

ADDENDUM/ERRATA SHEET

<u>Page</u>	<u>Line</u>	<u>Correction and Reason for Correction</u>
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13	18	Boren spelled incorrectly should ^{be} be spelled Boren.
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26	1	him should be her, Dr. Boren is female.
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF INVESTIGATIONS

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In the Matter of: :

INVESTIGATIVE INTERVIEW :

Edwin A. Balliet, Jr. :

(CLOSED) :

- - - - -X

Scenery Hill Manor Nursing Home

R.D. 5

Indiana, Pennsylvania

Saturday, December 5, 1992

The above-entitled matter commenced at 1:00
o'clock p.m., when were present:

RON LLOYD, Investigator

CYNTHIA G. JONES, Section Chief, IMNS

PENNY NESSEN, Health Physicist

Nuclear Regulatory Commission

P R O C E E D I N G S

[1:00 p.m.]

1
2
3 MS. JONES: It is Saturday, December 5th, at
4 exactly one o'clock. My name is Cynthia Jones, and I am a
5 Section Leader in the Operations Branch, Division of
6 Industrial Medical Nuclear Safety at our headquarters
7 office, which is located in Rockville, Maryland.

8 What I would like each of you to do is please
9 state your name, spell your last name, and give us your
10 title?

11 THE INTERVIEWEE: My name is Edwin Balliet,
12 B-a-l-l-i-e-t. I am the Administrator for the nursing
13 facility.

14 MR. LLOYD: My name is Ron Lloyd with the U.S.
15 Nuclear Regulatory Commission in Bethesda, Maryland. My
16 last name is spelled L-l-o-y-d.

17 MS. NESSEN: Penny Nessen, the last name is
18 N-e-s-s-e-n. I am a Health Physicist in the Medical
19 Inspection Section for Region I of the NRC.

20 MS. JONES: As we discussed earlier, the subject
21 incident is being investigated by what we call an Incident
22 Investigation Team or IIT.

23 These teams are established at the highest level
24 of the Nuclear Regulatory Commission to establish what
25 happened, to identify probable causes of the incident, to

1 provide any appropriate feedback to the industry or licensee
2 regarding any lessons that we learn from the incident.

3 We are here conducting interviews, and taking
4 notes of interviews with a stenographer to ensure that we
5 can have the facts for useful purposes later on so that we
6 can look at a document, an interview, and determine what
7 exactly was said.

8 We are interviewing people with regard to their
9 personal actions and observation of personnel or situations
10 in the area who were directly involved with the event.

11 The transcripts that will be made of our
12 conversation will be available for your review in about 24
13 hours, and Ron has a copy of Exhibit 3.1 which include some
14 information for you, along with the telephone number of our
15 hotel, and room number on the top. Marsha K., when you call
16 that phone number, will be able to tell you if the
17 transcript is ready for you to review. You will get an
18 opportunity to look at it, and to correct any statements
19 that you feel were incorrect or wrong, and you can correct
20 those in about 24 hours.

21 I just recommend that you call first and see if
22 they are available, because we are doing a number at the
23 same time. The corrections, and any clarifications that you
24 make will be included as part of the transcript, just so you
25 know that.

1 The transcripts will be made publicly available in
2 the NRC's Public Document Room, both in our regional office
3 in King of Prussia, and in our headquarters offices in
4 Washington, D.C. They will be issued after the team report,
5 which will be in probably 45 days from now. It takes about
6 that long for us to assimilate all the information and fact
7 finding and put it in the report.

8 What I guess we would like to do is, in your own
9 way and description of events, how you can describe in your
10 own way the events that occurred shortly before the patient
11 was sent over on Monday, November 16th, to the Cancer Center
12 for treatment, what was she like here, and then just go one
13 from there?

14 THE INTERVIEWEE: I have no direct resident
15 contact other than just visiting, so as far as any physical
16 health, she was alert and oriented, she was able to speak to
17 you and talk to you.

18 MS. JONES: Let me back up a second. Tell us what
19 your training and experience is, and your experience and
20 responsibilities here?

21 THE INTERVIEWEE: I am a Licensed Nursing Home
22 Administrator with the State of Pennsylvania. I have a
23 Bachelor's Degree in Health Administration, and I have been
24 the administrator here for approximately 16 months.

25 MS. JONES: And before that?

1 THE INTERVIEWEE: I was an Associate Administrator
2 at another facility. Prior to that, I was the Administrator
3 for Research for the Veterans' Administration.

4 MS. JONES: So how many years of experience do you
5 have in this field?

6 THE INTERVIEWEE: In long-term care?

7 MS. JONES: Yes.

8 THE INTERVIEWEE: Approximately three.

9 MS. JONES: Has there been any retraining that you
10 have taken since obtaining your degree?

11 THE INTERVIEWEE: I do the standard required in-
12 services that the State requires and the Federal government
13 requires for me to keep my license, yes.

14 MS. JONES: Do you provide any training here to
15 personnel in long-term care?

16 THE INTERVIEWEE: Yes, we do. We do in-services
17 here at the facility. We also send our staff out for in-
18 servicing either to Indiana University of Pennsylvania, or
19 to other seminars that they wish to attend.

20 MS. JONES: What kinds of training?

21 Would they be for both nursing staff and the
22 other?

23 THE INTERVIEWEE: Yes. Any of the departments may
24 attend an in-service, if they find one that they wish to
25 attend outside the facility. The in-services within the

1 facility, we have several that are yearly requirements, and
2 others that we do simply to refresh skills.

3 MS. JONES: Could you tell us the background
4 history on the patient that was in question here earlier?

5 THE INTERVIEWEE: The individual patient was
6 admitted here three times in this calendar year, 1992. The
7 original admission was for treatment of radiation burns from
8 previous radiation treatments that she had received.

9 The second admission was due to a possible
10 fractured hip, and the last admission was an admission for
11 treatment and care dealing mainly with her diagnosis which,
12 at this time, had been infection and secondary cancer.

13 MS. JONES: Do you happen to have the dates of
14 those admissions, or records of them?

15 THE INTERVIEWEE: Yes, I do.

16 MS. JONES: We will ask you to supply us with a
17 copy of that information.

18 THE INTERVIEWEE: Okay.

19 MS. JONES: Did you note any -- on the last
20 admission date to this facility, did you note any activity
21 changes in the patient, or did -- I know that you normally
22 don't work with the patient, as you mentioned before, was it
23 brought to your attention?

24 THE INTERVIEWEE: No, it wasn't. If there is any
25 changes, they would be in either the nursing notes or the

1 social servicing activity notes.

2 MS. JONES: What is the number of staff on each
3 shift, and what type of staff are on each shift?

4 THE INTERVIEWEE: On the seven to three shift, we
5 staff an RN, an LPN, and anywhere from four to six nursing
6 assistants. On the three to eleven shift, there is an RN,
7 an LPN, and anywhere from three to four nursing assistants,
8 possibly on some days there would be five. On the eleven --

9 MS. JONES: Excuse me, on Sundays or some days?

10 THE INTERVIEWEE: Possibly on some days, excuse
11 me.

12 MS. JONES: I am sorry.

13 THE INTERVIEWEE: That's okay.

14 On the eleven to seven shift, there is an LPN,
15 from time to time there may be an RN in place of the LPN,
16 and two to three nursing assistants.

17 MS. JONES: What is the total number of people
18 that are employed at the facility?

19 THE INTERVIEWEE: It varies from time to time.
20 Currently, I believe it is 51.

21 MS. JONES: Do you have, besides nurses or nursing
22 assistants, any other type of employees?

23 THE INTERVIEWEE: We have dietary employees,
24 housekeeping employees, maintenance. We have a physical
25 therapy technician, and, of course, social services

1 activities and secretarial support.

2 MS. JONES: What was your contact, if any, with
3 the doctor of the patient here, and also the doctor at the
4 Cancer Treatment Center?

5 THE INTERVIEWEE: The doctor of the patient here
6 is our medical director, so I have contact with her
7 concerning policy issues, individual issues, and simply
8 seeing her. She is in the facility itself.

9 The physician from the Treatment Center I have
10 only spoken to once on the phone briefly.

11 MS. JONES: Do you have or have you had at this
12 facility other patients who were treated with catheters?

13 THE INTERVIEWEE: Not to my knowledge. We have
14 had other individuals here treated with radiation
15 treatments, and we have had other individuals who have had
16 true implants, but, to the best of my knowledge, I am not
17 aware that we had anyone with catheters before.

18 MS. JONES: Do you know if any of the nurses or
19 assistants on your staff have had training with catheters?

20 THE INTERVIEWEE: No. I am not aware if they have
21 or not.

22 MS. JONES: As far as the day to day routine of
23 red bag waste or medical waste is concerned, could you step
24 me through if a patient had medical waste, what happens to
25 it or what the nurses or assistants would consider what they

1 would do with it, would it stay in the patient's room, and
2 so forth?

3 THE INTERVIEWEE: Any item that would be
4 considered biohazardous medical waste in our facility would
5 be placed in a one gallon hazardous waste bag, which is red
6 in color. The bag would be tied and sealed at the top and
7 then carried to a utility room where we have a step can with
8 another biohazardous waste bag in that and the bag would be
9 placed in there.

10 Each day between 3:00 and 3:15 one of our two
11 maintenance men would then take that bag, tie the top, and
12 take it out to an outside entrance to a storage center where
13 it is placed into a biohazardous box which again has a red
14 bag liner in it.

15 When a box becomes filled, the top is sealed with
16 tape and it is dated and our facility name is put on the top
17 of it.

18 MS. JONES: Okay. How often does it get picked
19 up? What happens at that point?

20 THE INTERVIEWEE: The boxes themselves are picked
21 up once per month on a Wednesday by the licenced carrier
22 that we have a contract with to pick it up.

23 MS. JONES: Okay. Of the treatment shipping paper
24 that I made a copy of here and that you had seen, too,
25 yesterday. It was the one that had a difficult date to look

1 at and I'll speak with [REDACTED] who is listed on there.
2 We had a question trying to read the date and it was listed
3 the 23rd, which we noted was a Monday rather than a
4 Wednesday.

5 Can you explain or is it just --

6 THE INTERVIEWEE: No, to the best of my knowledge
7 they have always been here on a Wednesday.

8 MS. JONES: Okay, so if we needed to, is it
9 possible if we corrected this you would be able to sign and
10 certify that it was on Wednesday or --

11 THE INTERVIEWEE: I can't certify that it occurred
12 on that Wednesday. I was not here at the time it was picked
13 up.

14 MS. JONES: Okay.

15 THE INTERVIEWEE: But I do know that every time
16 that I am aware that they have been here it has always been
17 on a Wednesday.

18 MS. JONES: Okay. What I'll do is have [REDACTED] look at
19 that and if he can ensure me that's a Wednesday, then we'll
20 have him sign and state that this was just an incorrect
21 date, they come on a Wednesday, and if he can sign and date
22 that we'll put that into the record.

23 That date, just for people's information, was the
24 day before Thanksgiving, so there was probably a lot of
25 activity going on.

1 Did you have anything?

2 MR. LLOYD: No.

3 MS. JONES: After the patient came back from the
4 Cancer Treatment Center on the 16th, she was here for a
5 period of time and received care. Do you have records of
6 the patients that were in rooms adjacent next to her and
7 across the way -- any for that period of time from the 16th
8 through the 21st?

9 THE INTERVIEWEE: Yes, we do.

10 MS. JONES: Okay. We would like to get a copy of
11 the patients that were in the facility at that time.

12 THE INTERVIEWEE: Okay.

13 MS. JONES: I guess in addition to the ones that
14 are adjacent to her, probably a list of the patients that
15 could have been in the area or an estimate of the number of
16 patients who were here would be helpful.

17 THE INTERVIEWEE: Okay.

18 MS. JONES: If you -- I have asked you this
19 question before, but just for the record, do you have any
20 Visitors Logs that are at the facility?

21 THE INTERVIEWEE: No, we do not.

22 MS. JONES: Okay. If you had an idea or could
23 estimate when people visit the most at the facility, when
24 would that be? Is there any peak on certain days, hours?

25 THE INTERVIEWEE: At this facility, no. There

1 seems to be visitors here at any given time between 10:00
2 a.m. and perhaps 7:30 p.m.

3 MS. JONES: So those would be the core hours?

4 THE INTERVIEWEE: Those are the core hours,
5 between there.

6 MS. JONES: Okay. Is there anyone on your staff
7 that would be knowledgeable of visitors or an estimate of
8 visitors that I could ask?

9 THE INTERVIEWEE: I don't believe one of my Staff
10 would be able to give you an estimate of the number that are
11 in on any given day. It depends on again whether it is a
12 holiday or perhaps there are more on a weekend than there
13 would be during the week.

14 MS. JONES: What types of notification, if any,
15 was made to the family after the patient died?

16 THE INTERVIEWEE: It's noted in the nursing notes
17 who was notified and at what time.

18 MS. JONES: Okay. Let's see. Do you know if
19 there is very many children that visit the facility for
20 people, I mean it's their grandparents or --

21 THE INTERVIEWEE: We do have children who visit
22 the facility, yes.

23 MS. JONES: Do you have any estimate or would
24 someone here have an estimate if that is -- would that be
25 considered very rare, infrequent, frequent, or --

1 THE INTERVIEWEE: I would say it's probably a
2 daily occurrence.

3 MS. JONES: And the children would be any sort of
4 age, babies to --

5 THE INTERVIEWEE: Certainly. We have infants here
6 that come in and visit family members.

7 MS. JONES: In addition to the nurses' notes that
8 you have here, are there any other notes or records from the
9 physician or from other physicians that may have attended
10 the patient in question?

11 THE INTERVIEWEE: The Physicians Orders and the
12 Physician Progress Notes are part of the clinical record
13 here as well.

14 MS. JONES: Okay. We'd like to get a copy of
15 those for the record. Any copies --

16 MR. LLOYD: Question.

17 MS. JONES: Yes.

18 MR. LLOYD: Would this include [REDACTED]

19 [REDACTED] or both?

20 THE INTERVIEWEE: It would definitely include [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 MR. LLOYD: Okay, so the notes you are referring
24 to would be those of [REDACTED]

25 THE INTERVIEWEE: Yes.

1 MS. JONES: Is there -- do you happen to know the
2 names of the relatives that have been notified or will be
3 notified of the deceased?

4 THE INTERVIEWEE: That she became deceased or of
5 this event?

6 MS. JONES: Of this event.

7 THE INTERVIEWEE: No. We were told that was being
8 handled by the Treatment Center.

9 MS. JONES: Okay, so the Treatment Center has
10 indicated they would call the people.

11 THE INTERVIEWEE: Yes.

12 MS. JONES: Did someone tell you that from the
13 Treatment Center?

14 THE INTERVIEWEE: I was told that by the Medical
15 Director.

16 MS. JONES: 

17 THE INTERVIEWEE: Yes.

18 MS. JONES: Okay. If possible, we would like to
19 get a copy of the names of the relatives. I myself don't
20 have that information. We can check with the other people
21 on the team to see if they have that, so that if we need to
22 contact them, we can.

23 THE INTERVIEWEE: Okay.

24 MS. JONES: Do you know if they are in the area?
25 Do they --

1 THE INTERVIEWEE: Yes, they do.

2 MS. JONES: Okay. What was the feeling of the
3 Staff at the nursing home concerning the death of the
4 patient?

5 THE INTERVIEWEE: They felt sad to see her go. As
6 I said, she had been here three times so the patient was
7 known very well by the entire Staff.

8 THE INTERVIEWEE: Okay. Is there anyone else that
9 you think we should talk to or perhaps would have additional
10 information that could help us put together time and motion
11 studies for determining where people are at certain times of
12 the day, routines, that kind of thing?

13 THE INTERVIEWEE: I think you are going to get
14 most of that information off of our scheduling sheets and
15 our nursing assistants flow sheet.

16 MS. JONES: Okay, and if you could just again tell
17 me the scheduling sheets have what types of information on
18 them?

19 THE INTERVIEWEE: The schedule sheet would say who
20 was working that evening or that morning or whichever the
21 shift is for a specific day and also which rooms the
22 individual had to take care of that day.

23 MS. JONES: The Certified Nurses Assistants, as
24 Nurse Joyner told me, are rotated for different patients or
25 either the parts of the wing. Can you explain a little bit

1 more in detail how that works?

2 THE INTERVIEWEE: Sure. We rotate our nursing
3 staff in our building so that the same resident does not
4 have the same nursing assistant each day, so an individual
5 may have a certain number of rooms on the specific wing
6 section tonight but have another set of rooms on another
7 wing section tomorrow night.

8 They would not have the same set of rooms each
9 night.

10 MS. JONES: So would it be fair to say that if a
11 nurse, a Certified Nursing Assistant, had one wing one
12 night, the next -- North Wing, the next night, and then came
13 back to that same wing again the third night?

14 THE INTERVIEWEE: It could be the third night or
15 it may be four or five nights later, depending on the
16 rotating of the shifts.

17 MS. JONES: Okay. Okay, great.

18 How long would it take to go through a full
19 rotation in one shift?

20 THE INTERVIEWEE: Do you mean an individual who
21 would have had this resident how many days would it be until
22 they had them again?

23 MS. JONES: Yes.

24 THE INTERVIEWEE: There is no way of knowing. It
25 depends on requested days off. They may have that person,

1 two days later they may not have that person, if there are
2 three nursing assistants on in the evening for three or four
3 days, or on day shift, they may not see them for a week.

4 MS. JONES: Penny, did you have any questions that
5 you wanted to ask?

6 MS. NESSEN: Actually quite a few. Can I ask
7 questions?

8 MS. JONES: Sure.

9 MS. NESSEN: You are the Administrator of the
10 nursing home, correct?

11 THE INTERVIEWEE: Yes, I am.

12 MS. NESSEN: What are your duties as an
13 administrator?

14 THE INTERVIEWEE: My duties are the overall
15 running of the facility itself to oversee all the services
16 that we provide here in the facility, to ensure smooth
17 running from day to day, to give direction to the department
18 heads, and I also personally oversee the admissions.

19 MS. NESSEN: You stated that you have 51 employees
20 currently at the nursing home.

21 THE INTERVIEWEE: Yes.

22 MS. NESSEN: Does this include part-time
23 employees?

24 THE INTERVIEWEE: Yes, it does.

25 MS. NESSEN: And what about people from training

1 programs, maybe from community colleges around here?

2 THE INTERVIEWEE: No, that is not included.

3 MS. NESSEN: How many part-time employees do you
4 have?

5 THE INTERVIEWEE: Approximately five from the top
6 of my head, and we consider part-time anyone under 30 hours
7 per week.

8 MS. NESSEN: Thank you.

9 You said that the maintenance man comes and picks
10 up the bio-hazard waste and takes it outside to the storage
11 room. Is this particular duty assigned to one maintenance
12 man, and if he is off that day you have to try to rearrange
13 the schedule?

14 THE INTERVIEWEE: No, it is not. We have two
15 full-time maintenance men here, and no one is specifically
16 assigned to it on any given day.

17 MS. NESSEN: Would there be an occasion when both
18 of those individuals would be off for a day?

19 THE INTERVIEWEE: No, we have a maintenance man
20 here seven days a week.

21 MS. NESSEN: Your waste hauler that picks up the
22 bio-hazard waste, how do they gain access to that outside
23 storage?

24 THE INTERVIEWEE: The maintenance gentleman that
25 is on that day opens the door for them.

1 MS. NESSEN: And the maintenance man has a key to
2 all of the rooms around here?

3 THE INTERVIEWEE: Yes.

4 MS. NESSEN: We had discussed before what the
5 walls between the patients rooms and between the outside
6 storage area for the bio-hazard waste and the recreation
7 room were made of. If you could describe first the walls
8 between the patient rooms for me?

9 THE INTERVIEWEE: The walls between the patient
10 rooms is our standard wood and stud wall with three-quarter-
11 inch drywall on each side, and quarter-inch wood panelling
12 on top of that.

13 MS. NESSEN: And now the --

14 THE INTERVIEWEE: The wall between the storage
15 room for the waste and the activities room is a cinderblock
16 wall.

17 MS. NESSEN: There is a lounge that is located
18 adjacent to the soiled utility room, do you have an idea of
19 how often that is used, or how long someone may stay in that
20 area?

21 THE INTERVIEWEE: The lounge is used everyday. It
22 is used by visitors, it is used by residents. The average
23 person in the lounge may be there an hour. If a resident is
24 sitting there reading a book, she may be there for an hour-
25 and-a-half to two hours. To the best of my knowledge, no

1 one would be in there longer than two hours.

2 MS. NESSEN: Would any of your employees use that
3 area as an office space to work?

4 THE INTERVIEWEE: It would not be used as an
5 office space, but some of the staff may complete their notes
6 in there at the end of shift, which would be approximately
7 20 minutes.

8 MS. NESSEN: And the recreation room is located
9 adjacent to the outside storage room?

10 THE INTERVIEWEE: Yes.

11 MS. NESSEN: I notice that there was a desk in
12 that room, is that used for --

13 THE INTERVIEWEE: That is the activity director's
14 desk.

15 MS. NESSEN: How long are they at that position in
16 the day?

17 THE INTERVIEWEE: She would be at the desk
18 approximately two to two-and-a-half hours a day.

19 MS. NESSEN: If you could just explain what that
20 room was used for, the recreation room?

21 THE INTERVIEWEE: The recreation room is a multi-
22 purpose room. All of our resident activities are in there.
23 We have musical groups who come in and play music for us.
24 We have movies that we show on the VCR. They have a card
25 club in there, and crafts, aerobics, those types of things.

1 MS. NESSEN: Next to the soiled utility room,
2 there is bathing room?

3 THE INTERVIEWEE: Yes.

4 MS. NESSEN: How long would an individual, one of
5 your residents or one of the nurses, how long would they
6 spend in that room?

7 THE INTERVIEWEE: A resident would not be in the
8 room for more than approximately 20 minutes, probably less
9 than five to disrobe and be lowered into the tub, less than
10 ten minutes in the tub, and another five to be brought out,
11 dried and dressed before she left the room.

12 The staff members would be in there with her at
13 that time, then they would escort that individual back to
14 their room, and perhaps one of those two nursing assistants
15 would go back in with the second resident, but a separate
16 nursing assistant would also be in there at that time. So
17 they do rotate through the tub room as well.

18 MS. NESSEN: The nurses rotate?

19 THE INTERVIEWEE: The nursing assistants, yes.

20 MS. NESSEN: And who are the staff members, who
21 would that include?

22 THE INTERVIEWEE: The nursing assistants, anyone
23 who would be on the day shift, or the three to eleven shift.

24 MS. NESSEN: Okay.

25 MS. JONES: For the recreation room schedule, you

1 indicated that there are activities that are done probably
2 throughout a daily basis, is it possible to get a list of
3 activities that were performed on the dates of November 16
4 through the 21st?

5 THE INTERVIEWEE: Yes, I can give you a calendar
6 and it shows the activities that were there.

7 MS. JONES: And in regards to the room that
8 contains -- in the interim here, that would have the red bag
9 waste, is there a possibility that that could have filled up
10 earlier in the day, or do you have maybe more than one bag
11 throughout the day rather than waiting until 3:15 to 3:30?

12 THE INTERVIEWEE: If the bag would have been full,
13 nursing staff would have told the maintenance director, or
14 the maintenance assistant, and they would have taken the bag
15 out and placed a new bag in.

16 MS. JONES: Is there a possibility that maybe the
17 nursing staff, if they couldn't reach the maintenance man,
18 would have taken the bag out themselves, do they have a key?

19 THE INTERVIEWEE: No. They would not have taken
20 it out themselves.

21 MS. JONES: Can we take a brief recess for a
22 second?

23 [Brief recess at 1:25 p.m.]

24 MS. JONES: Let's go back on the record.

25 When were you first aware or heard about the

1 situation with the patient and the fact that there was a
2 source that was in the patient for a period of time while
3 that patient was here?

4 THE INTERVIEWEE: When we were first aware that
5 the source was in the patient?

6 MS. JONES: And how did you find that information
7 out?

8 THE INTERVIEWEE: We found that information out
9 on -- I believe it would have been Thursday morning, because
10 we were not aware that the source had been found in the
11 catheter until then. We had been aware of the situation,
12 but we were not aware that the source had been found in the
13 catheter.

14 MS. JONES: So last Thursday morning, so December
15 3rd?

16 THE INTERVIEWEE: Yes.

17 MR. LLOYD: How did you find that out?

18 THE INTERVIEWEE: We were told when the NRC team
19 arrived here.

20 MS. JONES: Did anyone contact you from the Cancer
21 Treatment Center, to your knowledge, before that?

22 THE INTERVIEWEE: We had talked to them two days
23 prior to that concerning the information from BFI, but they
24 had not told us where the source had been found, no.

25 MS. JONES: Do you know who BFI talked to at this

1 facility when they called up?

2 THE INTERVIEWEE: Yes.

3 MS. JONES: And who was that?

4 THE INTERVIEWEE: [REDACTED] she is an RN.

5 MS. JONES: Have you talked with [REDACTED] to

6 understand what was in the conversation with BFI?

7 THE INTERVIEWEE: Yes. BFI told her that one of
8 our boxes had shown to be radioactive at the treatment
9 facility, and had told her that they would call me back
10 later that morning. I was not in in the morning when they
11 called.

12 MS. JONES: And did they call you back? -

13 THE INTERVIEWEE: No, they did not.

14 MS. JONES: Did you have a phone number where you
15 could reach them?

16 THE INTERVIEWEE: Yes, I did.

17 MS. JONES: Did you contact them?

18 THE INTERVIEWEE: No, I did not. I contacted the
19 Cancer Treatment Center.

20 MS. JONES: And what was the reason for contacting
21 the Cancer Treatment Center?

22 THE INTERVIEWEE: I was trying to determine why
23 our garbage would have shown radioactivity.

24 MS. JONES: At that point, was there any other
25 patients here who would have gone through radiation

1 treatment?

2 THE INTERVIEWEE: Not at the present time, no.

3 MS. JONES: What happened at that point?

4 THE INTERVIEWEE: I did not get to make the phone
5 call to the Cancer Treatment Center. I was on another line,
6 and I had my Director of Nursing contact them. She spoke to
7 an individual named [REDACTED] who assured her that it was
8 impossible for our waste to have been radioactive from a
9 resident that we had had here.

10 MS. JONES: Do you know what happened after that?

11 THE INTERVIEWEE: From our standpoint, we then
12 telephoned our electric company to see if it might have been
13 some sort of magnetism that might have set off their alarm,
14 since the boxes are near our electrical system. They
15 assured me that it was impossible from their standpoint, and
16 I then was waiting for BFI to call me back.

17 That same day, at approximately five to twelve,
18 the Cancer Treatment Center called and asked for me, and
19 asked for the name and telephone number of our waste hauler,
20 which I then gave them.

21 MS. JONES: And do you know what happened after
22 that?

23 THE INTERVIEWEE: What happened after that is
24 Wednesday morning. This had all occurred on Tuesday. On
25 Wednesday morning, I telephoned the Medical Director and

1 told him that I had not heard anything yet.

2 MS. JONES: The Medical Director, [REDACTED]

3 THE INTERVIEWEE: Of our facility, yes, [REDACTED]

4 That I had not heard anything yet, but that there had seemed
5 to have been a problem with our medical waste, and it was
6 shortly after that that we were told that there had been a
7 problem.

8 MS. JONES: Then what happened after that?

9 THE INTERVIEWEE: What happened after that is, our
10 Medical Director was contacted by Dr. Flynn, and we, at that
11 point, set up for blood testing to be done on our staff on
12 Thursday.

13 MS. JONES: Do you remember how many staff had
14 blood samples?

15 THE INTERVIEWEE: The original numbers were
16 approximately 43, but I do not know from Dr. Flynn how many
17 samples he actually had drawn.

18 MS. JONES: And did you have blood samples taken?

19 THE INTERVIEWEE: Yes, I did.

20 MS. JONES: What direction or information was
21 given to your staff regarding why the blood samples were
22 taken, and who did that?

23 THE INTERVIEWEE: Myself and the Director of
24 Nursing explained to our staff that there was a possibility
25 of one of our residents having been exposed to a high level

1 of radiation and, as a precaution, and to prove to the staff
2 for piece of mind that everything was fine here, that we
3 were going to be done blood testing. That they would be
4 able to see the results, and discuss them with our Medical
5 Director, and the independent oncologist, and that they
6 would be more than welcome to show them to their physician.

7 MS. JONES: So the blood samples were taken on
8 Thursday, and that would be December 3rd.

9 And have you received your results back, and have
10 your staff?

11 THE INTERVIEWEE: Yes, we did. The results were
12 faxed to us on that evening, approximately 9:00 p.m., and
13 all of the staff members had been notified that Dr. Flynn
14 had reviewed them and had stated that all of the results
15 were within normal ranges.

16 MS. JONES: Do you know if [REDACTED] has also
17 reviewed those results?

18 THE INTERVIEWEE: [REDACTED] was notified by Dr.
19 Flynn, but I am not aware if she has actually seen the
20 results or not.

21 MS. JONES: Can you think --

22 THE INTERVIEWEE: Also on that Thursday is when
23 the building itself was tested with the counters, and we
24 were told at that point that we were not registering any
25 radiation.

1 MS. JONES: That was done by?

2 THE INTERVIEWEE: The Department of Environmental
3 Resources.

4 MS. JONES: Is that of Pennsylvania.

5 THE INTERVIEWEE: Yes.

6 MS. JONES: Do you have any questions?

7 MR. LLOYD: Yes, I have a couple of questions.
8 Have you known [REDACTED] in the past?

9 THE INTERVIEWEE: No, I do not.

10 MR. LLOYD: So when was the first time that you
11 had any contact or knew of his presence?

12 THE INTERVIEWEE: I have heard of his name before
13 through the Treatment Center, but I have never personally
14 met him.

15 MR. LLOYD: Has he ever been in this facility at
16 all, whether you were here or not here?

17 THE INTERVIEWEE: He may have been to our facility
18 at some point, but I am not aware of him being here in the
19 year and four months that I have been here.

20 MR. LLOYD: Has he requested the nurses' record,
21 the attending physician's records, and so on of the patient?

22 THE INTERVIEWEE: We have not had a formal request
23 for the records, no.

24 MR. LLOYD: Has the Nursing Home had any
25 complaints filed against it since you have been here, or

1 that you know of?

2 THE INTERVIEWEE: I am not sure if I understand
3 what you mean by complaints.

4 MR. LLOYD: People complaining about the service
5 given to the residents?

6 THE INTERVIEWEE: We have had one complaint, which
7 stemmed from an incident approximately a year-and-a-half ago
8 to a year-and-three-quarters ago which was investigated as
9 part of a standard survey by the Department of Health in
10 January of '92, and we were told at that time that there was
11 nothing to substantiate those findings, and that dealt with
12 the resident who was sent to a hospital, and the hospital
13 was not aware if it was a correct discharge or not.

14 MR. LLOYD: Anything else?

15 MS. JONES: In your opinion, is it usual or
16 unusual to receive instructions from doctors, or outside
17 doctors, in this case, for patients that are in care at this
18 facility?

19 THE INTERVIEWEE: Well, we do not have physicians
20 that are employees of our facility. All of our physicians
21 are the individual residents' primary physician, so all of
22 the orders that come through here would be from the outside
23 physician.

24 MS. JONES: We mentioned earlier that the catheter
25 use at this facility was unusual, that you hadn't had any --

1 THE INTERVIEWEE: To the best of my knowledge.

2 MS. JONES: -- to the best of your knowledge,
3 here. Do you know if there were instructions from the
4 doctor to your nursing staff about catheter use?

5 THE INTERVIEWEE: To my knowledge, I am not aware
6 if there was or not, but it would be listed in the nursing
7 notes.

8 MS. JONES: You mentioned before, earlier to me,
9 yesterday, when we were walking around, that the facility is
10 undergoing construction, or will undergo some construction.
11 Do you think there has been anyone at the facility who is a
12 construction worker, and electrician, an outside person who
13 would not work at the facility and enter the facility and
14 walk around?

15 THE INTERVIEWEE: No, I don't. The individuals
16 who -- all the renovations we are doing are cosmetic. The
17 individuals who had started them did not arrive here until
18 after the 21st.

19 MS. JONES: Okay.

20 THE INTERVIEWEE: I am not sure of the exact date,
21 but they actually started Thanksgiving morning.

22 MS. JONES: Do you have any questions for us?

23 THE INTERVIEWEE: No.

24 MS. JONES: Do you have anything else?

25 MS. NESSEN: No.

1 MS. JONES: Ren?

2 MR. LLOYD: No.

3 MS. JONES: I think concludes the interview. It
4 is now 1:40.

5 [Whereupon, at 1:40 p.m., the interview was
6 concluded.]

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REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission

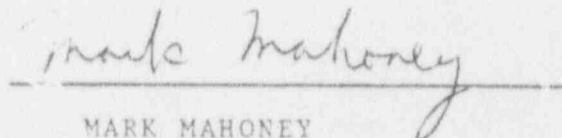
in the matter of: Incident Investigation Team

NAME OF PROCEEDING: Int. of: Edwin A. Balliet, Jr.

DOCKET NUMBER:

PLACE OF PROCEEDING: Indiana, Penn.

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



MARK MAHONEY
Official Reporter
Ann Riley & Associates, Ltd.

HDR TREATMENT DATA SHEET -- GREATER PITTSBURGH CANCER CENTER

R08 92 97
B10

Patient Name

10-7-92 Plan ID# CM 023

Applicator Type: _____
 If Ovoid, Diameter: _____ cm
 AP mag: _____
 Lat mag: _____
 Catheter 1 Length: 93.3 93.3 cm
 Catheter 2 Length: _____ cm
 Catheter 3 Length: _____ cm
 Catheter 4 Length: _____ cm
 Treatment Dose: 500 cGy
 Treatment Distance: 1.0 cm

Starting pts and distance from distal end of catheter (min 0.3 cm):

Catheter #1: 5.0 cm
 Catheter #2: _____ cm
 Catheter #3: _____ cm
 Catheter #4: _____ cm

$(93.3 - 5.0) + 0.3 = 88.6$ ✓
 $88.3 + 0.3 = 88.6$

End point distances:

Catheter #1: _____ cm
 Catheter #2: _____ cm
 Catheter #3: _____ cm
 Catheter #4: _____ cm

Information in this record was deleted in accordance with the Freedom of Information Act, exemption FOIA-92-410

Sources needed to cover treatment length: # of sources:

Catheter #1: 4.4 cm 4
 Catheter #2: _____ cm _____
 Catheter #3: _____ cm _____
 Catheter #4: _____ cm _____

Survey with 410 GM: Before: 20.1 mR/hr
 After: 20.1 mR/hr

EH18

Signature: Source in safe

HDR MANUAL CALCULATIONS
based on Radium Equivalent.

Calculations are performed using the linear source information from Johns & Cunningham Physics of Radiology, table 13-3, page 467 for 0.5 mm Pt filtration from Radium-226.

Constants used: Exposure rate constant for ^{226}Ra : $8.25 \text{ R cm}^2 \text{ hr}^{-1} \text{ mCi}^{-1}$

Exposure rate constant for ^{192}Ir : $4.66 \text{ R cm}^2 \text{ hr}^{-1} \text{ mCi}^{-1}$

All distances are from center of sources.

Patient Name: _____

Date: 12-7-92

^{192}Ir Source Activity (mCi): 3477

Physicist: m Jarosz

point used from computer plan: #6 526.6

Source #	Distance from source (cm)	1000 cGy/mg-hr	Dwell time (sec)	$\times \frac{4.66 \times \text{Source act. (mCi)}}{8.25 \times 3600}$	Dose (cGy)
1	2.3	1000/687	89.6 80.4	0.5456	63.9
2	1.45	1000/279	87.5 49.4	↓	96.0
3	1.0	1000/136	86.4 36.1		144.8
4	1.35	1000/247	8 90.0		198.8
		1000/			
		1000/			
		1000/			
		1000/			
		1000/			
		1000/			

TOTAL: 504.1

$\frac{504.1}{526.6} = 1.045$ ✓

Linear Sources, R_L -- (mg hr to deliver 10 Gy) to a point h cm from the center of a linear source of active length L

Active Length L	Treatment Distance - h cm									
	0.5	0.75	1.0	1.5	2.0	2.5	3.0	4.0	5.0	
1.0 cm	(41)	81	(138)	295	517	801	1151	1998	3134	

Greater Pittsburgh Cancer Center

Calc Date: 15:52:10 December 7, 1992
Depth of cut (cm): 0.0
Angles from AP Plane:
X: 0.0 Y: 0.0 Z: 0.0
Matrix size (CM): 15.0
Plot Scale: 1.00
File Name: \\PATIENT\CM023A.esp

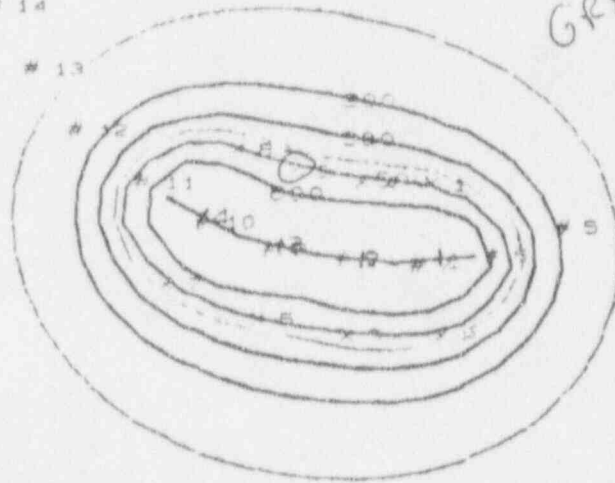
Patient: [REDACTED]
Doctor: TOKARS
Plan by: M JAROSZ
Site: LEFT BRONCHUS
Comment: AP CLINICAL

10

15

14

13



GREEN = 500cgy.

1

2

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4

5

supr
ant left

[Handwritten signature]

Greater Pittsburgh Cancer Center

File name: CM023A
Plan by: M JAROSZ
Physician: TOKARS
Time of printout: 15:52:24 December 7, 1992
Time of plan: 15:52:10 December 7, 1992

Patient: XXXXXXXXXX
Treatment Site: LEFT BRONCHUS

Sex: f

The source 01-01-9275-001-090192-08644-38 was used in these calculations
The original calibration was: 8.644 Curies
The date of original calibration was: Tuesday September 1, 1992
The date used for these calculations was: Monday December 7, 1992
The half life used was: 73.83 days
The decay factor is: 0.4023 ✓
The present strength is: 3.477 Curies
The source description is: Omnitron
The sourcetype is: 1
Calculations are for a dose fraction 500.0 cGy

Total Doses to calculation points (cGy):

1	502.3
2	472.6
3	486.1
4	532.3
5	466.7
⑥	526.6 ←
7	488.1
8	525.3

Mean dose: 500.0 cGy
Standard deviation: 25.6
per cent standard deviation: 5.1

Dwell times:

Position	Cath#	Distance	seconds		
number	X	Y	Z	Loading	Type
1	1	88.6	80.4		
2	1	87.5	49.4		
3	1	86.4	36.1		
4	1	85.3	90.0		
1	5.37	3.25	-0.51		Catheter point
2	5.02	2.36	-0.28		Catheter point
3	4.43	1.69	-0.19		Catheter point
4	3.69	1.08	-0.00		Catheter point
5	2.88	0.59	0.14		Catheter point
6	1.97	0.20	0.24		Catheter point
7	1.00	0.05	0.21		Catheter point
8	0.02	0.11	0.04		Catheter point
9	-0.96	0.22	-0.23		Catheter point
10	-1.87	0.56	-0.49		Catheter point
11	-2.67	1.06	-0.65		Catheter point
12	-3.55	1.74	-0.67		Catheter point
13	-4.17	2.54	-0.58		Catheter point
14	-4.69	3.38	-0.30		Catheter point
15	-5.13	4.25	-0.01		Catheter point
16	-5.39	5.18	0.34		Catheter point
1	1.78	0.17	0.23		
	0.70	0.07	0.16	279.64 Ci-secs	Omnitron
1	1.15	1.12	0.19		Calculation point
2	1.33	-0.87	0.19		Calculation point
2	0.70	0.07	0.16		
	-0.38	0.16	-0.07	171.90 Ci-secs	Omnitron
3	0.08	-0.88	0.05		Calculation point
4	0.24	1.11	0.05		Calculation point
3	-0.38	0.16	-0.07		
	-1.40	0.39	-0.36	125.66 Ci-secs	Omnitron
5	-1.11	-0.70	-0.21		Calculation point
6	-0.67	1.25	-0.21		Calculation point
4	-1.40	0.39	-0.36		
	-2.36	0.87	-0.59	312.88 Ci-secs	Omnitron
7	-2.33	-0.26	-0.47		Calculation point
8	-1.43	1.52	-0.47		Calculation point

Physician approval _____

Physics review *mj* _____

The data presented by this plan must NOT be used clinically without approval of a qualified person.

Greater Pittsburgh Cancer Center

Calc Date: 15:52:10 December 7, 1992
Depth of cut (cm): 0.0
Angles from AP Plane:
X: 0.0 Y: 0.0 Z: 0.0
Matrix size (CM): 15 0
Plot Scale: 1.40
File Name: .\PATIENT\CM023A.esp

Patient: [REDACTED]
Doctor: TOKARS
Plan by: M JAROSZ
Site: LEFT BRONCHUS
Comment: AP-FILM

15

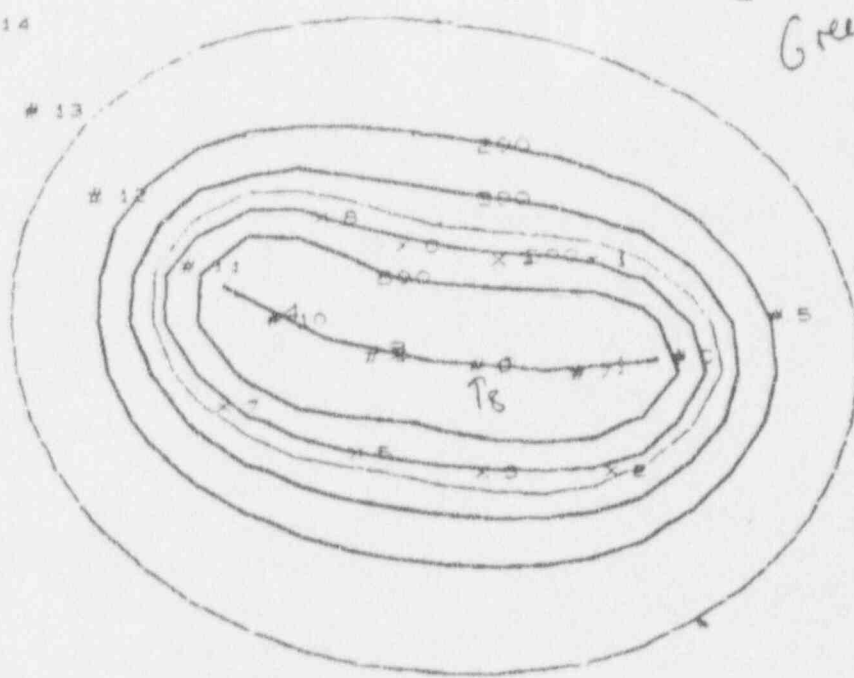
15

14

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12

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Green = 5.00 Gy.

1

2

3

4

5

cm

Supr
Ant left



NAME: [REDACTED] SEX: F
SSN: [REDACTED] AGE: [REDACTED]

RECORD NUMBER:

DOCTOR: TOKARS

DOSIMETRIST: H JAROSZ

PLAN SOURCE SERIAL NUMBER: 01-01-9275-001-090192-08644-38

CREATION: 12/07/1992 LAST EXECUTED: 00/00/0000

PLAN DWELL TIMES BASED ON 3.477 CURIES SOURCE STRENGTH.

	POS 1	POS 2	POS 3	POS 4	POS 5	POS 6	POS 7	POS 8	POS 9	POS 10	POS 11	POS 12	POS 13	POS 14	POS 15	POS 16	POS 17	POS 18	POS 19	POS 20	
CHANNEL: 1																					
POINT (cm)	88.6	87.5	86.4	85.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DWELL (secs)	80.4	49.4	36.1	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

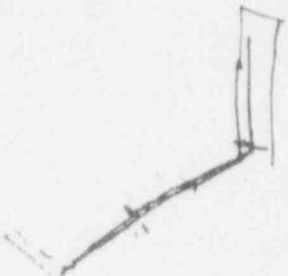
The Treatment Execution Password is 17166. Plan Approved by _____

Date: _____ Dosimetrist: _____

Date: _____

Dwell Time ✓ 90 sec ✓ on Computer

90.2 sec ✓



Survey = 410Gn Before - 0.1-1.4hr

After Survey

0.1 ml/hr

Catheter removed by Dr. T.

12-792

[Treatment Execution Record for Patient File CM023A]

NAME: [REDACTED]
SSN: [REDACTED]

AGE: SEX: F

RECORD NUMBER:
DOCTOR: TOKARS
DOSIMETRIST: M JAROSZ
PLAN SOURCE SERIAL NUMBER: 01-01-9275-001-090192-08644-38
CREATION: 12/07/1992 LAST EXECUTED: 00/00/0000
PLAN DWELL TIMES BASED ON 3.477 CURIES SOURCE STRENGTH.

DWELL TIMES SHOWN BELOW ARE COMPUTED BASED ON CURRENT AFTERLOADER SOURCE WIRE ACTIVITY
ON 12/07/92 OF 3.478 CURIES, DECAYED 97 DAYS FROM CALIBRATION DATE 09/01/92
USING A HALF LIFE OF 73.83 DAYS.
AFTERLOADER SOURCE WIRE SERIAL NUMBER: 01-01-9275-001-090192-08644-38
SCALE FACTOR APPLIED TO INITIAL PLAN DWELL TIMES: 1.00.
THIS IS ATTEMPTED FRACTION # 01. THERE HAVE BEEN 00 PREVIOUSLY COMPLETED FRACTIONS.
PLAN DOSE FRACTION: 500 CGY
TOTAL DWELL TIME REQUIRED FOR TREATMENT: 255.9 SECONDS.

cutting Dummy Wire Check on All Channels.
Dummy Wire check on Channel 1 completed.
Completed Dummy Wire Check on All Channels.

cutting Treatment for Channel 1.
Selected Channel 1.

CHANNEL: 1	POS 1	POS 2	POS 3	POS 4	POS 5	POS 6	POS 7	POS 8	POS 9	POS 10	POS 11	POS 12	POS 13	POS 14	POS 15	POS 16	POS 17	POS 18	POS 19	POS 20
CATHETER:																				
POINT (cm)	88.6	87.5	86.4	85.3																
DWELL (secs)	80.4	49.4	36.1	90.0																

Treatment halted due to Error Class A: Possible Emergency error, check source status
Error Code 84: Active wire failed length check

Total Dwell Time Executed by Treatment: 255.9
Completed Omnitron 2000 Treatment Sequence.

MJ