Fill Unit 2 which is the former

collection basin. The cross-section extends roughly from the edge of the former settling basin eastward to Lake Michigan. The top of the CERCLA cover is depicted until it gets to the edge of the former collection basin. There are some waste materials consisting virtually entirely of calcium silicate material at the bottom of the former miscellaneous -- I'm sorry -- the bottom of the former collection basin. And on top of that there is another clay cover that varies in anywhere from 5 to 15 feet in thickness.

MR. KENNEY: Now, it's not part of this proceeding, but there have been discussions with -- between Johns Manville and IEPA concerning the cover that is on the Fill Area 1 and 2; is that correct?

MR. BOW: There have.

MR. KENNEY: Do you have an understanding as to what IEPA's position on that -- whether the cover is equivalent to the regulatory requirements?

MR. BOW: Well, the existing cover will need to be modified through the

placement of some additional materials, sand drainage layer, and some additional cover materials. But we've been in ongoing discussions with the Illinois EPA, specifically Chris Liebman and his group. And they have agreed that the cover that's being proposed for the onsite landfill units is the equivalent of the standard cover in the regulations; therefore, an adjusted standard will not be required.

MR. KENNEY: Okay. Now, in terms of the adjusted standard proceeding here today, we're talking about an adjusted standard for gas monitoring and management requirements and for ground water monitoring for Fill Area 1 and 2?

MR. BOW: Correct.

MR. KENNEY: Could you briefly describe -- First of all, why don't we start with gas management monitoring. Could you point out why that would -- why the regulatory requirements would present problems in terms of location of gas monitoring wells and management systems?

MR. BOW: Yes. The standard regulation calls for the placement of subsurface gas monitoring devices roughly 100 feet away from the edge of the waste unit. And based on this cross-section 2B that I referred to earlier, that would place the monitoring wells or monitoring devices roughly half way up the side slope of the now-closed CERCLA landfill. So we would be drilling -- We would be placing permanent monitoring wells half way up the side slopes of a closed superfund asbestos landfill. And for a variety of reasons, health and safety, and logistics and costs, we have felt that the placement of monitoring wells half way up the side slopes of the CERCLA landfill was inappropriate and that placement of those monitoring wells immediately at the top of the slope was a much more practical solution.

MR. KENNEY: Now is that -- Are you talking about ground water monitoring wells or gas monitoring wells or both?

MR. BOW: Both.

MR. KENNEY: Okay. So is the problem

penetration of the cap or is the problem getting equipment to put the wells in?

MR. BOW: It's both. The first issue is that the U.S. EPA and JM would prefer to avoid drilling through the CERCLA cap as much as possible. Secondly -- and that's for health and safety reasons simply during the drilling event; and then, subsequent to that, there is the concern that you could have slope failure, and you would expose a significant portion of the asbestos waste materials underneath the cover should the bringing of heavy equipment and construction of the roads that would be necessary to put these wells half way up the side slope should that cover fail.

MR. KENNEY: Obviously with the drill rig, you have to have some sort of equipment to bring in and put it in place?

MR. BOW: That's correct.

MR. KENNEY: Like a truck or something like that.

MR. BOW: Correct.

MR. KENNEY: And that can create

problems in terms of slope failure.

MR. BOW: Yes. So the combination of slope failure and the potential health and safety effects of the drilling and of the potential slope failure led us to conclude it would be more practicable to locate the monitoring point; instead of half way up the side slope, to just move them immediately to the east or the south away from the side slopes to the now closed CERCLA landfill.

MR. KENNEY: Okay. And the data that JM has collected concerning gas generation is that there is not much gas being generated by the landfills anyway.

MR. BOW: That's correct.

MR. KENNEY: Okay. Let's talk about ground water monitoring a little bit. Could you sort of explain what Johns Manville is seeking with respect to the adjusted standard for the ground water monitoring?

MR. BOW: Similar to the location of the gas monitoring devices, JM is seeking an adjustment, adjusted standard to the location of the ground water monitoring wells that

would normally be placed pursuant to the regulation at a distance of one half of the distance between the edge of the waste and the zone of attenuation. That would, in effect, locate those wells roughly 50 feet away from the edge of the waste within the two units. That 50-foot distance, again, puts that within the CERCLA landfill requiring drilling through the CERCLA cover and along the side slopes of the CERCLA landfill. Therefore, we have proposed placing the monitoring wells and the zone of attenuation extended outward a short distance; that instead of the zone of attenuation being 100 feet away from the waste, it would be placed in various distances roughly 150 to 200 feet away.

MR. KENNEY: Now, you're referencing Figure 2A which is part of Exhibit 2 of Group Exhibit A; is that correct?

MR. BOW: Correct.

MR. KENNEY: Okay. Now, the Pollution Control Board, prior to the hearing, asked the question concerning zone of attenuation

and whether the zone of attenuation could be, apparently based on this drawing, which is also the same drawing as Exhibit 8 to the adjusted standard petition. Is that correct?

MR. BOW: That's correct.

MR. KENNEY: Do you recall the Board's question?

MR. BOW: The question regarding that was whether or not the zone of attenuation actually extends in a complete encirclement of the two waste units. And that is, in fact, the case. The concern was that the exhibits, as depicted, only showed the zone of attenuation in the down gradient direction, which is, from a practical perspective, where the ground water monitoring has to be conducted. But the zone of attenuation, in effect, extends, encircles the entire unit at a distance roughly 100 feet away from the edge of the waste. However, in the down gradient directions where the monitoring has to take place, it's extended somewhat further to the east and to the south. But to the northern and the

eastern -- western sides of the two units, it would not be changed. It would be left at the standard 100 foot distance.

MR. KENNEY: I'm going to ask that Exhibit D, which is a drawing, be marked for identification. And I'll ask Mr. Bow to take a look at this. You've seen this, Peter. I'll have Mr. Bow discuss this as well. I'm going to ask you to take a look at Exhibit D and explain what it is.

MR. BOW: Exhibit D is a modification to Figure 2A that shows the -- shows the proposed zone attenuation boundary on the south and east sides as had been requested in the adjusted standard petition. However, it includes a dashed line that would depict the zone of attenuation at a 100 foot distance away from the waste edge -- away from the unit -- the boundary of the waste in a traditional fashion, pursuant to the regulations at 100 feet away.

MR. KENNEY: Okay. Now, there wouldn't be ground water monitoring wells located to the north or where that --

northern part of that line to the north of Fill Area 1 or Fill Area 2; is that correct?

MR. BOW: No, there would not.

MR. KENNEY: Because --

MR. BOW: They are in a cross gradient, not a down gradient direction. There would not be monitoring the ground water quality from these two units because they are not down grading. Those directions, the west side on the north side are not down grading of the units.

MR. KENNEY: Now, would the same type of issue -- In the event that the gradient never shifted and there needed to be wells, would the same issues present themselves there?

MR. BOW: They would.

MR. KENNEY: In terms of slope and drilling through the asbestos landfill?

MR. BOW: They would.

MR. KENNEY: Because the asbestos landfill extends around Fill Area 1 and Fill Area it, doesn't it?

MR. BOW: It does. The asbestos

landfill extends a considerable distance to the west and to the north of the two fill areas.

MR. KENNEY: Okay. The one exception to that is where the settling basin is, but -- the former settling basin. But that, similarly, you can't drill through that either, can you?

MR. BOW: That's being closed pursuant to the first amended consent decree, and the U.S. EPA and JM would view drilling through those units as -- we would like to see that as limited -- just as limited as the existing CERCLA cover.

MR. KENNEY: In order prevent --

MR. BOW: In order to prevent --

MR. KENNEY: -- migration of asbestos-containing material and that sort of thing?

MR. BOW: And, again, since these directions are not down gradient of the two units of the miscellaneous disposal pit and the former collection basin ground water monitoring would never be anticipated for

those areas.

MR. KENNEY: So in answer to the question raised by the board, this document would show the zone of attenuation extended around the landfills. But in terms of location of ground water monitoring wells, they wouldn't be required because -- under the regulations because at present it's not down gradient?

MR. BOW: That's correct. There was never any intent to modify the zone of attenuation in those other directions.

MR. KENNEY: Okay. I think we've addressed the board's questions about the consent orders. We've addressed the question about the zone of attenuation.

MS. LIU: Actually, I do have some remaining questions. Is it all right --

MR. KENNEY: We can do it now or --

HEARING OFFICER HALLORAN: Let's do it now since we're on the topic. Want to go ahead, Miss Liu.

MS. LIU: Since the consent order was the first thing you addressed, I believe the

question related to whether or not there had been any development since those consent orders came out that might have changed the directives at all? There was some indication in a public comment that perhaps there were future developments that might impact today's adjusted standard. I was wondering if you could provide any insight on that.

MR. KENNEY: Not to my knowledge. What is occurring under the consent orders, the Illinois consent order, the penalty has been paid. It was -- The consent order arose from an enforcement proceeding. Penalties have been paid. I think there's been some stipulated penalties for some sort of ongoing MPDS type issues that have been paid. And the only other issue essentially associated with that was there was a reference to the adjusted standard which is what we're here for. And there really haven't been any other development that I'm aware of with respect to that.

In terms of the federal consent decree, the federal consent decree

provides for some extended remedial activities, settling basin is being done pursuant to that. There's some additional work that's being done pursuant to that. At some point in time, the two bodies of water, two of the bodies of water to the north of the site -- Why don't you identify those, Mr. Bow.

MR. BOW: The industrial canal located along the northern boundary and the pumping lagoon, which is an extension, westward extension of the canal.

MR. KENNEY: Those will need to be addressed, but they really don't relate to this proceeding at all. So there really have not been any development associated with either the state consent order or the federal consent decree that I'm aware of that would affect this, what the adjusted standard proceeding.

MS. LIU: Thank you for that update. The other question I had was pertaining to the zone of attenuation, and I appreciate you clarifying where you intended it to be. But

I believe the question related more to the wording of the adjusted standard as proposed. When I read it, I thought perhaps it might exclude the identification of the zone of attenuation on the western and northern side. And I was wondering, not being a lawyer, if there was an alternate way you could word that so that there wasn't confusion.

MR. KENNEY: Yes. There was a reference in the adjusted standard language that refers to Exhibit 8 which was Exhibit 8 to the petition which is the same as figure 2A. We could do an alternative figure, or we could -- I was looking at the language, and I'm not sure I can figure out a better way of doing that, but we're certainly not adverse to that if the Board feels it needs to be clarified. We can even do an alternative exhibit more along the lines of the one that Mr. Bow was just discussing. I suppose we could do alternative language, too, but I'm really not sure exactly how to do it. The location -- yeah. Basically the language that we had suggested talks about installing

ground water monitoring wells at the location specified on the attached Figure 8. Figure 8 really was intended to identify where the ground water monitoring wells were going to be installed and had the zone of attenuation placed on that for sort of additional information. We could either amend Figure 8, 2A to clarify that, you know, the zone of attenuation surrounds the two fill areas. It'll still show the monitoring wells in the same locations if that's -- if that's what the Board feels would be necessary.

I guess the other thing we could do is submit something that -- basically a revised figure that just shows where the monitoring wells would be and not indicate the other language.

MR. BOW: I believe that the Illinois EPA felt it important that we distinguish that the zone of attenuation would be moved as a result of this adjusted standard. So the act of moving the ground water monitoring wells outward to the slope also necessitated an adjustment to the zone of attenuation

adjusted standard to that.

MR. KENNEY: Okay.

MR. BOW: The language references Figure 8 as the location of the zone of attenuation as adjusted. We could -- easiest to modify Figure 8 in order to show the zone of attenuation in much the same way that we have shown Group Exhibit -- on Group Exhibit D where we would show the zone of attenuation at the 100 foot distance on the sides, the west and the north sides, and leave the modified zone of attenuation on the east and south sides as are already on the figure. Since the language references Figure 8 in the original adjusted standard, a modification of Figure 8, I believe, would just address the issue without trying to figure out how to write it down in words depending upon this corner and that corner, et cetera, et cetera, if that would be acceptable.

MS. LIU: I think that would be a good way to go.

MR. KENNEY: And that's fine. Now,

could we do this or do you want to do -- submit another revised Figure 8?

MR. BOW: I'm fine with this handwritten sketch as Group Exhibit D because the -- that's essentially what it's going to look like on the revised Figure 8. The question would be whether the Board would be concerned that the hand sketch isn't exactly reflective of 100 foot distance on the north and west sides in the sense that it's going to wobble a little bit between 90 and 110 as my pen moved around it. We could, on a much more detail level, submit a figure that was exactly 100 feet. I think it's a distinction without a difference, but if the Board would prefer that we come up with an exacting drawing, I don't have any problem doing that. I just don't have it with me today. In other words, you know, this is --

HEARING OFFICER HALLORAN: Off the record.

(Short break taken.)

HEARING OFFICER HALLORAN: We can go back on the record, I think. We took a short

break. We're now back. It's approximately 10:31. Mr. Kenney?

MR. KENNEY: I think there was some discussion when we were off the record how best to address this Exhibit 8 to the petition issue and to kind of clarify that. I think the conclusion was that we can submit a revised Exhibit 8 that shows the zones of attenuation around Fill Area 1 and 2, and we can do that within the next day or so. So that would be our proposal in terms of clarification of the record.

HEARING OFFICER HALLORAN: Yeah. That's fine with me. Or I'm trying to -- I'm thinking out loud here. Do you wish to submit that into evidence?

MR. KENNEY: We can submit -- Why don't we have -- and I would ask that Exhibit D be entered into evidence. That's the figure that Mr. Bow had identified and was addressing. We can also submit a revised -- and that should be part of the administrative record as well, but I'm not sure how best to do that.

HEARING OFFICER HALLORAN: Mr. Orlinsky, I guess first off, do you have any objection to Exhibit D being admitted into evidence?

MR. ORLINSKY: No.

HEARING OFFICER HALLORAN: Exhibit D is admitted into evidence.

Now, the query is do you want to, I guess, at our behest, submit a revised Exhibit A?

MR. KENNEY: Just so the record is clear, this drawing was submitted as Exhibit A to the original -- to the amended adjusted standard petition. And it's also included in Group Exhibit A as Figure 2A; is that correct?

MR. BOW: Correct.

MR. KENNEY: So it's sort of in two places. What we would be submitting would be sort of a modification of Exhibit D, which was just entered just a little bit more precisely drawn to show the zone of attenuation around Fill Area 1 and Fill Area 2, just be more precise by CAD; is that

correct?

MR. BOW: It is. The Exhibit D is a hand sketch of what a more accurately depicted revised Figure 8 would be. But it will -- largely it will be exactly reflective of what is on Exhibit D already.

HEARING OFFICER HALLORAN: Okay. Thanks for the clarification, and I think the record will reflect that. However, I feel a little uncomfortable accepting it if you were going to offer it into evidence. What will happen, the Board will take that into consideration, you'll just submit the revised Exhibit 8 and Group Exhibit A.

MR. KENNEY: That's fine.

HEARING OFFICER HALLORAN: And any objection, Mr. Orlinsky, just for the record?

MR. ORLINSKY: No. I wouldn't object.

MR. KENNEY: That's fine. We have no problem with that. This is really for the Board's clarification in any event. So we have no problem doing it that way.

HEARING OFFICER HALLORAN: Terrific. We can move on.

MR. KENNEY: One other question that the board had raised was concerning Exhibit 11 of Group Exhibit A which is -- it's an onsite landfill ground water aviche (ph.) quality report, and there was a reference to a submittal to the Pollution Control Board in that report. It actually should be -- the submittal was to the Illinois EPA; is that correct?

MR. BOW: It was a submittal from the Illinois EPA.

MR. KENNEY: I'm sorry.

MR. BOW: Dated September 14, 2005. There was a question from the Illinois EPA, and we inaccurately stated it was a question from Illinois Pollution Control Board. So the sentence in Exhibit 11 that has been referred to in the question that the Board had, it should have stated from the IPCB. It should have stated from the IEPA dated September 14. So we're clarifying that it should have been from the IEPA, not from the Pollution Control Board.

MR. KENNEY: So that should clarify

the record on that score.

Now, the -- I believe you had testified that the types of wastes that were in the landfill were similar to, more similar to inert type wastes than they were to chemical and putrescible type wastes. Is that accurate?

MR. BOW: I did not -- I can make that characterization that they are more similar to inert type wastes. We hadn't discussed that specific point, but the presence of calcium silicate and the roofing material would be much more similar to an inert type waste, although technically it's being considered chemical and putrescible based upon the limited amount of landfill gas generation and the aviche (ph.) quality. It is much more similar to an inert waste than it is a chemical and putrescible waste.

HEARING OFFICER HALLORAN: Mr. Bow, could you speak up, please.

MR. BOW: In a traditional sense.

MR. KENNEY: So is it your opinion that the adjusted standards that have been

proposed by Johns Manville would be protective -- equally protective of the environment as in compliance with the regulatory requirements?

MR. BOW: It is my opinion. That is correct.

MR. KENNEY: That is true of both landfill gas monitoring proposed adjusted standard, and gas -- and the ground water monitoring?

MR. BOW: It is true of both.

MR. KENNEY: Well, I have no further questions for Mr. Bow, unless -- I know Mr. Orlinsky has some. And if the Board has any additional questions, we'd certainly --

HEARING OFFICER HALLORAN: Mr. Orlinsky?

MR. ORLINSKY: I have a few, and to some extent I think you may have just hit on the question. But Sandra Bron, that's B-R-O-N, who is our project manager with Johns Manville was not able to make it. But she had sent me just a couple of questions and she wanted to clarify based on the

written testimony that was submitted to the board. And these go to what you were just talking about, about the distinction between inert wastes and chemical and putrescible wastes. So let me just read them verbatim and see.

On Page 10 you say that waste material generated at the plant in 1992 for disposal on the onsite landfill included sludge from the presettling lagoons, parentheses, insert solids from manufacturing, parentheses. How do you know the sludge from the presettling lagoons was inert solids?

MR. BOW: The sludge from the presettling lagoons came out of the thermal 12 manufacturing process. Thermal 12 or T12 insulation was primarily and largely consisted of lyme and silica sand quartz. Those materials are inert. It did not contain organic materials that you would typically consider to be a chemical and putrescible waste. Therefore, the description as largely inert is accurate in

that it was lime material and sand.

MR. ORLINSKY: And Ms. Bron's second question: On Page 11 you say the initial facility report on Page 9 has a reference to the waste being inert. For the record, in your discussions and communications with Illinois EPA, is it your understanding that Illinois EPA agreed with the reference to the waste being inert?

MR. BOW: They did not agree that it was inert.

MR. ORLINSKY: Now, and this is just my question now. If, in fact, there was some chemical and putrescible waste mixed in with the inert waste, would that have any bearing one way or another on this adjusted standard?

MR. BOW: Yes.

MR. ORLINSKY: It shouldn't have --

MR. BOW: It could because the ground water monitoring requirements as a whole, should they have been inert waste, would have been largely different. Because it is chemical and putrescible by definition in a strict sense, we are looking at the ongoing

ground water monitoring that we're currently addressing. So I believe there would be a substantial difference had it been determined to be fully inert. But the presence of cardboard and wood caused it to be considered as a chemical and putrescible waste even though it was largely inert.

MR. ORLINSKY: Thank you. I have nothing further.

HEARING OFFICER HALLORAN: Thank you. Miss Liu?

MS. LIU: Nothing else for me. Thank you.

HEARING OFFICER HALLORAN: Terrific. We can go off the record.

(Off the record.)

HEARING OFFICER HALLORAN: We can go back on the record. We're back on the record. We were just talking about post-hearing briefing schedules. The parties have rested, our technical personnel, Miss Liu, has no further questions. We've agreed on a post-hearing briefing schedule as follows: Mr. Kenney, JM's brief is due --

opening brief is due August the 31st, 2007. The IEPA, Mr. Orlinsky's brief, is due September 12, 2007, and JM's reply, if any, is due September 19, 2007. I'll set public comment for August 17.

All right. If there's no further questions, this concludes the hearing, and I appreciate your professionalism. And I apologize, again, for my lateness. I thought the quality of evidence was very enlightening and very good. Thank you so much.

(Which were all the proceedings had.)

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STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, LAURA BERNAR, being a Certified Shorthand Reporter doing business in the City of Chicago, Illinois, County of Cook, certify that I reported in shorthand the proceedings had at the foregoing hearing of the above-entitled cause. And I certify that the foregoing is a true and correct transcript of all my shorthand notes so taken as aforesaid and contains all the proceedings had at the said meeting of the above-entitled cause.

Laura Bernar

LAURA BERNAR, CSR
CSR NO. 084-003592

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