Deletions to be made on p. 60 & 111

IN THE MATTER OF:

THREE MILE ISLAND SPECIAL
INQUIRY DEPOSITION

DEPOSITION OF MICHAEL A. JANOUSKI

Place - Middletown, Pa.

Date - September 19, 1979 Pages: 1 - 127

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THE NUCLEAR REGULATORY COMMISSION'S:

SPECIAL INQUIRY GROUP :

Oral deposition of MICHAEL A. JANOUSKI

APPEARANCES:

Brownstein, Zeidman & Schomer
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Washington, D.C. 20036

For the Nuclear Regulatory Commission Special Inquiry Group

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For Metropolitan Edison

ALSO PRESENT:

Oliver D. T. Lynch
Harry S. North
Paul A. Murray
John J. Cody

TAKEN AT:

Trailer 203
Three Mile Island
Three Mile Island, Pa.

Wednesday,
September 19, 1979
9:00 a.m.

I N D E X

EXHIBITS

PROCEEDINGS

MICHAEL A. JANOUSKI

was called as a witness and, having been first duly sworn by Oliver D. T. Lynch, was examined and testified as follows:

BY MR. DIENELT:

Q Would you state your name and business address?

A My name is Michael A. Janouski. I am a senior radiation protection technician for Metropolitan Edison Company at Three Mile Island.

Q I will show you a document that has been previously marked as Exhibit 3021. Have you had an opportunity before this deposition to review a copy of that document?

A Yes, I have.

Q Do you understand it?

A Yes, I do.

Q The answers to the questions you give today are the same as if you were testifying in a court. You will have an opportunity to review the transcript of the deposition after it has been concluded and to make any changes in it that you feel are necessary.

It is important to understand the questions and to try to give full and complete answers to the questions. Because if you make changes in the deposition

later that are of a substantial or substantive nature as opposed to a change of spelling it could be viewed as affecting your credibility. So, if a question is asked that you don't fully understand, please let me know. We will try to clarify it.

Also, I would appreciate it if you would allow me to finish asking the question even if you know what the thrust of the question is and are prepared to answer it. That will assist the court reporter in getting an easy-to-read sequence of what we have to say today.

I would also like to note for the record that Mr. Janouski is accompanied by a union representative. His name is Mr. Cody.

MR. CODY: Union, non-counsel.

MR. DIENELT: Would you mark these as 3028 and 3029.

(Whereupon, an interview of Michael A. Janouski taken on May 2, 1979, was marked as Exhibit 3028; and an interview of Michael A. Janouski typed on June 28, 1979, as Exhibit 3029.)

BY MR. DIENELT:

Q Do you recall being interviewed by members of the I&E Branch of the Nuclear Regulatory Commission?

A Yes, I do.

Q I am going to show you 2 documents that have been

marked Exhibit 3028 and 3029.

Have you had an opportunity to review the interview that you gave to I&E?

A No, I haven't.

Q Exhibit 3028 and 3029 are transcripts of the interviews. Am I correct that you have not received and had an opportunity to review those transcripts?

A I have in my possession tapes with these. I have not had the opportunity to listen to those tapes because I do not have a cassette recorder of my own. So ...

Q To the best of your recollection were the answers that you gave to the questions that were asked of you by the I&E investigators full and complete and accurate?

A Accuracy-wise I would say that there was -- there could be a question in time spans. As I could recollect the sequence of events are as accurate as I could remember them at the time because both interviews that I had given were, you know, in periods of time quite later. The effects of the accident and the response through the accident, you know, things became very vague. And, you know, it was as best that I could recollect, yes.

Q Is there anything that stands out in your mind at this point as a statement or an answer that you gave during those interviews which you now believe was not completely accurate or should be elaborated upon?

A No.

Q Have you been deposed as an individual by the staff of the President's Commission?

A As an individual, no.

Q Have you been deposed or interviewed or given testimony as a member of a group?

A Yes, I have.

Q Can you tell me briefly the circumstances of that testimony?

A The testimony was with the President's Commission and involved 6 union representatives, union officers of IBW Local 563 which is the RIBEW affiliate here at Three Mile, and Mr. Bob Dietrich, the international representative of our district and Mr. Joe Parks who is our U-9 system counsel president.

Q What does U-9 stand for?

A It is the bargaining -- it is the group of 5 locals under Metropolitan Edison Company who are the arbitrating group for our contracts with Metropolitan Edison Company.

Q Do you recall when the testimony before the President's Commission took place?

A I don't remember the exact date.

Q Do you remember the month?

A It was last month.

MR. CODY: I think it was the 21st.

THE WITNESS: I am pretty sure it was the 21st.

BY MR. DIENELT:

Q To your knowledge was that testimony transcribed in some form?

A Yes, it was. I think they were taping the conversations.

Q Apart from your interviews with I&E and the group testimony before the President's Commission do you recall giving any deposition or interview which was recorded in some form in which you discussed the accident that began on March 28, 1979, at Three Mile Island?

A No, I don't.

Q What is your current position?

A I am a radiation chemistry technician, nuclear.

Q Will you summarize what your responsibilities in that position are?

A I am a senior tech for my shift. I handle whichever department I am assigned to at the time, either chemistry or HP. I am responsible for all the shift duties that the work, you know, that the work associated to that department is completed. We handle all the signing of RWP's, liquid and gas releases, really routine -- the routine, everyday duties of our department we are in charge of really.

Q Was your position the same during the period

beginning on March 28?

A Yes, it was.

Q The responsibilities were the same?

A My responsibility that night was senior HP in charge of health physics in Unit 1 and 2.

Q Do you have with you a resume?

A No, I don't.

Q How long have you held the position you currently hold?

A Approximately 5 years.

Q Were you employed by Met-Ed prior to that time?

A Yes, I was.

Q What position did you hold?

A I was an analyst junior.

Q What does an analyst junior do?

A All we did was handle all the secondary chemistry water sampling for the site. That was prior to Unit 1 startup.

Q How long did you hold that position?

A Approximately 2 years.

Q Had you been employed by Met-Ed prior to that?

A Yes, I was.

Q What position did you hold?

A I was a -- I was an auxiliary operator A at Crawford Station.

Q Where is Crawford Station?

A It is the coal-fired plant in Middletown that belongs to Metropolitan Edison Company.

Q How long did you hold that position?

A 2 weeks.

Q Is there any particular reason why your tenure was so short?

A I bid the job for here.

Q Had you been employed by Met-Ed prior to Crawford Station?

A Yes.

Q What position and for how long?

A I was a utility B worker at Crawford Station.

Q For how long?

A 2 weeks. Auxiliary A is actually an auxiliary B operator. It really isn't an A classification.

Q How long total were you employed at Crawford Station?

A One month.

Q Prior to your employment at Crawford Station were you employed by Met-Ed?

A No. I wasn't.

Q Did you have any employment prior to the time you came to Met-Ed?

A Yes, I did.

Q Tell me about that?

A Oh, boy.

Q You can summarize it generally?

A I worked for Bell Telephone as a janitor for 3 months prior to that. Prior to that I worked for the United States Government for approximately a year. And it was just a labor-type position. And prior to that I worked for Thompson-Woolridge Company of Harrisburg as a production expediter for 5 years.

Q Prior to that employment did you have any full-time employment?

A Yes. I worked for the Bethlehem Steel Company. That was -- it was full-time. That was summer-type employment carried into when I was going to college.

Q Did you graduate from college?

A No, I didn't.

Q How many years did you attend?

A One year. One complete year.

Q Where?

A Harrisburg Area Community College.

Q How old are you?

A 32.

Q Had you any experience in the health physics field in which you now work prior to the time when you became a Rad Chem Tech?

A No.

Q All of your training in that field came through Met-Ed?

A That's correct.

Q During the period beginning on March 28 did you maintain a log or diary or any notes of the activities in which you engaged?

A No, I didn't.

Q Have you since March 28th prepared any memorandum or other documents summarizing the activities in which you engaged?

A Other than general discussions with my shift partners and that sort of thing, one of which I have with me here, it is just really to go over a sequence of events to try and regroup my memory a little bit on what occurred during that period. It is not really a documented-type thing. It is really just a matter of discussion and notes.

Q The notes that you have with you today were prepared when?

A These were just prepared in the last day.

Q With whom did you discuss the chronology of events?

A Mr. Pat Donnachie who was the other HP on shift with me at the time and Mr. David Zeiter and Mr. Tiny Davis. It is Thomas Davis. I am sorry.

Tiny and Dave were the HP's who were working in

chemistry the night of the accident. Dave is the other senior on my shift.

Q You were senior to Mr. Donnachie?

A Pat has seniority time on me. But since I was the senior shift person I received that responsibility.

Q Did you discuss the sequence of events or any other aspect of the incident with anybody other than these 3 in preparing that set of notes?

A No.

Q What was your shift on the evening of the 27th and the morning of the 28th?

A The hours of work?

Q Yes, sir.

A That was the 11 to 7 shift.

Q When did you become aware of the transient that began?

A The first indication that I had was that right after 4:00 o'clock the notification over the page system of the turbine trip. And then shortly within seconds after that or minutes after that the announcement of the reactor trip.

Q At this point were you the senior health physics person, not in terms of seniority, but --

A On-site?

Q On-site.

A Yes, I was.

Q What did you do after you heard the announcements of the turbine and reactor trips?

A I went -- Well, Pat and I started our routine trip procedure that we use. It is not really a procedure as such, but we have a sequence of responsibilities that we have to do after a trip. And we started getting ready to perform those sequences. I went and made sure that Pat and Dave -- or, I am sorry, Tiny and Dave knew to put the reactor coolant, and that's Unit 2, on recirc for their dose equivalent iodine sampling.

Q The procedures that you began to implement were standard procedures?

A Right, for sequence of things that we perform after turbine trip.

Q They were in a written form?

A They are by procedure in a written form, yes. They are not in a sequence of events in a procedure form.

Q In carrying them out did you consult any written document or did you know them well enough that you just began to do them?

A I know them well enough to just go into them.

Q How long were you the senior person on-site?

A Till approximately -- To my knowledge I was the senior person on-site until just about 6:00 o'clock.

Q What happened then?

A Dick Dubiel came in.

Q Who is he?

A He is the Radiation Protection Chemistry's Supervisor.

Q Had you called him?

A No, I hadn't.

Q Was that his normal time to arrive?

A No, it wasn't.

Q Did he tell you why he had come?

A No, he did not exactly. Not until much later.

Q He is your boss at normal times?

A He is my second-level foreman or supervisor, yes.

Q Second level meaning there is a level inbetween?

A Right.

Q Who is the level inbetween?

A The Radiation Protection's foreman.

Q Who would that be?

A It could be any number of people. It could be Peter Velez, Joseph Deman. At that time a Mr. Fred Huwe, and he was the Unit 2 HP foreman.

Q Was there a foreman assigned to the shift you were working?

A There was a foreman on call.

Q Which one was it?

A I don't know. I think it was Mr. Velez. But I'm not -- I couldn't swear to that.

Q Where does Mr. Mulleavy fit into the chain of command?

A Mr. Mulleavy is at that time I guess -- I guess you could say that Mr. Dubiel is really the third person, I stand corrected, okay. Mr. Mulleavy sort of fits inbetween there above the foreman and Mr. Dubiel at the time. But what his real responsibilities were is more like a foreman than they are a supervisor-type person, I guess. I don't really know what his job title is or was at that time.

Q Would it be fair to say that when Mr. Dubiel arrived he replaced you as the person who was in charge?

A Yes, it is.

Q Did he give you any instructions as to what you should do after he took over?

A Yes, he did.

Q What did he tell you to do?

A He informed me first of all to draw another sample of HPR 227 which is the reactor building monitor in Unit 2. He also informed me just later on that we were going to make an entry into the Unit 2 Reactor Building to check the ruptured disc on the reactor coolant drain tank and to bring 8 or 10 Scott Air Packs to the Unit 2 control pump. They were the distinct orders that I

remember him giving me.

Q Did you draw the HPR 227 sample?

A I attempted to draw it.

Q Did you do that before he gave you the instruction to prepare to enter the Unit 2 Reactor Building?

A I started to do it before that, yes. That's the HPR 227 sample had been drawn earlier in the night. It was drawn somewhere between 3:00 and 3:30 which is a routine sample that we draw normally everynight on the 11:00 to 7:00 shift. It is a, you know, it is a standard practice that we have of drawing that sample prior to the daylight shift. That sample had been drawn earlier in the shift and he requested a second sample drawn off of it.

Q Did he tell you why he needed the second sample?

A He had said that there was -- they thought that there was a problem in the building and that because of the blowing of the ruptured disc in the RC drain tank that he wanted to see what was in the building prior to the entry that we made, that we were going to make.

Q You stated that you attempted to take the sample?

A Yes.

Q Did you not succeed in doing that?

A No, I did not.

Q Why is that?

A Because the monitor was filled with water.

Q In preparing to take the sample what preparation did you do?

A Really none except getting the replacement filters and a Marinelli beaker which is a glass beaker, to the monitor itself and setting that up and ready to line the monitor up. Other than that, there was no specific-type things that I did. Now, I didn't refer to a procedure to draw the sample or anything like that.

Q When you had taken the sample or when the sample had been taken earlier in the evening, were any protectionary devices used by you in drawing that?

A No.

Q That was the normal practice?

A Right.

Q Did you bring the Scott Air Packs to the Unit 2 Reactor Building?

A Yes, we did.

Q Scott Air Pack is a respiratory aid?

A That's correct.

Q Approximately when did you do that?

A That was between 6:30 and 6:45.

Q Did you enter the Reactor Building?

A No, we did not.

Q Why not?

A Because of what I saw HPR 227.

Q What is the relationship there?

A Well, I went to draw the particulate and charcoal samples off of HPR 227. I had not looked at the regulator guages on the monitor prior to cracking the valves or cracking the wingnuts on the sample holder. And I caught the sample holder -- it blew out of the monitor and I caught it about 18 inches from the monitor, 12 to 18 inches away from the monitor. It just flew out in my hand. And I just slammed it back into the monitor and tightened it back up. And I looked at the guages and they were filled with water. And just common sense told me that there was something wrong in that building. And I wasn't going in that building.

Q Did you tell this to Mr. Dubiel?

A Yes, I did.

Q He agreed with you that it was not desirable to go into the Reactor Building?

A Yes, he did.

Q This took place before the site emergency was declared?

A Yes.

Q When the site emergency was declared what did you do?

A I -- The very first thing I did was -- are you talking about the actual declaring of the site emergency?

In other words, I informed the control room of the rad levels so that they did declare the emergency.

Q Why don't you elaborate on that if you will?

A Okay, approximately between 6:45 and 7:00 o'clock I had been -- Pat and myself had been in Unit 2. We had taken the Scott Air Packs to the control point in Unit 2. And we were on our way back to Unit 1. This was after HPR 227 had scared the daylights out of us. We were on our way back from Unit 1 -- or from Unit 2 to Unit 1 through the auxiliary building and the model room and the Unit 1 fuel-handling bank. We got to the Unit 1 fuel-handling bank and there is a security guard sitting at what we know as the hot machine shop. It is actually the hot machine shop directly outside of the Unit 1 control point.

In that hot machine shop is a monitor. It is RMG-4. It is hanging on the wall. The machine shop is normally a low rad area. And I say low rad, I say less than one MR general area.

We were walking through the fuel-handling bank going back to Unit 1. And there was a lock on that door, on the hot machine shop door. The security guard was sitting in front of the door. G-4 went off. It alarmed.

Q As you were walking by?

A Just as we were walking up to it.

Q Were you walking up to check it?

A No, we were just walking by. At that time we didn't have any dose rate instruments with us or anything. It is just, you know, there was really no reason, no indication -- really, we had not been notified HP-wise that we were having a problem, even up to that point. We had no idea of the problems in the control room, the transit problems or anything.

G-4 alarmed. Pat and Dick Dubiel and myself were standing -- were right in that area. And I informed the security guard to leave the area. It was just, you know, just instinct I guess told me to tell him to leave especially after a trip. I mean, it just wasn't right that G-4 should go off. We thought at first there was a problem in the Unit 1 Reactor Building or the Unit 1 area. We logically -- we couldn't understand why G-4 went off. We couldn't find the key to the hot machine shop because we normally don't have a key in the HP area for that room. There was a pair of bolt cutters in the decon room in Unit 1. I ran to the decon room, got the bolt cutters, told Pat to go to the HP lab and get a dose rate instrument. By that time I came out with the bolt cutters, Dick and I cut the lock off the door. We swung the door open. We checked the dose rate levels at that time. I will be honest with you, I can't specifically

remember the dose rates. I know they were high at that time. They were somewhere like 500 MR, maybe 2 MR. They were exceptionally high. And so, Pat had an RO2 which is a dose rate instrument. It is nonchamber. I ran and got another ion chamber. We were trying to figure out where it was coming from. We had no idea exactly, you know, where this level of dose could be coming from at, you know, in that area. At the time there was no logical reason what it was.

What we did was we went into the hot machine shop. We were feeling around, checking the area, trying to figure out where this dose was coming from. It seemed awfully odd that whenever we walked underneath a certain area the dose would go up. When we walked out from under the area it would go down. We did this back through the fuel-handling bank until it finally occurred to us that it was something in the Unit 2 sampling lines. The sample lines are exposed coming through that area going into the nuc sample room, Unit 1.

Then it occurred to us that there was a problem. The first thing that popped to our heads at that time was failed fuel. You know, there was a problem in Unit 2. I mean, it was right there.

We followed the sample lines back over into the model room until we lost them in the ceilings.

Q You and Mr. Donnachie went into the hot machine shop with instruments to measure the radiation level?

A That's correct. And I also went over into the Unit 1 sample room at the time, too.

Q Did Mr. Dubiel accompany you?

A Mr. Dubiel was there at the time, yes. He was in that -- He was walking around with us in that area, yes.

Q Am I correct that prior to going in and taking the measurements none of you put on any protective clothing?

A That's correct.

Q Why not?

A I guess really not, you know, I can't say it's habit. But, you know, we were so involved with the situation at the time it really, you know, it hadn't really occurred to us. We were trying to figure out what the problem was. There was -- I guess for one reason I knew that R make (phonetic) and 6 had not alarmed which are the fuel-handling exhaust monitors and the auxiliary building monitors, air monitors in Unit 1. They had not alarmed or were not alarmed. And there was really no indication of an airborne problem at that time, you know, sir, you know, just out of standard practice I guess you would call it, you know, we just did 't don any airborne-type equipment

or protective clothing.

Q Did you and the others discuss the possibility of putting on protective clothing?

A No, we didn't.

Q It is your view that not putting the equipment on in those circumstances was standard procedure as opposed to an exceptional act?

A No, I wouldn't say that. It was just the -- really the thought never occurred to us.

Q Did you consider attempting to measure the level of radiation at the door of the machine shop before you opened it?

A We had a dose rate at that time, yes.

Q You did do that?

A Yes, oh, yes. The meter was on when Pat -- as soon as Pat got the meter, you know, he was there with -- in fact, he was there with the meter before we even got the door unlocked or the bolt cut on the lock. In fact, we had a problem cutting the bolt because it was such a big lock. And it took 3 or 4 swipes at it just to cut it. I mean, you know, we knew what the dose rate was right there at that time. We were trying really to figure out where it was coming from because the hot machine shop was enclosed with a nontransparent plastic from the Unit 1 refueling outage because of work that they had been doing

in the machine shop and that sort of thing, you know.

Q During the time that you were in the machine shop did you have with you or were you wearing any kind of equipment that would measure your personal dose?

A Yes.

Q What were you wearing?

A Thermoluminescent dosimeter and a standard pocket dosimeter.

Q Which is exactly what you have on now?

A Which is exactly what I have on now.

Q During the time that you were in the machine shop did you look at the pocket dosimeter?

A Yes, I did.

Q What did you see?

A There was no apparent, you know, rise on my dosimetry at the time.

Q You indicated that as the result of the measurements that you took in the hot machine shop you concluded there was a possibility there was failed fuel?

A That thought entered my mind later. But at that distinct time it didn't hit me what it was. I really, you know, had no inclination. I really didn't think what it could be, you know. I knew something was wrong. But I didn't know exactly, you know ...

Q Did you and the others at that time discuss the

possibility that there was failed fuel?

A At that --

Q Yes, sir.

A No, we did not.

Q Prior to the time that a site emergency was declared did it occur to you that it was failed fuel?

A I would say sometime after 7:00 o'clock was when the first statement was made that, you know, yes, there was failed fuel.

Q Who made that statement?

A I couldn't tell you.

Q It wasn't you?

A It wasn't me, no. It may have even been Mr. Dubiel for that matter.

Q As a result of the measurements that you took am I correct that you or Mr. Dubiel contacted the Unit 2 control room?

A Unit 1 control room.

Q Unit 1 control room?

A Unit 1 control room.

Q You advised them of the levels?

A That's correct.

Q As a result of that they declared a site emergency?

A That's correct.

Q After the declaration of the site emergency what did you do?

A I started establishing the emergency control center.

Q Why did you do that?

A Instinct.

Q Did someone tell you to do it?

A No.

Q Was it part of a standard procedure of which you were aware?

A Emergency procedure, yes.

Q That emergency procedure designated you or the person in your position as the senior health physicist as the person who would establish the emergency control station?

A That's right. Dick was the one going to the Unit 1 control room which was his responsibility by the procedure. And I established the emergency control center.

Q Where was that located?

A In the Unit 1 HP.

Q What did you do in establishing an ECS?

A It was just a matter of setting up the headsets for the communication system until an instrument man cam running down because they came running down as soon as

the announcement was made for the emergency. They started moving -- people started coming to the control center. He set up the phones. I established the people for the door for monitoring the access, the ingress and egress from the HP area with an auxiliary operator that was there at the time, made sure that the hand units, the telephones, the monitors were all working and turned on at the time. And shortly thereafter Joe Deman came in and he took over there. And I went to Unit 2 with Pat.

Q Had you had occasion before this to set up the ECS?

A Yes, I had.

Q Had you had occasion to do it in the context of an actual site emergency?

A No.

Q You had the opportunity in the context of a drill?

A That's correct.

Q Was there any procedure which you were aware was supposed to be followed in setting up the ECS which you did not follow?

A That's correct.

Q What was that or what were they?

A The standard emergency procedure which is establish and which states the designations of the responsibilities for the ECS, the equipment to be set up

during the ECS, the establishing of the monitoring system, the establishing of the teams, the onsite, offsite teams, the emergency repair parties and that sort of thing.

Q I must have misspoken. I was asking you if there was any procedure which you did not follow which was required by the standard procedures?

A No, not that I can remember.

Q The list that you just gave me was the actual procedures you did follow?

A That's correct.

Q When Mr. Deman relieved you was the fact that he relieved you written down in a log book or any other document?

A No, it was not.

Q What did you do when you went to the Unit 2 control room?

A I didn't go to the Unit 2 control room.

Q I am sorry.

A I went to the Unit 2 area. Just returned to the Unit 2 area.

Q What was the purpose of going there?

A Just to see what I could help out with and establish there.

Q At that point as you understood it who was the person from whom you would get instructions?

A Me.

Q When you got there I take it you did not report to anyone?

A No, I did not.

Q Did you find Mr. Donnachie?

A Pat went with me from the HP area.

Q You two were at the HP area together?

A That's correct.

Q He assisted you in setting up the ECS?

A I really don't know what he was doing at the time--the exact time that I was setting the ECS. He was in the HP area. What he was performing, I really don't know.

Q At any rate, the two of you left together and went to the Unit 2?

A That's correct.

Q When you arrived at the Unit 2 area what did you do?

A I grabbed the dose rate instrument. I had a dose rate instrument with me. What I really did was just start monitoring the areas in the auxiliary building hallways as I was going through.

Q What kind of instrument?

A It was an RO2. The rad levels that I saw were significantly higher. They were in the 1 R to 1-1/2 R range at certain spots in the corridor, in the hallway.

Exceptionally higher than what we normally saw.

Q Did you report this information to anyone?

A No, I didn't. Not at the time.

Q Subsequently did you report it?

A Later. Not very much later. Actually, upon my entry into the HP area, really.

Q This would be the Unit 2 HP area?

A Right.

Q To whom did you report the information?

A Just the operators who were right there at the time. The auxiliary operators for the Unit 2 area were still at the Unit 2 rad waste panel which is at the north end of the auxiliary building. And the dose rate where they were really weren't that high yet. They were still really monitoring and trying to figure out -- Mr. Terry Daugherty was the senior aux operator on at the time, auxiliary A operator at the time. He was at the panel. Him and I were communicating really pretty significantly as to what we were doing. In fact, he informed me that there was water coming in the basement. He was telling me there was water coming up through the floor drains in the basement.

Q Was it the standard procedure for you to go to the Unit 2 area once you had been relieved at the ECS?

A Standard as far as a written-type procedure or just as a practice?

Q Either written or practice?

A Just a practice.

Q That had been something you had done before or known to do on the basis of practice?

A Just instinct.

Q Did there come a time when you recommended that the auxiliary building be evacuated?

A Yes, there was.

Q Was the basis for that the readings you took on the way?

A No.

Q What was the basis for that?

A The airborne activity levels.

Q How did you determine what they were?

A One of the technicians, one of our HP technicians -- well, really there was 2 or 3 of them had come in. The 7:00 o'clock shift had come in. They started air sampling in Unit 2.

Q Was this at your direction?

A No, it wasn't.

Q At whose direction was it?

A I really don't know to be honest with you. I would assume that it was the ECS informed them where to go because that was our normal -- Unit 1 was our normal reporting place.

Q They reported the results to you?

A They really didn't report anything to me. I just walked in the area. Mr. Carl Myers was counting an air sample at the time that he had taken right there in the HP area. And it was up above 30,000 counts. And it was only on for a few seconds. And at that point I evacuated the auxiliary building.

Q It was your decision?

A Yes.

Q Did you consult with any superior regarding it?

A No, I didn't.

Q Did you advise anyone you had ordered an evacuation?

A The auxiliary operators who were in the auxiliary building at the time.

Q These are all the people who were there to get out?

A Yes.

Q Did you tell anybody who wasn't there that you told the people to get out?

A Yes.

Q Who did you tell?

A I told the Unit 2 controller.

Q To whom did you speak?

A I don't know.

Q Was it your understanding that the emergency plan or emergency procedures gave you the authority to order an evacuation without consulting the higherups?

A No.

Q That was not your understanding?

A Well, as far as I know I don't have any right to evacuate anything without calling the control room.

Q Why did you do it?

A Because I didn't want to see anybody get hurt.

Q You felt it was an emergency situation and you didn't have time to consult?

A Yes.

Q Did there come a time later after the auxiliary building had been evacuated that you made a survey yourself?

A Yes.

Q This was about an hour or two hours later?

A No, it was within a few minutes.

Q Did you decide to take that survey on your own?

A Yes.

Q What were the results?

A I would say medium dose rates through 305 level. Not very high readings on the 328 level. Water on the floor and the drains in the auxiliary building basement. Medium dose rates in the auxiliary building basement. Increasingly higher levels around the makeup system areas.

makeup tank doorway was reading like 10 R. The fuel injection filters were -- that area was -- I had taken a teletector or I had gotten a teletector in the meantime. So, I was reading, you know, that high range-type scale. It was reasonably high. I would say greater than 50 R upwards. Some places 200 R.

Q Did you report the results of your survey to anyone?

A Yes, I did.

Q To whom did you make the report?

A Mr. Fred Huwe.

Q Where was he at this point?

A In the Unit 2 HP area.

Q Why did you report to him?

A Because I thought somebody ought to know.

Q Why did you report to him rather than calling the ECS, for example?

A Because he was the first foreman with responsibility that I saw.

Q Would it be fair to assume that your responsibility was to report to the first person at a level higher than you whom you saw and let that person carry the ball from there?

A No. I assumed that, you know, I would notify the first person who had health physics responsibility higher than myself.

Q And that you would then expect that person to take whatever action was necessary?

A That's correct.

Q When you made the entry into the auxiliary building what protective measures did you take for yourself?

A Just putting on -- I just donned a respirator. I didn't wear any protective clothing.

Q Would it have been better for you to have put the protective clothing on?

A The original reason for my entry in the auxiliary building was to -- I mean, it was really not to survey the building, to be totally honest with you. It was more to make sure that everybody was out of the auxiliary building who may not have heard the announcement because the speaker system in the basement and the second floor sometimes is a little difficult to hear. And I was more concerned about making sure that everybody was out.

Q Did you expect to stay a shorter time in the auxiliary building than in fact you did?

A No, I expected to stay a little longer, really. Because I didn't, you know, I really -- after I had thought about it at the time I didn't want to spend anymore time than I had to in there. But I wanted to make sure that, you know, I hit as many areas as I could hit to make sure there was nobody else in.

Q What kind of instrumentation did you have with you to measure radiation?

A Teletector.

Q What kind of personal dosimetry?

A The same as I have on now. The same as I have been wearing the whole night.

Q Did you read that during the time you were in the auxiliary building?

A No, I did not.

Q Did you read it afterwards?

A Much later afterwards.

Q You kept your TLD on at that time rather than giving it to someone to have it read?

A I didn't take the time to give it up. Really, there was nobody there because at that time we did do the readings of the TLD's. And there just wasn't time to have anybody read it. When I did check my dosimetry later my dosimeter which was, I would say within like, I don't know, maybe a half hour or an hour after the entry, there was -- it was still on scale. And I really didn't see any reason to have my TLD read.

Q Did you tell anyone that you were going to go through the auxiliary building either for purposes of making sure that everyone had left or for purposes of conducting the survey?

A No, I did not.

Q Is there any reason why you didn't?

A Didn't see why there was any need to. Everybody was busy doing other things. They were not really -- not really more concerned, I guess they were assuming other responsibilities. And I just didn't see any reason to.

Q Is it your understanding of the emergency procedures that HP personnel are required to maintain communication with the ECS?

A Yes, it is.

Q Is it your understanding that HP personnel are not supposed to leave the ECS without the instructions of or the permission of the person who is in charge of the ECS?

A Yes.

Q Would it be fair to say that when you left the ECS you felt that you had Mr. Deman's permission to leave or his instructions to leave?

A Yes, I did.

Q Was that implicit permission by him or did he explicitly say, "Okay, you can go," or, "You should go"?

A No, he didn't really say anything. I just mentioned on the way out the door, "I am going to Unit 2." But he didn't answer.

Q He didn't try to stop you?

A That's right.

Q Did you make any other entries into the auxiliary building on March 28?

A Yes, I did.

Q About how many times did you go into the building?

A One other time.

Q Approximately when was that?

A Let's see, that was probably around 7:30 or 8:CO o'clock maybe.

Q In the morning?

A Yes.

Q Why did you make the further entry?

A To really determine what the situation in the basement was.

Q Why did you feel you needed to determine what the situation in the basement was?

A Well, the auxiliary operator had notified us that there was water coming up through the basement floor through the floor drains. And really, we wanted to determine if there was any reading off the water itself where the water was trying to account where the water might have been coming from.

Q Who was "we"?

A Terry Daugherty and myself.

Q Before you made that entry did you discuss the entry with anyone else?

A No. Well, yes, I did say to Fred Huwe that I was going. In other words, Fred knew that we were making the entry.

Q He didn't protest?

A No.

Q Did he give you any warning or instructions?

A No.

Q You did not talk to anyone in ECS directly before you did that?

A I would say no, not that I remember. You know, there was a thousand phone conversations made to the ECS during that period, you know. It is very possible that I did. But I really don't believe that I did.

Q But at any rate you weren't instructed by the ECS to make another entry into the auxiliary building?

A No.

Q Would it be fair to say that you decided on the need for that additional entry yourself and informed Mr. Huwe who was your superior?

A Yes.

Q During the times when you entered the auxiliary building did you have any kind of communication equipment with you which would have allowed you to talk to anyone in

the Unit 2 HP area or the ECS?

A The page phones were on the walls through the auxiliary building. But as far as, you know, a manual-type piece of equipment, no.

Q When you went in the second time did you have the same dosimetry equipment you had been wearing?

A Yes.

Q During that entry did you read your pocket dosimeter?

A Yes, I did.

Q Was it still on scale?

A Yes.

Q After that entry I take it you still kept the dosimetry equipment on rather than having someone read the TLD?

A Yes.

Q Did you ever determine whether as a result of your entrance into the auxiliary building you were contaminated?

A Did I check myself?

Q Yes, sir.

A Yes.

Q Were you?

A No. Other than from HPR 227 which was much earlier.

Q That was when the thing sort of blew out at you?

A That's correct.

Q When you were contaminated by that had you taken steps to decontaminate yourself?

A Yes, I had.

Q They had been successful?

A Yes.

Q What had you done?

A Just washed my hands and stuff off.

Q What did you use to wash your hands with?

A Soap and water.

Q When you went in the auxiliary building the second time did you also take a teletector?

A Yes.

Q Did you take any other kinds of survey instruments?

A Yes.

Q Why did you take the teletector?

A Because of the rad level and the fact that it was the only instrument we had.

Q If you had had other survey instruments would you have used them instead of or in addition to the teletector?

A I would have preferred to have an RO2A.

Q What would the different functions of a teletector and an RO2A have been?

A Okay, the RO2A would have given me a better scope

of beta dose which was of some concern to me. The fact that it has a higher range, you know, a higher range scale capable of accurate dose for beta. It doesn't have the dose range that a teletector does as far as a full-scale range, but it does give you, I feel, alot more protective factor with the wide window, with the 3-inch window exposed on it. But they were scarce.

Q Do you know why they were scarce?

A Yes, because the company is too cheap to buy instruments.

Q Is there anything else that you would have liked to have taken for purposes of surveying the radiation levels other than RO2A and the teletector?

A No.

Q In your view that would have given you the necessary pictures?

A Yes.

Q Did you prior to the time that you entered the auxiliary building on either occasion try to find an RO2A which you could use?

A No, not really other than looking around the HP area. But, you know, I have been working in the HP department for a number of years. And I knew how many we had and I knew how many we didn't have. And I knew how many we were supposed to have. And they weren't there.

Q Did you make any inquiries of anyone in either the ECS or the Unit 2 HP area to determine whether there was an RO2A available?

A No.

Q Would it be fair to say that the fact that you didn't do any further looking or further inquiry regarding the RO2A is that you regarded such efforts as futile?

A Yes.

Q That was based on your past experience and your general knowledge of the availability of the RO2A's?

A Yes.

Q After you had come back from the additional trip in the auxiliary building did you report the results of your survey to anyone?

A Yes.

Q To whom?

A To Fred Huwe.

Q Do you know whether he made reports regarding your surveys to anyone else?

A No, I didn't.

Q Did you ever ask him whether he did?

A No, I didn't.

Q Were you debriefed by him or by anyone else after your entry?

A No.

Q Did you prepare any written documents regarding your entry?

A No.

Q Are there procedures pursuant to which in ordinary circumstances you are required to prepare a survey form or a written record of an entry to an area which is likely to have a high radiation level?

A Yes.

Q Why did you not prepare any survey forms or written record on this occasion?

A I guess just the situation and the circumstances.

Q Did anyone instruct you to do it?

A No.

Q Did anyone discuss it with you?

A No. I guess it would be fair to say that because of the scope of what we had seen it was the time and the sequence of events up to that time and what we were looking at. And we, you know, the ever increasing levels that we saw, you know, it was really -- it was a futile-type thing. It would have, I guess, by procedure should have been done. For my own benefits now when I think back on it I wish I had kept a log of everything that I did and everything that I saw. But because of the scope of the problem and the scope of what I had seen it was like I was thinking, okay, what do I have to do next

rather than okay, this is what I did, this is what I have to do. It was more like what do I do next.

Q What did you understand to have been the scope of the problem as you put it?

A As far as official notification goes?

Q No, in your last answer you indicated, if I understood it correctly, that you dispensed with or did not follow certain procedures because of the scope of the problem which you were facing?

A Right.

Q What I wanted to know is what you understood the problem or the scope of the problem to be at that point?

A I had no idea. I had -- I physically did not understand what was going on. I could not in my furtherest reaches understand what was giving me the dose rates in that building that I saw, you know. I just could not visualize a problem that great that could cause what I saw, you know. And nobody -- I really didn't have the time to sit and say to Fred Huwe or to Joe Deman or to Dick Dubiel, you know, what is causing this? What is going on? You know, I figured if they wanted me to know or if they have the time to inform me, well, this is what happened, this is what is going on, this is what is causing it, you know, I could say, okay, I understand what is going on. But I had no idea what could be causing what I saw.

I had no idea what caused the water to come up. I had no idea what caused the water to come up in the auxiliary building. We had had water in the floor drains on the 305 elevation in the auxiliary building many times just because they overflowed with the boric acid mixed tank upstairs or the, you know, because the drains never worked. The drains never properly worked. They were always either plugged up or there was a block someplace and they'd surface on the 305 level and there would be no water at all in the basement. You know, it was many times. You know, but then with the scope and the amount of water that was beginning to come through the floor in the basement, like when I walked through the floor the hallways in the basement I was walking on pedestals and conduit chases and just trying to keep my feet out of the water, you know. It was crawling over equipment, you know. And I really didn't think, you know, okay, what can we do in this. What can be causing this? You know, I walked by an area and it is rated 200 R, 300 R. I had seen 750 R one other time in my life, you know. And I have been in that area for 18 seconds and picked up 1200 MR. You know, but you walk by and all of a sudden look down at an instrument and walk by a room and go offscale and come right back on, you know, I think where is it coming from? What is causing it? You know, this, you know, rem is dose rates

you are looking at, you know.

No, I didn't take the time to go to somebody and say, "Explain to me what is causing this and what am I seeing and why am I seeing it?" No, I didn't take that time.

Q Would it be fair to say that you believed at the time you were recording the levels that you saw in the auxiliary building that there was a fairly serious emergency going on even though you didn't know exactly what the emergency was?

A Yes.

Q Let me tell you my problem with trying to figure out what you did and why you did it. Earlier in your testimony you said that you declined and advised Mr. Dubiel that you should not go into the reactor building because you were uncertain of what was going on in there as a result of the situation with the HP 227. A little bit later you said that you saw high levels of radiation in the auxiliary building. And you told everybody to get out.

Now, we find you a little bit later in time going back into the auxiliary building to take further measurements and not, if this is a fair characterization, following health physic's practices to a tee.

Why, if you wouldn't go into the reactor

building and you chased everybody else out of the auxiliary building, did you go back into the auxiliary building without making sure that from your superiors that such a procedure was necessary and taking every personal precaution that you could to minimize the prospect that you would become contaminated?

A Now let me answer your question. Number one, 5 years I have been going in and out of the Unit 1, Unit 2 reactor buildings. I know them.

Okay, you got 2 doors to go through. And those 2 doors are the only 2 doors in and out of that building. I also know what the structural internal structure of that reactor building looks like. I know where the takeoffs are on the monitors that are in those buildings, my radiation monitors, my air-sampling monitors and that sort of thing.

The fact that HPR 227 blew out in my hand tells me that there is horrendous amount of pressure in that building. That monitor just doesn't work like that.

Okay, I would not go in that building because I knew that the water that was in the guages on HPR 227 was not actual water, but steam. The building is enclosed. The takeoff on HPR 227 is in an area that unless that building was completely filled with steam I wouldn't have seen it.

The amount of pressure that blew that lead-covered holder out in my hand and sprayed me with water indicated to me that, you know, when we ran it like less than .1 pounds -- .1 pounds plus or minus zero under normal conditions in alot of cases would not cause that which indicated to me that there was a horrendous amount of pressure from the inside out.

Now, I'm not stupid. I wouldn't go into that building under those conditions.

Now, your question about the auxiliary building is I could walk through that door and I can see in front of me. There is no steam in the auxiliary building. I can hold a meter and know that the dose rate levels go up. They go down. I can see that.

If I can see it I know what I will go to and where I will go and what I will do, how long I can stay there. That meter will tell me how long I can stay there, you know. If that meter pegs I don't go any further. I come back out. Okay?

Unless it is a stream or something like that that if I walk by it it comes up and it goes down. Then I will continue. But if I walk into an area where I can't read that meter anymore and it reaches its maximum readability and I am not going to go any further. I mean, that is just common sense to me, you know.

That's the reason I went back in the auxiliary building because I wasn't afraid to go into the auxiliary building. I was afraid to go into that reactor building because I knew if I went into that reactor building I'd never come out or I had a pretty good idea I'd never get out because I know that the amount of pressure that gives me the capability of blowing a fixture out into my hand that weighs probably 3 pounds, you know, coming through a 3/4 inch line is alot of pressure, you know. For one thing, I doubt very much that we'd even gotten the door open in the first place. Okay. But, you know, I can't -- you know, in the auxiliary building I could walk through there and I could see water on the floor. And I could see dose rates. But I know what is there, you know.

I mean, I can visually look at that meter and know what I am getting into and if I am going to go any further, you know. It's a different scope in that reactor building, you know. Once you are there -- Sure, I could have been looking at that meter and seen what I am into. But I also know that if that building is filled up with steam I am not going to stay there very long. Or if I am, it is going to be a long, long time, you know. That's the difference.

Q What about the difference between the auxiliary

building which you told people to evacuate and the auxiliary building which you then reentered without either instructions from above or without taking all of the precautions that you otherwise would take?

A Well, you know, I have restricted people from many areas because of dose rate. But I have entered those areas myself. And this was under those same circumstances. I didn't feel that I took anymore chances regarding myself because there was nobody else in there. I had to worry about me, okay. And I can take care of me when it comes to entering areas of high rad levels because I know and I count to myself and I know -- I concentrate totally on what I am getting into, you know. If I -- I walked into that auxiliary building. If I saw a dose rate, you know, I remember it and I know that, okay, I stay here or I don't stay here. And I move or I avoid this or I avoid that, you know. I can take care of myself under those conditions, you know. It wasn't like nobody knew I was there. I was in there, you know, by myself or with somebody else. But somebody knew I was there. And if, you know, I didn't come out in a certain period of time somebody would come out looking for me regardless, you know. But I didn't really think that way. But I knew what I was getting into under those conditions, you know.

Like I said, if I would walk up that hall and

the general area in that hall reached a point where I knew I couldn't stay there I didn't go any further, you know. I was looking out for my personal safety as much as I ever had during that period, you know.

Hey, I was as scared as everybody else, you know. It is just that I knew there was something wrong and that granted, somebody -- people somewhere along the line were going to have to go back in there shortly or within a, you know, a given period of time. And we had to know what was there.

Q Am I correct that there were protective measures you could have taken which would have minimized the risk you were subjecting yourself to?

A Yes.

Q Am I correct that you did not take those measures because you felt that you didn't have time?

A That's correct.

Q Am I also correct that you did not engage in more consultation with your superiors than you did about the entry into the auxiliary building because you didn't feel there was time?

A No, not really that I didn't have time to consult with them. It is just that the scope of what was going on, the concentrations were elsewhere, I should -- You know, it is not really a matter of taking the time or not having

the time. But it was really the -- I don't know how you -- really to put it, you know. Everybody was everywhere. And nobody was concentrating on one certain thing. It was like I knew I was going to be in that HP area for, you know, a certain amount of time. And I knew that if there was anybody going into the auxiliary building besides myself after that point that I was going to be there to say, hey, look. This is what you have here. Walk up by the makeup valve alley, this is what you have. You walk by the fuel injection filters, this is what you have, you know, avoid these areas, you know. That, you know, we were restricting who was going in there after that point.

And I really -- it was like we didn't have a boss, really, at that time. You know, the seniors or the technicians at that time were really -- we were the bosses, you know. The people who were there were asking us questions. They weren't asking Fred Huwe and Joe Deman and the Dick Dubiel's and the Tom Mulleavy's. They were asking the Mike Janouski's, the Pat Donnachie's, the Carl Myers'. Those are the guys they were asking because we were involved in it. We were the ones who were making most of the on-line decisions and giving the explanations and that sort of thing about what we were seeing, you know. What they were doing as far as the questions for the control room and the ECS and that sort of thing, you know.

I don't know who was asking those questions and who was talking to who.

Q Would it also be fair to say that you didn't record the information regarding the survey of the auxiliary building in the normal manner because you felt there were so many things to do that it was better to dispense with the record keeping?

A No, I don't really think I thought that. In other words, I never thought to myself during the whole period, hey, you know, well, I am not going to write that down because it is going to be different an hour from now or 15 minutes from now. Like, I would jot myself down notes on a tablet or something. And I'd just write something down that I wanted to remember. And it would be there on the desk, you know. And, like, the HP log book, that was there and that sort of thing, you know. That stuff was -- it was there but we didn't use, you know.

Like I said, it was like when I did something I was thinking what am I going to do next or what do I have to do next, okay. Fact -- The fact that I didn't keep records through the whole thing bothers me more now when I have the time and the ability to sit back and look at what I did and what all of us did. I think, boy, I wish I had kept alot better notes of what happened and what I saw. But I didn't at the time. Not only for you people

or for the people investigating the situation but more for myself.

MR. DIENELT: This would be a good time to take a break.

(Whereupon, a recess was held.)

BY MR. DIENELT:

Q As you understand, what is the purpose or what are the purposes of maintaining records during an emergency?

A I guess the ability to go back and set up a sequence of what happened to say, you know, -- I mean, you never know when it is going to stop or to what degree it is going to go to. It may have, you know, like in this situation I guess it may have gone to a certain point and then, you know, they could have maintained it. And then you would have been able to say, hey, this is where it stopped. You know, at this point it is going the hilt. And you are trying to go back to a middle point or an early point and say, okay, this is what it was and this is, you know, where it's at.

Q Would you agree that what you just described is essentially a historical purpose?

A Yes.

Q Do you also believe that the record keeping has any contemporaneous purpose?

A In this situation?

Q Yes, sir.

A I will be honest with you. I don't know.

Q If someone had come to the auxiliary building to conduct a survey after you had completed yours and you had not been present for some reason how would that person learn that a survey had already been conducted?

A By discussions that we had with the other technicians.

Q If you were not present wouldn't it be fair to say that in the absence of discussions with other people the only basis on which a person would have known what had transpired in the survey that you took would have been if there were some written record at the time that he could look at?

A Say that again.

Q If you weren't there wouldn't it be true that a person would be able to find out what you had done if you had made record of it?

A Yes.

Q Would you agree that the record keeping also has that purpose?

A Yes.

Q You also assisted in sampling the primary coolant on the 28th?

A Yes.

Q At whose direction did you do that?

A Terry Harner.

Q Who was he?

A He is the Unit 2 chemistry foreman.

Q Did he tell you why he wanted a sample?

A They wanted to establish a dose equivalent iodine factor.

Q What was the reason for that as you understood it?

A Just -- I will be honest with you. I don't really know. I don't know why they did it. They wanted -- because they were concerned the E-bar factor in the reactor coolant system --

Q Would you tell me what E-bar factor is?

A What E-bar is you take all your isotopes, your weight and mean activities of all your isotopes, calculate those all out including your tritium, including your strontium 89's and 90's. And you add these altogether and it gives you a total activity of the coolant. And you take a certain factor for this and it gives you a base line. I don't know exactly what the purpose of it is, you know. Some engineer came up with this thing and, you know, they use it everywhere. I think what it does is it gives you the reactivity or something in the core. I'm not really sure

what it is.

Q Did you understand the taking of the primary coolant was essentially an emergency measure?

A Yes.

Q How did you gain that impression?

A Just because of the activity that we had seen.

Q Did Mr. Harner say to you you have got to take a primary coolant sample and do it as soon as you can or words to that effect?

A What he did was he said, "Look, you know, we are going to be drawing a sample. And I would like you to, you know, go in with Tom." Tom Thompson is the other technician at the time he drew the sample. "You know, this is the reason we have to do it. You know, we are going to do it now."

Q He said now?

A Well, you know, now was like 9:30. But it turned out it was like 10:00 o'clock or a little bit after 10:00 till we got completely dressed and everything.

Q Tell me what you did in terms of preparing to take the sample?

A We got fully dressed in anti-C's.

Q What is anti-C's?

A Protective -- it is full protective clothing. That involved coveralls, boots, gloves, hood and respirator.

Q What else did you do in preparing to take the sample?

A Really nothing. It was already lined up. The system was already still in recirc. It was just a matter of going in and drawing the sample. We talked about it, how we were going to do it, what equipment we were going to use, where we were going to use the sample if it turned out to be something horrendous.

Q How did you decide you were going to do it?

A Well, what we decided was we were going to take a beaker and take the hose and put the hose in a beaker, draw the sample, dump the beaker into a bottle, bring the sample out, sit it behind some lead bricks and let it there for whenever we got a chance to analyze it.

Q Were you going to do this manually or with some kind of instrument?

A Manually.

Q Did you consider doing it with an instrument?

A No, we never -- it's routine that we do it that way. We were going to go into it and draw it just as our routine sample.

Q Where were you going to put the sample?

A The original discussion was we were just going to store it behind some lead bricks on a counter.

Q Is that what you did?

A No.

Q What did you do?

A Nothing like we decided. We got in there. I had a teletector. Tom was going to be the one to draw the sample. I was just going to be more or less the HP escort. I put the teletector -- he wore -- I'm not really even sure if he wore finger rings at the time. I wasn't too involved in the actual prep for it. I know I didn't have finger rings on at the time or extremity dosimetry. I'm not really sure if Tom did at the time. It was a situation where everybody else decided what we were going to do and, yes, you are the guys that are going to do it.

We came into the room and the dose rates in the room I don't really remember what they were. They were fairly high, you know, maybe 5 to 10 R range, general area in the room. We didn't waste any time, tried not to waste any time -- we -- Tom held onto the sample hose. He cracked the valve. The sample started flowing. He went to put it in the beaker and the dose rates were high. So, I told him I said, "Just stick it in the beaker and set it in the drain."

So, he stuck the hose in the bottle, set the bottle in the drain and left it sit. And then we just turned the valves off and I turned the motor-operated valves off on the panel. And I said, "Back out." I had the teletector I would say probably 1 , maybe 14 inches away

from the sample itself. And it was reading like 200 R, a little greater than 200 R at the time.

Q What became of the sample if you know?

A The sample sat in the sink for -- I'm not really sure. [redacted] eventually did an analysis on that sample. I'm not -- I can't remember the exact date that he did that. It would be easy to find that out because he got overexposed.

Q Would it be fair to say that you had anticipated lower levels than you found?

A Yes.

Q What had you been told about the levels you should expect?

A Nothing except to be careful.

Q At this point were you aware that there had been fuel damage?

A No. It's just an assumption.

Q Did you assume that?

A Yes. Well, not really that there was fuel damage, that there was something wrong in the core. You know, I -- you know, I had really no idea what, you know, what really could have been wrong other than the fact that earlier in the morning somebody had mentioned failed fuel, you know.

Q You did not discuss the failed fuel in the context of the taking of the primary sample of the primary coolant?

A No. I don't think -- my opinion of it is that, you know, when I think back on it now that there was nobody there really qualified to determine that. I certainly don't think any of my foreman were. I certainly don't think my supervisors were who were there at the time, who were physically there running the show at the time.

Q At the time, though, you didn't have that view; is that correct?

A No.

Q That's not correct?

A Well, I didn't depend on them at the time. You know, I have learned that the people who have been my boss for the past 5 years, you know, that you can't really, you know, it is what I know and it is what my fellow technicians who are doing the job know. And we depend on each other, you know, for information and for a background on things and, you know, look have you been through this before? Yes, I have. Okay, you know, what can I expect or, you know, that sort of thing where they say to me, hey, look, you have done this job before. You know, you have been through this, you know, how did you handle it. It's not a situation where my foreman has come up to me and said, look,

I am the, you know, I know what is going on. I know how to handle this, you know. I am the foreman and I am experienced in this because my foremen aren't. My foremen have been technicians. You know, and alot of us don't feel that they were good technicians. You know, and I don't feel my foremen are any more qualified to tell me my job regardless of what their position or color of the hat they wear. They are not as qualified to do that job as I am.

Q Had you discussed taking the sample of the primary coolant with any of the other technicians?

A No.

Q Were you aware of any records or surveys that were made regarding the levels of radioactivity in that area before the sample was taken?

A Yes.

Q What had been done?

A Well, Pat and I had surveyed it prior earlier, you know, at the very beginning when G-4 went off. But there had -- that I know of other than Dave Zeiter and Tiny, they had gone in and drawn a sample around 6:00 o'clock for a boron sample. And other than that I, there was no surveys done during the period because ...

Q Had you discussed the survey that the other 2 individuals took around 6:00 o'clock with them?

A Yes. Yes.

Q I take it that they did not find high levels?

A Right. In fact, the levels at that time were fairly routine. In other words, the general area in there isn't very high anyway.

Q When you left the sample in the sink and left the area did you report what you had done to anyone?

A Yes.

Q To whom did you report it?

A Numerous people, Gary Read, Kerry Harner, Pete Velez was there at the time. You know, Tom Mulleavy was there at the time. I think, yes, Tom Mulleavy was there at the time.

Q Who is Gary Read?

A Gary Read is the Unit 1 chemistry foreman.

Q Did any of the people to whom you reported this information respond to you?

A No, not out of the ordinary like, you know, where did you leave the sample? What did you put it in? You know, what did it read? Now, that's just -- that sort of thing, you know. Like, you know, we said, "Well, we left it sit in the sink and it is fine,"you know,"That is great. Just let it there," you know. "It won't hurt anything there." That sort of thing. There was no responses to, you know, "What color was the water?" You know, "Did it foam and steam," and, you know, that sort of thing.

Q If you had been using instruments to draw the sample and pick up the bottle would you have been able to get it behind the lead bricks?

A No, I don't believe so because to get it -- to put it behind the lead bricks that we were originally going to put it behind we would have had to carry it out of the lab or out of the sample room to a counter in the nuclear chem lab or the hot lab really. And, you know, it is a normal, little brick cave that we have established for our reactor coolant samples when we are doing routine analyses on them everyday. It is not a fantastic designed thing. It is 5 or 6 lead bricks standing together and just something to shield us while we are working in the lab.

Q Prior to taking the sample of the primary coolant did you discuss what you were going to do with either Mr. Dubiel or Mr. Mulleavy?

A No. Most of the discussions we had was with Gary Read and Kerry Harner. Tom Thompson had discussed the sampling with Kerry Harner earlier. But I don't know what the discussion on that was. I know that Tom wasn't very enthused about drawing the sample. In fact, Tom Thompson quit like a day after that. This was on Wednesday morning and Tom quit Friday.

Q You had the impression that he was doing it under protest?

A He wasn't very happy about it, yes.

Q Did he tell you why?

A No. Well, Tom was very anti-nuclear the whole time he was here. You know, he was here because it was good money and, you know, he was a very fussy-type person. In other words, he was very, very critical of the company. He was very critical of his job. He was very dissatisfied, you know. He was a very difficult person to work with.

Q Were you uneasy about taking the sample?

A No. No. I am not very -- I don't shake very easily when it comes to that. Alot of people tell me I am supposed to. But I figure it is my job. And if I'm afraid to do my job, I shouldn't be here.

Q What dosimetry did you have?

A We had -- Now, like I said I don't remember if they put Tom -- had Tom in finger rings or extremity TLD's or not. I honestly can't answer that question. I know I didn't have them on at the time. And I had a high-range dosimeter on, a 5-rem dosimeter, a standard 200-millirem pocket dosimeter and a TLD.

Q What was your exposure as a result of the sample?

A It wasn't very much. I will be honest with you, I don't really remember.

Q Did you have the 5-rem dosimeter read?

A Yes, they read it. But I don't remember what it

was. In fact, our dose was real low, if any. It was, you know, 10, 20 MR, something like that. It was really very low.

Q Do you know whether the dose that you received was recorded somewhere?

A It was recorded someplace, yes. But I don't remember where or what happened to it. Alot of our records during that time got -- the records that we did keep, the notes that we kept -- I told you that there was no survey -- completed survey form done in Unit 2. But there was notes kept during that period. Those have somewhere along the line, who has them or where they got to, you know, some of us have questioned because, like I said, I did a survey, a documented survey a day or two later after the accident. It was Friday or Saturday of that week. And it was all 3 levels of the auxiliary building from one end to the other. And that survey isn't around. And it was stapled together and it was 3 sheets. And it was the entire auxiliary building, every cubicle, every door, everything. And that survey as far as I know has not been able -- they have not been able to find it since the week after the accident. And that was just one of numerous-type things, air sample results that we had kept. Other surveys that were done by other technicians during that. Those documents are all gone someplace.

Q Apart from the sampling of the primary coolant and the entries into the auxiliary building on the 28th did you do any other sampling or expose yourself to any additional risk of radiation during that day?

A During that day?

Q Yes, sir.

A No, I don't believe so. Not that I can remember,anyway.

Q Will you summarize your activities on the 29th?

Let me back up for a minutes. When did you leave on the 28th?

A It was around probably 3:00 o'clock or so in the afternoon.

Q When did you come back?

A That night about 11:00 o'clock.

Q For your normal shift?

A For my normal shift.

Q Did you work that normal shift?

A Yes.

Q Did you leave at about 7:00 the next day?

A No, next day I worked till about 11:00 o'clock or something like that. It was late in the day again the next day.

Q Tell me what you did roughly during that 12-hour span if you can recall?

A I really can't.

Q Was that the day on which you did the survey on the auxiliary building?

A I think it was 2 days later.

Q Did you do any surveys that day that you can recall?

A Not that I can remember, no.

Q Do you know where you were physically during that period?

A No, no, I don't remember.

Q Did you work at the shift beginning at 11:00 o'clock on the next day which would have been the 3:00 to 11:00 shift?

A No, I was off the next day. I had other arrangements and took a personal day off. One thing, I was pretty well exhausted. And I had made plans and the accident, I really didn't inform -- they had known like a week or so in advance that I was going to be off. And I just didn't come in. And nobody said anything. They knew I wasn't going to be there or I think they expected me to be there but they didn't tell me, "No, you can't have your personal day off."

So, I took my personal day. And this was on I think it was Saturday morning. I'm not really sure. And I was at the Hershey Motor Lodge at the time.

And about 11:00 o'clock in the morning this lady

came in. She was hysterical. And I thought -- I was eating breakfast and I thought, well, I had better call the plant and see what's going on.

So, I called the plant about 11:00 o'clock. And, of course, I had trouble getting through. And I thought, well, I'd better go to work. So, I left the Motor Lodge, and I came straight to work from there. And I got there about 11:30 I guess. And I went right to work then. And I worked -- I don't know, 20 hours that day.

Q Was that the day on which you did the survey of the --

A That's the day I did the survey of the auxiliary building.

Q You stated that the lady whom you had encountered was hysterical?

A Well, she was very emotional. She was crying. And I was really eavesdropping in her conversation with this waitress.

Q What did you hear that caused you to call the plant?

A Well, she said that, you know, they were talking about a core meltdown, you know, and the whole bit, you know. And, you know, there was alot of people pretty upset that day. And I just thought, hey, you know, I better find out if they need help. I felt kind of guilty really

about not coming to work.

Q Who, if anyone, instructed you to do the survey of the auxiliary building?

A Nobody instructed me to do it. I informed -- I talked to Tom Mulleavy about it. Tom Mulleavy was aware that it was being done. I told Tom, "Look, you know, we don't know what we have." Because as far as we had -- well, as far as anybody had known nobody had been there since late in the day of the 28th, maybe early in the morning of the 29th.

Q How did you know that?

A Just from discussions. I knew that Gregory Hitz, the shift supervisor, and Carl Myers had taken water samples off the basement floor and they had gone in and done some -- a couple small things, very quick entry type things during that period. But nobody really knew what anything was. I mean, nobody had any idea really what any of the cubicles read. There was no idea really what kind of dose rates there were in the building or in the auxiliary building during that period.

And I had talked to Tom about it. And they were already talking about starting to send operators back in to start doing some small things, you know. And I had talked to Tom about it.

Q Who was "they" in this conversation?

A Well, shift foreman, you know, just general foreman-type discussions that you would overhear. Conversations and stuff like that. The operators were talking, you know. You'd hear an operator say, you know, they are already talking. They want me to go over and line up this or, you know, go over the rad waste panel and just close the valve or something, you know. Real quick type entries. Nothing extended or anything like that.

And they really had no idea. You know, you'd talk to somebody and say, "Hey, look, what do you have in the basement?" "Well, we don't know. We don't have any idea, you know." Because there was no entries, real entries made. And I talked to Tom about it. And he said, "Well, go ahead." You know, "Go do what you have -- get some readings if you can and get some kind of idea what you have, you know."

Q That was your iniative to conduct the survey?

A Yes.

Q Did you discuss it with anyone other than Mr. Mulleavy?

A No.

Q Did anyone accompany you in taking the survey?

A No.

Q What precautions, if any, did you employ?

A Well, I checked the instrument that I used very carefully to make sure that it worked properly, the batteries

were okay.

Q What instrument did you use?

A I used a teletector.

Q Still no RO2A?

A Still no RO2's. Made sure my dosimetry was right.

Q How did you do that?

A Well, just, you know, zeroing my dosimeters, my pocket dosimeters and that sort of thing.

Q Zeroing means that you bring it back to the point where it shows a zero reading?

A Zero reading, right.

Q So that you would be able to tell how much you had gotten from that particular event?

A Right.

Q Did you wear a respirator?

A I wore a Scott Air Pack.

Q Did you wear protective clothing?

A Yes, and wet suit.

Q Did you wear any extremity --

A No. I had no intention of touching anything or turning any valves or grabbing hold of anything. I didn't really see any reason for it. The only thing I probably should have done which I didn't do was wear extremity badges on my ankles.

Q Why would that have been a good idea?

A Well, because of the water in the basement on the floor.

Q What form did the written survey that you prepared take?

A It was a -- it was the auxiliary building -- it was full layout prints of -- they were regular 11 -- 8 X 11 sheets with the hallway drawings on them. Well, I am sorry. No, they were 14 or 8 X 14's, full layouts of the entire floor elevations with all -- each cubicle in it, the hallways, the full layout.

Q As you went around did you write down the levels as you were taking the survey?

A Well, what I did was I went to the basement. I knew -- I laid out in my head exactly where I was going to start, what I was going to do, how I was going to approach everything. What I did was I came to the basement. I came down the stairway at the south end of the auxiliary building to the basement first. I laid my survey forms right inside the door for the upper two levels so that I wouldn't have to carry them around with me and all that.

I took my -- There's a desk in the basement in the center of the hall about midway between north and south ends. It is a regular operator's log desk. It is really what it is. I laid my survey there in the hall. I went back

and I started at the south end. And I worked to the center. And then when I got to the center I wrote everything down on the log sheet by cubicle, what readings I could, you know, I had in the hallways, that sort of thing.

Then I went to the north and I started back in the decay closed cooling heat exchanger area, the valve -- the decay heat valve area and came back out through that area and logged everything down then.

Then I went and went to the next floor. And I did the same there at both ends. And then I went to the other floor.

Q Did you have gloves on?

A Yes.

Q When you went outside to record the levels you had found did you remove your gloves?

A No.

Q You wrote with the gloves on?

A Yes, I taped a pen to my wrist so that I wouldn't lose it and, you know, just wrote everything down. I figured I could always put it in poly bags and copy it, you know. As it turned out it wasn't hot because really I didn't touch anything.

Q "It"being the pen or the paper?

A Both.

Q How long did you spend in the building?

A Probably 2 hours.

Q When you finished your survey what did you do with it?

A It was put in the HP lab, Unit 2 HP lab.

Q Was there a particular place where you were supposed to put such documents?

A Well, at the time we were just laying them on the desk for reference really at the time. And normally they would have been filed in the file -- in the filing cabinets.

Q Is there a procedure of which you are aware which is supposed to be followed with respect to the maintaining of documents during an emergency?

A No, not that I know of.

Q Did you discuss the survey after you had taken it with anyone?

A No.

Q Who did you discuss it with?

A Dick Dubiel, Tom Mulleavy, Fred Huwe.

Q All at one time or on different occasions?

A Different occasions.

Q Did you show any one of them the survey?

A Yes, Fred Huwe had the survey, yes.

Q You showed it to him?

A Yes. In fact, I gave it to him.

Q He walked away with the survey?

A Yes. If I'm not mistaken, you know, I could be wrong. But if I am not mistaken he took that survey to his office, if I'm not mistaken. I really -- Yes, I am pretty sure that is what he did with it. He took it to the office. I did see it later, though, back in the HP lab. It was returned to the HP lab.

Q It was put back on the desk or table?

A Yes.

Q Was that the last time you saw it?

A Yes.

Q You don't know who picked it up, if anyone?

A No. We were using it for a reference really at the time.

Q How were you using it as a reference?

A Well, occasionally the operators were going in and isolating a valve, you know, here and there. And they were very rare entries. Like this might have been, you know, like 2 or 3 entries or something like that during that period. Far and few between.

Q They would consult you?

A No.

Q They would consult the written document?

A Yes.

Q After the day on which you took that survey did

you take any other surveys or have any other risk of exposure from that kind of activity up until about April 15?

A I don't know. I made about 12 entries in the auxiliary building in about the first week and a half.

Q Was the purpose of all these entries to record or determine levels of radiation?

A Some were. Some were escorting operators during certain jobs. Drawing -- other than drawing the first -- like we drew the first waste gas decay tank sample before it was purged back into the building, in the reactor building. I don't remember what the dates of those were. We drew -- I drew the first HPR 227 samples later. But I don't remember the dates of that either.

Q On all of the occasions when you entered the auxiliary building after the survey that you had just testified about did you wear protective clothing?

A Yes.

Q Did you make any entries into the auxiliary building after taking the survey alone?

A No.

Q Why didn't you have somebody with you when you took the surveys?

A I guess limiting exposure for one. We wanted to get as few people -- to have as few people in there -- you know, there was people in there that, you know, they

knew that, you know, I would be coming out of there about every 25 minutes to have a bottle changed.

Q Bottle changed, meaning a change for your respirator?

A For my respirator. And if that I didn't come out there was somebody who was ready to come in and look for me. You know, there was enough people that knew I was in there that it wasn't anything -- because by that time we had alot of outside contractors in for health physics support. And, you know, there was alot of guys in the HP area who knew I was in there and knew what I was doing and about where I was going to be and that sort of thing.

Q With the influx of the outside contractors did the change of command in the health physics area as you understood it change?

A Yes, many times. It reached the point at about the end of the first week that I didn't know who my boss was.

Q I don't want to ask you to try to remember each and every change. But can you elaborate for me a little bit what the changes were and who some of the new people who were involved were?

A Well, let me see. The first -- I guess the first thing was that they put Dick Dubiel and Tom Mulleavy and my first level foreman on shift, okay, which means Dick

Dubiel was really no longer my third level boss if you want to call it that, supervisor. It was more or less the HP foreman on shift at the time was the supervisor. Dave Limroth was instilled in there somehow. And I, you know, I still don't know what Dave's function is or was. I really -- there was a whole bunch of changes, you know. You were wondering everyday when you came in. During the emergency they made Peter Velez supervisor, you know, just by title-wise. You know, he never performed the supervisor's functions.

I don't know who was handling the outside contractors at the time. Later on a gentleman named Sandy Lawyer was thrown in there. I don't know what his function was or I don't know that we got memos, the HP department, you know, per Sand Lawyer. You know, there was a constant change.

Q Was either Mr. Limroth or Mr. Lawyer to your knowledge experienced in the area of radiation protection?

A I don't think so. They didn't, you know, they may have been. But if they were it wasn't at my level or at my foreman's level that I know of. It was more of an administrative HP-type thing, paper pusher.

Q Did you have any dealings with Mr. Graber?

A A Mr. Graber?

Q William Graber, Bill Graber?

A I don't even know Mr. Graber.

Q Was it your view that the outside contractors who came in were useful?

A That depends what you mean as far as useful, you know.

Q Did you think they helped?

A They offset some of the work load, yes. Whether they served a good function or whether they were capable in what they were doing, that's a matter of debate.

Q On what side of the debate are you?

A I am against it, you know. I am on the anti-side. The first group that we had in Unit 2 Rad Services, they threw anybody in there that they could get. You know, they were really bad. They were shaky. Most of their technicians didn't know what they were doing.

Q When you say they threw anybody in there they could get, where were they throwing these people?

A They had them at the HP control points. They had them at the -- doing just routine-type survey-type things in Unit 2. Strictly Unit 2.

Q When you say they were throwing people in to areas of high exposure or are you saying they were throwing people who might not have been fully able to do the job into a job?

A Right.

Q The latter part?

A In other words, what they were looking -- they had specific areas that became an HP essential, okay. Or it needed some type of HP support to one degree or another. And, you know, anybody they could get, it was like they just, you know, put out a paper clipping in every paper in the country that said if you know anything about HP come to Three Mile. You know, they had people who were milkmen and they had people who were painters and, you know, and these guys said -- in fact, the one guy I talked to said he was from Camp Hill. He had been working on a garbage truck. And he had worked for an HP firm when he was in the service like 10 or 12 years ago. And he came to the company. He came here to work, you know. They had, you know, they had guys here who were doing surveys that didn't know how to read the instruments. They had people here who were, you know, like myself and a few other guys who were making the everyday entries into the auxiliary building, you know, you had to watch how they, you know, how they helped you get dressed, how they taped you up. You had to be, you know, super -- you had to read the RWP's over and over just to make sure that what they had on there was right and that they weren't sticking you into something and requiring something or not requiring something that you should have been wearing.

Q An RWP is a radiation work permit?

A Right. They were really -- really shaky about it, about their whole job, you know. It got to a point where you had to be afraid to depend on them, really.

Q Would it be fair to say that you believe that the health physics organization at the time when the incident began was disorganized?

A You mean as far as my department?

Q Yes, sir.

A Yes.

Q Would it be fair to say that as the incident progressed the health physics areas became more disorganized?

A Yes. Can I explain something to you?

Q Yes, please.

A You asked me if it was disorganized prior to the accident or at the start of the accident. I do not consider myself a good senior technician. I don't consider myself the day of the accident a good senior technician and I don't consider myself now a good senior technician. And the reason I don't consider myself a good technician and I know most of my fellow technicians feel that way is because we haven't had any training. And I have said this many times before. I have not had a stitch of training, HP training other than the general, yearly training that

lasts 4 hours. I have not had a single bit of training HP-wise since I have been with this company. Everything I have learned I have learned on the job myself or from talking to the people from nuclear services support who have come here every year on our outages. You know, this is where our guys learn this stuff from. We learn it on our own. It's been that way with this company since day one, you know.

And, you know, I am not afraid to say that if I had to go someplace else and walk into another company or another plant and say, hey, you know, I am a fully qualified senior tech, I couldn't do it. I feel I have as much experience as any senior tech in the country for what I have gone through, for what I have seen and for what I have had to do. But as far as my theory and knowledge in the radiation protection field as far as knowing the radiological health end of everything, I have no knowledge at all. I have no theory at all. Everything I have is practical and commonsense-type stuff, you know.

Q You testified that you were aware that your co-workers felt the same way?

A Yes.

Q Are you saying that your co-workers to a man feel this way?

A Explain what you mean?

Q Everyone?

A No, I don't feel everyone feels that way. There are ones who just won't say. And there are ones who are afraid to say. And there are ones who won't admit, okay.

Q But there are a substantial number of them with whom you have talked who feel the same way that you do?

A Yes. If you were to go and pick I would say a large majority, a very large majority, and ask them to be totally honest and say, look, have you been properly, fully trained in your job? I would be willing to bet that 100% will say no.

Q I don't want to put you on the spot, but will you give me the names of people with whom you have discussed the inadequacy of the training program and who have told you or have given you the understanding that you have just stated to me, that it is inadequate? If you don't want to give me the names, I am not going to press you for it.

A Can I have a second?

(Discussion off the record.)

THE WITNESS: If you people want a better background, you know, what I have said to you is strictly, as far as this situation goes, is strictly my opinion, okay? I am sure that upon talking to some of my fellow workers that they -- there would be individuals who will or who would back what I have said, okay. I cannot name those people without talking to those people first. Because it is, like

I said, it is strictly my opinion from discussions that I have had with these individuals. And I know things that they have said to me. And without their permission and without consulting with them, I can't do that.

BY MR. DIENELT:

Q All right, that is fine. If we decide that we want to pursue other people and to try to obtain the names from you we will try to work something out at a later date. But I am not going to press the matter now.

A Okay, thank you.

Q Tell me what formal training you did receive?

A From day one?

Q Yes, sir.

A When I came -- when I first came to Three Mile Island 7-1/2 years ago I came here as an analyst. And I went through a standard training program of 3 months of half-day training where I went to formal classroom, book-type training for routine math and chemistry-type training.

Q This was to be an analyst?

A This was to be an analyst, okay. It had nothing to do with health physics whatsoever. That is for formal training, that is all that I have had concerning the total aspect of the job that I was performing at that time.

I have had a B&W, Babcock and Wilcox radiochemistry course for handling the radioactive material,

liquid sources and that sort of thing, certain specific analysis performed with radiochemistry.

Q When did you have that course?

A That was probably 4 years ago, 3 years ago, 4 years ago.

Q How long did that last?

A That was for one week.

Q Was it done in Lynchburg?

A No, it was here at Three Mile.

Q It was not a correspondence course?

A No.

Q You had an instructor here; is that correct?

A That's correct, right.

Q What other formal training?

A And I have had the radioanalysis program that they have for using the jelly detector.

Q Who is they?

A B&W.

Q What is a jelly detector?

A That is the probe that we use for -- it is a lithium germanium (phonetic) detector. We use it for analyzing our water samples and our air samples and that sort of thing.

Q When did you have that course?

A That was about 3 years ago.

Q Was that also here?

A Yes.

Q How long did it last?

A 2 days, 2 or 3 days. Other than that, that's all.

Q Before you assumed any responsibilities as a rad chem tech am I correct that you did not have any classroom instruction in what you were to be doing?

A You say any? No, there was very limited amounts of it. There was maybe a half a day here or an hour or two here, and that sort of thing. We are in a situation where we have a what we call a training week in our rotation. We are shift workers. And the sixth week of that shift is considered what we call a training week, okay. That training week has not been used for training since we have had it. That has always been a working week for us, okay. They would throw in occasionally something where they might go over a procedure for a half a day or some procedure for a half a day and that sort of thing. But there was no 2-week theory -- theory-type refresher courses or anything like that. There hasn't been anything like that. There hasn't been any training whatsoever for the last 3-1/2 to 4 years. All of our training was early in the program right after we actually got into Unit 1 startup where we actually went over a few procedures now and then

and that sort of thing. But as far as formal theory training we have had very, very little.

Q Before you began work as an analyst junior you had a 3-month classroom training program?

A Yes.

Q That was half a day?

A Yes.

Q The other half a day you were working or a trainee? Would that be fair to say?

A Yes.

Q Was there anything similar to that when you began work as a rad chem tech?

A No.

Q You did not spend half a day or part of a day for a period of time in classroom instruction and the rest of the time as a trainee?

A No.

Q When you started as a rad chem tech were you given any books to read?

A No, other than radiological health handbook. But that -- they -- here it is.

Q Were you given any books or manuals with respect to how you should perform in an emergency?

A No. That was all handled during drills once a year, you know. This is what we are going to do. It is

the -- Like, we would have practice drills prior to the drills every year. We would have 7 or 8 practices prior to that. Well, if you were on a shift the first 2 years I caught like one practice and never was in on the drill and, you know. It just depended on your shift rotation. There was many times we never even got involved in it or they would assign you to a specific job. They would say, okay, for this job you are the off-site team. And then you didn't see what physically went on in the ECS and how things were handled and the musters and that sort of thing.

Q Did you participate in a drill or a practice drill every year?

A Did I?

Q You personally, yes, sir?

A Yes, at least once every year, yes.

Q At the end of those drills did you attend any summary or discussion or critique of the drills?

A I think I have attended 2 in the 5 years that I have been with -- in this actual job where we actually had drills.

Q Were you supposed to attend more discussions or critiques?

A I was never told to, no.

Q Were you allowed to? Would you have been allowed to?

A I would assume if I would have asked, yes. But most of the time I didn't even know they were holding them until, you know, -- Everybody was under the impression that they were for foremen. Nobody said, you know, the HP's, you could go to the critique if you would like.

Q Was there available to you any classroom instruction prior to or at the time you began your job as a rad chem tech?

A No, we requested training for 5 years. And they keep telling us, well, we are working it up, we are working it up. You know, this is the way it is. And we are establishing something. But, you know, it never came back.

Q "We" in this context is you and co-workers?

A Myself and co-workers, yes.

Q Have you personally ever written a criticism or a request for more training which was submitted?

A Yes.

Q What form did that take?

A Just a written -- we occasionally -- now, when I say occasionally it might have happened twice in 5 or 6 years, I guess, where somebody has come to the shop and said, "Look, you know, we have some problems in the shop, you know." It's mutual problems with the company and the union-type things. And they would say, you know, "Give us

something that will help better the department."

So, what we would do is we would write down, you know, we need more training. And then we would be specific on what we wanted training on, you know, the theory end of it, the procedure end of it, the calibration end and use of dose equipment, you know, instruments and that sort of thing. Better understanding systems and that sort of thing. You know, we'd list them. And then we would turn them into the foreman who was requesting it at the time. Pete Velez. One time it was Dick Dubiel -- not Dick Dubiel but Ken Beale who was at one time radiation protection supervisor. John Romanski who was the radiation chemistry technician or radiation chemistry supervisor prior to Dick Dubiel, you know. And that's as far as they would ever go.

Q The foreman would not transmit them further?

A I can't answer that. I don't know, you know. I really don't know. It would -- we would turn to them. And what happened from there is out of our view. We don't...

Q You never got any written response to the written submissions that you made?

A No. Like we would hold a department meeting like once a week on Fridays. And they would come back and say this is what we are planning. And that would be as far as it would go. And, you know, we would come back and say --

for example, they have said to us that, now, in our shop right now they have changed the way we work. In other words, now we are assigned to chemistry for a 12-week period. I am senior radiation protection technician and I have to work in chemistry for 12 weeks. I have been in chemistry now for 8 weeks. And I have totally lost concept of what is going on. Now, 2 nights ago I got assigned to HP because they wouldn't fill a shift. We were a man short, 2 men short. There were 2 men in Unit 1, one guy worked in chemistry and one guy in health physics on this site on the 11:00 to 7:00 shift. They would not replace a man. I haven't been in the health physics for 8 weeks. For one night I get assigned to the health physics and I have to fill out RWP's. I have to know what is going on in the auxiliary building, you know. I have to know any changes in sampling and that sort of thing. And I am just not there. I just don't know what is going on because I haven't been in it, you know.

The only non-chemistry thing that I have been involved with in the last 8 weeks is the drawing of the water samples from the Unit 2 reactor building, you know. And I caught flack for that from my foreman, you know.

But we have this 12-week period. They told us -- all the technicians that were involved in this thing questioned why we are going to be tied up in one department

for 12 weeks, okay. And how do you expect us after 12 weeks to go back into health physics or back into chemistry after being in the opposite department for 12 weeks and know what is going on. Well, this is what we are going to do. This is what our plan is. We are going to give you a one-week orientation in your training week of -- which would be our 12th week to refresh you in what has happened in health physics in Unit 1, what the conditions of the plant are at that time, what the conditions of the auxiliary building are at that time, any changes in procedures that have been invoked since the 12 weeks started, you know. We -- and that happened 24 weeks ago or 20 weeks ago. And we have had one rotation. And I went from health physics to chemistry and everybody that was in chemistry the first 12 weeks of the rotation has gone to HP. We have instilled every new -- all these new procedures in Unit 1 and Unit 2 for radiation monitoring, air sampling, respiratory equipment, TLD's everything like this. Sure, we were pulled out of chemistry to go over these procedures with somebody. We were given that time. We were given a full day to go over all of these procedures. And they were explained to us and all that. The next day I was right back in chemistry.

But I have not and no other technician in my department has had that one-week orientation to refresh him

in what is going on.

Q You had one day?

A We didn't have one day. When I was told to go into chemistry on Monday to start my 12 weeks, I started working Monday. I -- in fact, my foreman was not even in chemistry for the first 3 hours of the day on Monday. It is a commitment that they make that they never keep.

Q Who is "they"?

A My supervisors.

Q Mr. Dubiel?

A Yes.

Q Mr. Mulleavy?

A Yes. Well, Mr. Mulleavy in the past Mr. Mulleavy is not involved with us at all now. I don't know what his function is. He is with Rad Waste Management or somebody. He is not even involved with us. I don't deal with Mr. Mulleavy at all now. But Mr. Dubiel, you know, he promises alot and gives nothing.

Q He is the one who promised a one-week refresher course and has not yet delivered?

A Yes.

Q Has the lack of or the inadequacy of the training for rad chem techs and others in the health physics or the chemistry area to your knowledge been a subject which the union has brought to the attention of the management?

A Yes, many times.

Q Has this been in the context of collective bargaining?

A Yes. We have discussed it under, you know, under our agreement with the company under 9.1 in the agreement which states that, you know, that we have that right to, you know, to question and to ask for training and stuff like that under the contract, you know.

Q Do you know whether there has been correspondence back and forth between the union and the management relating to this?

A Do I? John would better be able to answer that.

Q I will ask him off the record then.

Do you know the person in the company who has the primary responsibility for responding to concerns as they are expressed by the union about these kinds of matters?

A I would say that the superintendants are the ones who we would deal directly with concerning this sort of thing. Most of the time when I deal with a situation as my department, being that I am the union representing officer in my department, I deal directly with Dick Dubiel.

Q At anytime during your training or lack of training have you taken a written examination with respect

to health physics or chemistry matters?

A Other than just in the last month, no.

Q What was the exam that you took last month?

A Well, it was -- we had training, our last rotation we had chemistry training on our last training week, the last time I had training. I would consider training, we had a couple days of chemistry training. Where our chemistry foreman actually took the time and went over the equipment that we had, reviewed us on the equipment and theory on the equipment and that sort of thing, you know. I mean, it was basic, very basic, routine-type things that we do. And then he quizzed us very basically on what we had gone over like the 2 days before, the 3 days before that. But other than that, no. As far as a recall-type thing, if that is what you are referring to, no.

Q Earlier in your testimony you said that, if I am not mistaken, the amount of training that you had had, formal training was a total of 4 hours. Do you recall that?

A No, I said under normal conditions our formal training lasts, HP training is a general training which lasts 4 hours per year. Okay, it is something required by the regs. The general education -- general employee training is what it is called. They hold that every year

in respect to the Federal regs that they are required to ...

Q Was that held last year?

A Yes.

Q Did you attend it?

A Yes.

Q What did it consist of?

A Just more or less going over what high rad areas are, you know, what roping off of an area means, the classification of what is clean and what isn't clean, what is contaminated and what isn't contaminated, what can be released and what can't be released; tagging, as far as tagging the equipment; reading the scales on certain instruments; undressing and dressing.

Q Who gave you the instruction?

A Pete Velez did.

Q You did not take an examination?

A Yes, a very basic examination.

Q Have your concerns regarding the training program ever been brought to the attention of any NRC inspector by you?

A Since the accident, yes.

Q What about prior to the accident?

A No. I shouldn't say that. I think the statement had been made -- I think, if I am not mistaken, I had mentioned it in discussion with one other NRC inspector

a couple of years ago. That was Mr. Carl Plumly.

Q What response did he make?

A Really none.

Q Who did you discuss the training program with more recently?

A In my testimonies with Mr. Greg Newhaus. We had discussed it numerous times with another inspector. And I can't think of what his name is, during the accident, during the period of the accident. He was one of the new guys that just came in, a young guy. I truthfully can't remember what his name is. And they said that they would check on it for us.

Q Did they get back to you?

A No.

Q Did the NRC play any role in the health physics response to the accident?

A Yes.

Q What role was that?

A More or less overseers, I guess you'd want to call them. A few of the guys were really concerned, you know. They helped -- I feel they helped me on numerous occasions when they raised questions about certain things that were being done that maybe didn't occur to me when I was involved with a specific job. Like they said, they would come up to you and say if you were doing a hot job like

going in to check a valve, would you -- are you wearing extremity dosimetry and if you are not, don't you think maybe you ought to because of this and this and this. Or what do you expect? And if you see what you expect, what are you going to do? And they raised the question -- and sometimes raised questions to me in my head when I was doing specific jobs. Or don't you think you ought to be a little more concerned about certain things which was very helpful because it brought in my thinking a little bit in my job and what I was doing. But there were other times when they got to be a real pain. They actually were more in the road than they actually should have been. I think they were nitpicking. You know, we had a very touchy situation here. And, you know, understanding the point of view of the public and all that. But it got to a point where they were more detrimental to the job than they actually were worth. In other words, they would question things that we did and turn around and do things themselves in complete, you know, contradiction to what they said.

Q Are you saying that when they first became involved in the response they were helpful and as time went on they became less helpful?

A Certain ones were helpful. Certain individuals were helpful.

Q Was it more of a situation where some individuals had been helpful throughout and some individuals had been not so helpful throughout?

A Right. In other words, some were -- it seemed to me like they were thrown into a situation where they really didn't know what they were looking at. They had no conception of really what it was all about. They were just -- they were needed here. They needed people here. So, they were put here, you know. And they really had no idea really what it was all about.

Q Would you characterize their roles as more the role of observer and overseers?

A Yes, overseers.

Q Your perception is that they had some authority which they could exercise?

A They thought they had some authority that they would exercise.

Q They did attempt to exercise it or they did exercise it?

A Yes.

Q They did exercise it?

A They tried. It got to a point where as technicians we were doing things to avoid them. You know, we were trying to keep them out of our hair.

Q Had there been an occasion during the time that

you would have been a rad chem tech and that a new instrument was introduced for use?

A Yes.

Q What was that?

A Sam 2.

Q What is a Sam 2?

A It is a crystal-type instrument. It is a -- I guess it is an ionization chamber. I'm not really sure.

Q Have there been other instruments introduced?

A Not extremely new instruments, no.

Q Am I correct that you do not feel you were given adequate training with respect to the use of a Sam 2?

A I couldn't -- if you gave me one right now I couldn't set it up. I have not -- the training that I have had on a Sam 2 consisted of about 15 minutes of watching somebody say, well, this is -- you do this, you do this, you do this. And this was prior to our last emergency drill practices.

Q You did not get an opportunity to handle the Sam 2 yourself; is that correct?

A No, and I still have not had the opportunity.

Q Did you ask?

A Yes, many times.

Q Who did you ask?

A Mr. Len Landry who is one of the cadre of our

supervision in HP. I don't know what his function is. But he was the one training on the Sam 2. I think we have had 2 -- maybe 2 or 3 shifts out of the whole shop that have formally sat down and trained on the Sam 2.

Q Would you have used the Sam 2 if you knew how to use it in any of your activities in response to the accident?

A Yes.

Q What would its use have been?

A Well, it would have given me a better capability of counting iodine for one which, you know, other than counting it on our jelly right now we have no way -- I have no way of doing it, okay. The setting up of channels on it to count -- to use the correction factors for strontium 89 or 90 calculations. You know, we have a -- they have a factor based on cesium/137, okay, to correlate, you know, to come up with some type of a strontium factor or a number. I guess you would call it a fudge factor. You know, other than someone having a piece of paper laying there on the instrument saying this is how to do it, I don't know the first thing. If somebody would come in there and change that Sam 2, I wouldn't have any idea how to fix it. I'd have to pull out the procedure, go through verbatim everything that is on that procedure just to set it up. And I'm not so sure then I could.

Q Did Mr. Landry respond to your request for training on the Sam 2?

A He just kept saying we will get it.

Q What training, if any, did you receive in the specific plan and procedures dealing with an emergency?

A Other than the emergency practices and the drills and occasionally going, you know, just reading through the procedures, none.

Q You were given a copy of the procedures or a copy was made available to you?

A There is a copy available to us, yes. They are in the offices.

Q Were you instructed to read them?

A At one time, yes. I have read them numerous times.

Q My question is whether you did so on your own initiative or in response to instructions that you received from someone else?

A Both.

Q Is it your impression that all of the rad chem techs have read them?

A Yes. Now since the accident especially.

Q Let's take prior to the accident?

A Yes, I would imagine most of them had, yes.

Q Did you regard the emergency drills as effective

in training you to respond to an accident?

A Prior to the accident, no. But now, yes.

Q They have changed?

A They haven't really changed. But, you know, like before they were -- during the drills they would give us these numbers. And these numbers sounded so very unrealistic, you know. And we used to say,"Hey, give us something that is a little more realistic." Well, now, alot of us don't feel that those numbers were so unrealistic.

Q Are you saying that part of the reason that the drills are now more effective is that you are taking them more seriously?

A Yes, or they will. We haven't had any reason to drill them because I think we are still in the drill.

Q You have testified now at some length regarding efficiencies or inadequacies that you perceived in the training program. In your opinion why do these deficiencies exist?

A Money.

Q Would you elaborate on that?

A Budgeting company's money. How much they are really willing to spend. I think it is an easy place to cut corners.

Q Is it your view that influx of money would solve the situation?

A Partially.

Q What else would be useful?

A More qualified people in their training programs, to get the people in who know what they are talking about who can adequately train people in whatever they are doing. They have people now who maybe theory-wise are the best people in the world. But they don't have anybody who can practically apply it. Their training program as such -- their training department as such is a joke.

Q You have testified about the lack of availability of RO2's. Were other instruments or was other equipment which would have been useful in responding to the incident not available?

A Say that again?

Q Were there other kinds of equipment which would have been helpful to you in responding to the incident that were not available?

A Yes.

Q What was that equipment?

A Just more of what we had. In other words, there weren't -- I don't feel there was equipment that we didn't have that could have been had that would have made the job easier. But I think if we would have had more of the equipment that we needed it would have been better. Like, we had one or two or three or four, I don't know how many

exactly we had, R02A's at the time. Okay. There weren't any of those in service at the time, okay. Even still there wasn't enough of them. E520's with the GM probes, they should have been more of them. Or the ones that we had -- we had -- I am going to pull a number out. It's a number that as I remember was a number that was reflected to me. 47 instruments on the shelf the day of the accident out of 55 or something like that. It was -- that were not operative the day of the accident. 47 of them.

Had those instruments been available to us or at least a larger percentage of them we could have better done our job. You know, we waited in line for instruments, you know.

Q To what do you attribute the lack of workable instruments?

A Money is the big one. Okay, the fact that we had the priority of what our instruments concerned the company, the repair of our instruments were of a concern to the company. They were at the bottom of the list. In other words, we had our instrument people, I&C shop repairing the instruments. But if they had something else to do or they had something else they wanted these certain individuals who worked our instruments to do, well, they sat. You know, we had instruments in the shop for 5 or 6 or 7 months at a time, you know. And it was just a priority. It seemed like

it didn't really matter. Nobody was concerned in purchasing enough of the equipment or the technical pieces of these instruments to repair them. There was no shelf stock for any of the repair parts. You know, I think it comes down to money.

It's been something that we asked consistently over a 2 or 3-year period for more instruments, more instruments. Get us more instruments, you know. Get us enough teletectors to do the job. Get us enough RO2's and RO2A's to do the job. Get us enough air samplers. Air samplers more than anything else. But, no, we can't -- we beg and we beg and we beg. The instruments sit on the shelf. They just keep building up. They just keep sitting there. Nobody repairs them. Nobody seems to be worried about them, you know. And then we are at a loss. And then something like this happens. And we are pulling out our hair.

You know, there is no reason why this company should have had to go to, you know, 2 or 3 different companies to get enough instruments in here to support the job. We had 100-some instruments brought in here in the first 2 days or 3 days of the accident from other companies.

Q You testified that "we made requests for more workable instruments." In this context who is "we"? Not necessarily by name?

A The other technicians.

Q To whom was the request made?

A All of our supervisors and foremen consistently.

Q Dubiel?

A Dubiel, you know.

Q The other people that you have mentioned today as foremen?

A Yes. Fred Huwe is about the only foreman that I can honestly say made -- ever made really a super attempt to get what he wanted or what he thought he needed. And that was cut. You know, Fred has -- I have talked to Fred many times since then about it on a personal-type thing outside of here. And, you know, he just, you know, he just gave up. And he'd say -- they had somebody telling him there is no reason for it, and, you know, or he'd go to purchasing and purchasing couldn't justify it.

Q Are you familiar with the RWP program?

A Yes.

Q Was it followed during the incident?

A I would say after the first 2 or 3 days, yes. First 2 days or so, yes. In Unit 1 it was followed through the whole thing. I'm positive of that.

Q Was it ignored for the first couple of days in Unit 2 completely?

A Yes, I would say, yes.

Q Why?

A Update of information more than anything else. The fact that there was really not that many entries being done. And when there were entries being done there was HP involved in it. The fact that we were, you know, keeping track. We were daily keeping track of our dosimetry by -- because they were counting the TLD's daily and that sort of thing. I think more than anything else the reason was that the HP's were so involved in what was going on. And 90% of the work on entries that were being done were being done by the HP's. Not that it makes it right that an HP can go in without an RWP. I have entered many areas without an RWP and filled the RWP out afterwards with the information and everything and what I saw during that entry because the prior information was not uptodate enough to do it. Like, I would enter say an area that might not have been surveyed for a month or a month and a half earlier. And, you know, I went in in full PC's and a Scott Air Pack and everything like that just to get the results to apply to a new survey.

Q What did you understand as the reason for obtaining the RWP?

A To give the information on what levels and air-borne activity-type things you are entering into, to give you information on what type of clothing are going to be required to enter that area and to account for your dose.

Q Has there been any change in the availability of necessary instruments since March 28?

A Up to today?

Q Yes, sir.

A No. In fact, we are operating Unit 1 with, I think, 2 RO2's even today, 2 or 3 of them.

Q Did you regard it as important during the accident to follow the RWP program?

A As far as what?

Q Obtaining the permits?

A Yes.

Q Why was it important?

A Well, because it got to a point where more than anything else the accountability of the dose and MPC hours and that sort of thing has become very significant. And the fact that, you know, you have to specify -- because of the conditions you almost have to be certain of what you are, you know, allowing a guy to go into. The amount of time that he is allowed to stay in that area and to assure that he doesn't, you know, he is authorized only in the area that the RWP signifies, okay. He can't go roaming around. He can't go around a corner. If his job is in one area, you know, he has to, you know -- I think the RWP has, you know, because of requiring these people to sign the RWP and understand the RWP before they go into that area that, look,

you are assigned to work here. This is what the RWP tells you, the area that you are supposed to work in. You don't go around a corner and sit and relax and have a cigarette, you know. Because you are liable to go around the corner and sit on something that is going to burn you up, you know.

Q Do you know what the total exposure you have had has been as a result of the TMI accident?

A Yes. Since January 1st?

Q I suppose we ought to break it down. One since January 1st to the present.

A Yes.

Q What is that?

A About [redacted] millirem.

Q Second from March 28 to the present or to the time at which you had any reading done of dosimetry monitors that you had in the accident?

A About [redacted] probably.

Q How was the level measured?

A My levels?

Q Yes, sir.

A TLD.

Q Will you clarify the last answer?

A Since March 28 I have probably got probably [redacted] or something like that, [redacted]

Q What is the basis for that estimate?

A Form 5.

Q What is that?

A That is my accountable -- the record, recorded of my accountable dose based on my TLD.

Q You read the TLD yourself?

A No. We have a department now that is handling that.

BY MISS RIDGWAY:

Q That is your reading from March 28 to the present?

A Yes. Somewhere in that range. I would have to have the Form 5 to actually -- I could give it to you exactly with the Form 5.

BY MR. DIENELT:

Q At anytime during the incident beginning on March 28 did you wear an extremity monitor?

A Yes.

Q When did you do that?

A On -- When we did the waste gas decay tank lineups I wore them. And we did the -- when we actually drew the last waste gas decay tank sample I wore them. I have worn them numerous times drawing other samples, like handling samples of water that were, you know, extremely high in radiation levels, 10 to 12 R or 10 to 20 R, probably something like that where I had to move it from one

spot to another, or from one room to another or from one building to another building where I physically carried or handled these samples. Most recently I wore them when I drew the Unit 2 water samples from the containment building.

Q Has the extremity on which you have had the monitors always been your hands?

A No. I have just recently did a survey in the Unit 2 makeup valve alley in 2AB-1 level. And in fact, that was only 2 weeks ago. And I wore them on my ankles then, too.

Q What is the highest level of exposure that you have had as recorded by the extremity monitor?

A I guess the one that is recorded that is the highest is the one that I have just recently picked up. That was somewhere around 700, 750 MR on one ankle.

Q Did you wear extremity monitoring prior to the accident at all?

A Yes, many times

Q That is a standard procedure for you?

A Yes. Anytime that we would be handling, you know, pumps or anything where we would physically be handling hot, extremely hot-type things we would wear them where there was a chance.

Q Apart from the contamination you got when you attempted to read the dPR 227 were you otherwise contaminated

as a result of the TMI incident?

A No. I had a little bit of contamination about 2 weeks ago when we entered the makeup valve alley. I had a spot on my neck that was -- I don't remember what the counts were. It wasn't very high.

Q How were you decontaminated?

A Just with soap and water.

Q On either of the 2 occasions when you were contaminated did you receive any report on the contamination?

A Other than a whole body count, no.

Q Was there any written report that is generally required?

A Oh, I am sorry. Maybe I misunderstood what you said.

Q Is there a written report? Did you receive any kind of written report?

A Yes.

Q On both occasions?

A Yes.

Q What form did that take?

A It is the personal exposure and contamination reports that are kept in both the HP labs. It goes in your personnel -- in your HP file. It is kept on record.

Q Do you know who prepared the report?

A Let me see, the one on the HPR 227 sample was

never documented.

Q So there was not a report on that one?

A No, that one was not a report. The most recent one was. And Nuclear Services Support filled that out.

Q What is it that prompts the making of the report?

A Any contamination.

Q Do you need to tell somebody that you have been exposed in order for them to make a report?

A No, it is up to me to do it.

Q You make up the report yourself?

A In other words, if I'm involved with a situation, whether it be myself or somebody else, yes, I am required to fill out that report.

Q You just didn't fill one out on the --

A I didn't take the time. And it was a situation where, you know, I went -- I washed off and it was, you know, there was no problem. So, I just didn't take the time to fill it out.

Q Did you tell Mr. Dubiel, Mr. Mulleavy or any other person who is a supervisor of yourself that you did not prepare a report on your exposure as a result of the attempting to change the HPR 227?

A No. Mr. Dubiel was aware that I was contaminated.

Q Was he aware that you didn't prepare a report?

A I don't know if he is or isn't.

Q Did he ever --

A He never asked.

Q Did he ever ask you or instruct you with respect to the preparation of the report?

A No, he didn't.

Q You testified that when you set up the ECS you began to make arrangements to control access into the auxiliary building, is that correct?

A No. In Unit 1 I controlled ingress and egress out of the HP area.

Q Excuse me. Are you aware of any arrangements that were made to control access into the auxiliary building?

A In Unit 2?

Q Yes, sir.

A Not prior to me going there, no.

Q What about subsequent to your going there?

A Yes.

Q Who did that?

A Carl Myers and Michael Kuhns.

Q What was done?

A They just kind of, you know, restricted anybody from going into that area. It was just a short time after that that we evacuated the HP area. It was, you know, it wasn't very much after. I don't remember the exact time.

Pat said 7:20 here. So, it was a short time after 7:00 o'clock that, you know, that it was -- that we evacuated. Because Carl Myers took the first -- took his air sample in the auxiliary building hallway at 7:10. Now, that's on the notes that Pat and I had discussed.

Q After the evacuation do you know how access was controlled?

A No. That was Fred's responsibility. I really -- after that I really don't know.

Q Fred?

A Fred Huwe. After we evacuated the HP area everybody went to the Unit 1 area, okay. The only thing that was not evacuated at that point was the Unit 1 and Unit 2 control room and the HP area. Everybody else had been mustered at specific areas or had not been allowed on the island. Most of whom had not been allowed on the island. They were -- everybody was, you know, ordered to stay at the observation center or to go to the observation center. Because by that time, really, you know, nobody really knew what had occurred. The daylight people had not really started coming on the island. So, they were restricting them. The main gates were locked.

Q After the evacuation, as you understood it, was there a person who was in the position to know who was entering the auxiliary building?

A Say again?

Q Was there a person who had the responsibility for knowing who was going into the auxiliary building?

A Yes.

Q That would have been Mr. Huwe?

A Yes.

Q Are you aware of any entries into the building which were made without his knowledge?

A No. I'm not saying there couldn't have been.

Q After April 1st or about that time were you assigned to any on- or off-site monitoring teams?

A No.

Q I am going to show you a document that has been marked in an earlier deposition as Exhibit 3018 which is entitled General Reviews of Health Physics Program at the Three Mile Island Nuclear Station dated March 20, 1979. Had you ever seen that document before?

A Yes, sir, I have.

Q When did you see it first?

A The actual document itself?

Q Yes.

A I don't remember the date. It was prior to the accident.

Q Did you see some version of the document or some other document in addition to that?

A Yes.

Q What else did you see?

A It was a different form than this. It was the formal NUS evaluation.

Q When did you see that? Before the accident?

A Before the accident. I am sorry, no. That was after the accident. I have seen forms of this prior -- I had seen forms to this -- No, I am wrong. They were both after. It was in April when I saw them.

Q Were you aware of the report before the accident?

A Yes.

Q Were you aware of its conclusions before the accident?

A Yes.

Q How did you become aware of them?

A From Mr. LaVie.

Q Mr. LaVie is one of the authors of the report?

A Yes.

Q Did he interview you in connection with the report?

A Yes, I took Mr. LaVie on the -- on one of his tours.

Q How much time did you spend with Mr. LaVie?

A 6 hours maybe.

Q Would you say that the description and the

conclusions that are reached in the report reflect information that you furnished to Mr. LaVie?

A I didn't read it that close to be honest with you. I would have to read it.

Q Did you review the conclusions of the report?

A I have looked over them, yes.

Q Did you agree with them?

A Certain aspects of them.

Q Did you disagree with certain other aspects?

A I questioned some of them.

Q Can you tell me if you recall what you questioned?

A No, I can't. No. I know it did enter my mind when I was going over as to, you know, was that really what we meant or is that what somebody else through discussions with Mr. Dubiel or whomever, that is the way it came out. I don't remember exactly which was which.

Q When you were talking to Mr. LaVie did you make an effort to provide him with as complete and accurate information in response to questions that he gave you as you could?

A Yes. I was as honest with him as I am with you.

Q Have you been interviewed by any other outside consultant in the past regarding the health physics program at TMI?

A No.

Q To your knowledge was this the first outside report which has been done regarding the health physics program?

A Yes.

Q Had you discussed this report prior to the accident with Mr. Dubiel?

A No.

Q With Mr. Mulleavy?

A No.

Q With Mr. Velez?

A Other than -- not with -- not in regards to the report. In regards with discussions I had had with Mr. LaVie, yes.

Q You had discussed with Mr. Mulleavy or Mr. Dubiel what you had discussed with Mr. LaVie?

A Right. Well, I guess -- I am not sure who or which one of those it was. But it was one of those, yes.

Q One of either Mr. Dubiel or Mr. Mulleavy?

A Or Pete Velez.

Q Had you been assigned to take Mr. LaVie around?

A No. He just happened to come in. They informed me that he would be coming in. Well, yes, I guess I was. Because I was told that he would be coming in on the 11:00 to 7:00 shift, on my 11:00 to 7:00 shift. And that, you know, I was supposed to, you know, show him around and, you

know, more or less give him, you know, my opinions and show him around the plant and let him look around and explain to him how we do certain things and stuff like that. Yes, I was asked to do that.

Q He spent 6 hours with you?

A Yes, it was the better part of a shift, yes.

Q Do you know if he spent time with anyone else?

A He may have. I know that he had talked to other people as far as, you know, who they were and stuff like that. I don't remember.

Q To your knowledge did he spend as much time with anyone else as he did with you?

A Not to my knowledge, no.

Q Did you spend any time with Mr. Murri, the other author of the report?

A No, I didn't know Mr. Murri.

Q After the time you spent showing Mr. LaVie around did you have any subsequent conversations with him?

A Yes, I talked to him. I have talked to him 3 or 4 times like in passing in the halls and stuff like that.

Q Were any of the conversations ones in which he sought specific information from you?

A No. They were in just, you know, like did you see the results of the report and, you know, I hope this works out the way we hope it does and, you know, there are

some real problems and we are hoping that, you know, such and such happens, you know, in regard to this. I think the biggest -- the most important thing in here was the fact that the implementation between the chemistry and health physics as one department is the biggest, most devastating hindrance to our department. You know, that we are so spread out that, you know, our functions and our required knowledge involves so much about both of the departments that we really, you know, we have certain people like myself who are more concerned with health physics. Like I would much prefer to stay in health physics all the time. And we have certain guys who don't want anything to do with health physics. So, therefore, you know, I would prefer to focus all my intent on learning health physics, you know. I don't really care about chemistry. I don't really enjoy working in chemistry. I would prefer not to work in chemistry, you know.

But it is a point that we have stressed and NUS has stressed.

Q Do you know who, if anyone, higher in authority than Mr. Dubiel was aware of either the report or the conclusions of the report prior to March 28, 1979?

A Can I talk to John?

(Discussion off the record.)

MR. DIENELT: Would you read that question back.

(Whereupon, the Reporter read back the question referred to.)

MR. CODY: He is not going to answer that question.

THE WITNESS: I would rather not.

BY MR. DIENELT:

Q Let me just ask you a clarification. Do I infer correctly from the fact that you won't answer that question that someone higher than Mr. Dubiel to your knowledge was aware of the report or its conclusions and you just don't want to say who or how you know?

A Yes.

Q I think we will leave that the same way we left the other information for now. If we feel that we need to have --

A I am under an assumption, to be honest with you, okay, through discussions to people that I wish not to name. I assume that somebody else knew.

Q Fair enough.

I don't believe that I have anymore questions at this point. I know you have been interviewed by I&E. You have been patient with us and given us alot of information. But I want to give you the opportunity if there is anything else you would like to say particularly if there are matters within your knowledge which you believe would assist

us in conducting our investigation or preparing our report we would be happy to hear that now.

A No.

MR. DIENELT: I don't think it will be necessary to call you back. It is possible that it will be. If that is the case, we will try to work something out through the attorneys and, of course, Mr. Cody or somebody else from the union will be welcome to come at that time as well.

Thank you, very much.

(Whereupon, at 12:45 p.m., the deposition was concluded.)

CERTIFICATE

I, Roxanne Weaver, the officer before whom the deposition of MICHAEL A. JANOUSKI was taken, do hereby certify that MICHAEL A. JANOUSKI, the witness whose testimony appears in the foregoing deposition, was duly sworn on September 19, 1979, and that the transcribed deposition of said witness is a true record of the testimony given by him; that the proceedings are here recorded fully and accurately; that I am neither attorney nor counsel for, nor related to any of the parties to the action in which this deposition was taken, and further that I am not a relative of any attorney or counsel employed by the parties hereto, or financially interested in this action.

Roxanne Weaver

Roxanne Weaver, Reporter-Notary Public

Notary Public in and for the
Commonwealth of Pennsylvania

MONICK STENOGRAPHIC SERVICE

My Commission expires
July 19, 1983.

I have read the above and it is true and correct to the best of my knowledge and belief.

_____
Michael A. Janouski

Sworn to and subscribed before me by said Michael A. Janouski this _____ day of _____, 1979.

_____
Notary Public

My Commission expires _____