ADVISORY COUNCIL ON RADIATION PROTECTION

Bureau of Radiation Control

Hilton Garden Inn Tampa Airport Westshore
Tampa, Florida

05/15/2018



321.285.2324 www.AllGoodReporters.com

ADVISORY COUNCIL ON RADIATION PROTECTION 5/15/2018

1	
2	
3	ADVISORY
4	COUNCIL ON
5	RADIATION
6	PROTECTION
7	CERTIFIED
8	TRANSCRIPT
9	
10	
11	
12	Bureau of Radiation Control
13	Hilton Garden Inn
14	Tampa Airport Westshore
15	Tampa, Florida
16	
17	
18	
19	Tuesday, May 15, 2018
20	10 a.m 3:03 p.m
21	
22	Reported by
23	Rita G. Meyer, RDR, CRR, CRC Realtime Reporter and Notary Public
24	Realtime Reporter and Notary Public State of Florida at Large
25	

```
1
     ADVISORY COUNCIL MEMBERS PRESENT:
 2
     Randy Schenkman, M.D., Retired (Chairman)
 3
     Mark S. Seddon, M.P., DABR, DABMP (Vice-Chairman)
 4
     Kathleen Drotar, Ph.D., M.Ed., RT. (R)(N)(T)
 5
     Christine Crane-Amores, RRA, RTCR
 6
     Rebecca McFadden, RT(R)
 7
     Brian Kent Birky, Ph.D.
 8
     William (Bill) W. Atherton, DC, DACBR, CCSP
 9
     Chantel Corbett, AS, CNMT, RT(N), RSO
10
     Matthew Walser, PA-C, ATC
11
     Nicholas Plaxton, M.D.
12
     Adam Weaver, MS, CHP
13
     Efstratios Lagoutaris, D.P.M.
14
     FLORIDA DEPARTMENT OF HEALTH STAFF
15
     Cynthia Becker, Bureau of Radiation Control
16
     James Futch, Bureau of Radiation Control
17
     Brenda Andrews, Bureau of Radiation Control
18
     Douglass Cooke, Bureau of Radiation Control
19
     Lynne Andresen, BAS, RT(R)(MR), Bureau of Radiation Control
20
     Ginni Shaw, Bureau of Radiation Control
21
     Clark Eldredge, Bureau of Radiation Control
22
     Allen Moody, Bureau of Radiation Control
23
     Gail Curry, Medical Quality Assurance
24
     Anthony Spivey, D.B.A., Medical Quality Assurance
25
```

1	AGENDA
2	PAGE
3	MORNING SESSION
4	Welcome and Introductions4
5	Approval of 9/26/17 Minutes7
6	Bureau Update8
7	Medical Quality Assurance12
8 9 10	Presentations: Requirements, Discipline
11	DEXA Scan Case Scenario67
12 13	AFTERNOON SESSION Incident Investigation105
14 15	Rule Update: Chapter 64E-4133 Chapter 64E-3139
16	Member Renewals178
 17	Adjourn181
18	Certificate of Reporter183
19	
20	
21	
22	
23	
24	
25	

1 RANDY SCHENKMAN, CHAIRPERSON: Good morning, 2 everybody. 3 COUNCIL MEMBERS: Good morning. 4 RANDY SCHENKMAN, CHAIRPERSON: Welcome. This 5 looks like it's going to be a very interesting meeting. I'd like to start by everybody saying who 6 7 they are. Let me start over here. I'm Brian Birkv. I'm 8 BRIAN BIRKY: Okav. 9 executive director of the Florida Industrial Phosphate Research Institute. We're part of Florida 10 Polytechnic University and I'm here for 11 12 environmental matters. 13 REBECCA McFADDEN: I'm Becky McFadden. T'm PACS administrator at Munroe Regional Medical Center 14 15 in Ocala, Florida and I'm here as the certified radiologic technologist. 16 17 MATTHEW WALSER: Matt Walser. I work at the 18 University of Florida in Gainesville. I'm the clinical coordinator of all the PAs and nurse 19 practitioners in orthopedics for about 19 years. 20 NICHOLAS PLAXTON: I'm new to the council. Dr. 21 Nicholas Plaxton. I work over, just on the other 22 side of the bay at Bay Pines VA. I did my training 23 up at Emory, my nuclear medicine residency, and then 24 I did -- I also did time in the Air Force as a 25

flight doc. And I've been here about five years now 1 2 as a physician here at Bay Pines. 3 CHANTEL CORBETT: Chantel Corbett. Certified 4 nuclear medicine technologist at Fusion Physics, a medical physics consulting company. 5 6 CLARK ELDREDGE: Clark Eldredge, administrator for the radiation machine program, Bureau of 7 Radiation Control. 8 LYNNE ANDRESEN: Lynne Andresen, enforcement coordinator for the radiologic technology section. 10 11 GINNI SHAW: Ginni Shaw, enforcement for the 12 x-ray machine section handling medical events and violation corrections. 13 DOUGLASS COOKE: Douglass Cooke, business 14 15 consultant, Burea of Radiation Control. BRENDA ANDREWS: Brenda Andrews. I'm in the 16 17 management and operations section of the Bureau. And I also work with James on the coordination of 18 19 your council. 20 JAMES FUTCH: James Futch, health physicist 21 administrator for technology standards and 22 continuing education for the Bureau of Radiation 23 Control. 24 RANDY SCHENKMAN, CHAIRPERSON: Randy Schenkman. 25 I'm a retired radiologist. I worked at Baptist

Hospital in Miami and my specialty was women's 1 2 imaging and breast imaging. Mark Seddon. I'm the chief 3 MARK SEDDON: 4 physicist and radiation safety officer for the Florida Hospital system. Representing the Board 5 certified medical physicists representing the MMPM. 6 Hi, I'm Cindy Becker with the 7 CYNTHIA BECKER: Department of Health, Bureau of Radiation Control 8 9 Bureau Chief. GAIL CURRY: Hi, I'm Gail Curry, program 10 11 operations administrator for the boards of chiropractic medicine, clinical laboratory 12 personnel, nursing home administrators, optometry, 13 EMT paramedic and last but not least, radiologic 14 15 technologists. 16 (Laughter) 17 BRENDA ANDREWS: That's a mouthful. 18 ANTHONY SPIVEY: Good morning. I'm Dr. Anthony 19 Spivey. I'm the board executive director for all of those boards she just mentioned. I'm also your new 20 coordinator for MgA rad tech section and also former 21 22 Air Force. 23 I'm Kathy Drotar. I'm the KATHY DROTAR: 24 radiologic technologist therapy member. And I am 25 the university department chair for radiologic

```
technology at Keiser University and vice-president
1
2
    of the Florida Society of Radiologic Technologists.
 3
          CHRISTEN CRANE-AMORES: Good morning.
                                                 My name
4
     is Christen Crane-Amores. I'm the radiologist
 5
     assistant for Radiology Associates of Tallahassee.
          ADAM WEAVER: Adam Weaver. University of South
6
     Florida. I'm the radiation safety, laser safety
7
    officer there. And I'm the certified health
8
9
     physicist on the Board.
                             Bill Atherton.
10
          WILLIAM ATHERTON:
     chiropractic radiologist in Miami, Florida.
11
          STRATIS LAGOUTARIS: Hi. I'm Stratis
12
13
     Lagoutaris. I'm a private practice and Navy reserve
     podiatrist. I live and work in Jacksonville,
14
     Florida.
15
16
          RANDY SCHENKMAN, CHAIRPERSON: Well, welcome
17
     everybody, and our new people especially.
18
          The next thing on the agenda is that we need to
19
     approve the minutes from the last meeting, which was
20
     9-26-17. So do we have a motion to approve?
21
          KATHY DROTAR: I make a motion to approve the
22
    minutes.
23
          RANDY SCHENKMAN, CHAIRPERSON: Okay. All in
24
     favor, say yes.
25
          COUNCIL MEMBERS:
                            Yes.
```

1 RANDY SCHENKMAN, CHAIRPERSON: Anyone opposed? 2 (No response) 3 RANDY SCHENKMAN, CHAIRPERSON: Okay. So that 4 passes unanimously. And next, we have Cindy giving us the Bureau 5 6 update. 7 CYNTHIA BECKER: Okay. Good morning, 8 everybody. COUNCIL MEMBERS: Good morning. CYNTHIA BECKER: We all got soaked maybe last 10 11 night, some of us did, but we're here today. It's 12 not raining. All right. Good. 13 I think I say this every time we have a Bureau update, but we still have an interim division 14 15 director, which with the level of the State, you know, we are a bureau and we're under the Division 16 17 of Emergency Preparedness and Community Support and 18 the interim director is Doug Woodliffe and he will 19 be that way until the change of governor. So they want to keep everything like it is until that 20 transition time. So that's who we are from there on 21 22 down. 23 Our Bureau has quite a few vacancies. 24 only five, I think, at the moment. We hate to see 25 any. But our vacancies are being filled guickly

with Clark in the x-ray machine program, especially with the addition of Ginni. Yay. Glad to have her on board. He has one more vacancy to fill there. A consultant position. And we have a couple vacancies in Miami. Miami inspection vacancies. So if anybody knows anybody to send that way, that would be great.

We have some MQA changes, as they will discuss, I'm sure, later. Also have a very interesting talk presentation this afternoon with Allen Moody. He's our chemist administrator from our Orlando lab, environmental lab. I think you'll find that really interesting. We do have incidents, as you all know, and that one in particular he's going to talk about is extremely interesting.

I'm trying to get him or John to the Office of Agreement States/NRC meeting to also give that presentation.

And as we get more people on board with us and fill all the positions, I think you'll see we'll be working more towards developing and revising rules. Clark will talk about that later this afternoon. And trying to identify more ways that we can do internal quality assurance, standardization, look at trends and the new modalities that's out there. It

feels like, as you guys know in the field, it's always changing. Something is always new out there and we're just almost, like, hit in the face with it. You know, how do we handle this situation? How do we handle this new machine or this new radioactive material isotope? So it can be very challenging, but also very rewarding and interesting.

So I was thinking any other real changes we have in our Bureau. Not so much. I think you'll hear from a lot of our staff with our presentations and I think you'll find them quite interesting. And if you have any questions, we're always here. I think you know how to reach any of us at any time. And thank you for coming.

RANDY SCHENKMAN, CHAIRPERSON: All right. Okay.

JAMES FUTCH: So along the lines what Cindy was talking about, keeping up with new things, new technologies, new procedures, changes in the way old procedures are being used, we very much depend upon all of you to kind of be on the look out for that and if you see something that's coming down the pike or something that's beginning in your region of the state or your area of practice, please let us know.

Because it's probably going to eventually affect 1 2 more than just your region of your state and your 3 facility. And the guidance of the council is vital 4 for the Bureau to adapt and change; create new regulations; amend old regulations when possible. 5 So I just wanted to mention that so you're 6 always thinking that way in case you weren't 7 already. But, well, thank you. 8 9 RANDY SCHENKMAN, CHAIRPERSON: Anybody else 10 have any comments? 11 CLARK ELDREDGE: That theme is basically the 12 talk, running through one of my presentations, the 13 fact that a lot of the things I've got to talk about where technology or usage of new devices, current 14 15 devices and new ways and new devices; that type of 16 thing. So, yes, it is important and that's why I'm 17 here with my talk is to get you all to give us 18 quidance specifically on some of those types of 19 things. 20 RANDY SCHENKMAN, CHAIRPERSON: Okay. Anybody else? 21 22 JAMES FUTCH: Speaking of new technology, the 23 old technology in the middle of the room has just turned itself off. So while I'm doing this, back to 24 25 you.

RANDY SCHENKMAN, CHAIRPERSON: So now we're 1 2 going to go up -- we're going to do medical quality 3 assurance and this is Dr. Anthony Spivey. 4 ANTHONY SPIVEY: Okay. Thank you. Good morning again. I'm Anthony Spivey. 5 the new executive director for your group. We 6 manage seven boards currently in addition to this 7 8 one. 9 So what has occurred recently, this was under the Board of Pharmacy as an executive director, and 10 11 I've been with the department about three years. 12 And just to give you a little background on me 13 before I get into the presentation on the changes. I've prior Air Force. Spent 21 years in the 14 Air Force. Retired as a financial manager. And 15 16 coming out of the Air Force, I started working for 17 the Department of Business and Professional Regulation as an executive director. First some 18 19 other jobs and I was promoted to executive director, 20 doing basically the same thing for the Department of 21 Health managing the boards. And so my background, I have a Bachelor's 22 23 degree in management, a Master's in counseling and 24 human resource development and my Doctorate is in

business administration. So I've been with the

25

Department of Health about three years. And we've been working with our current boards to bring changes in the office.

we've got very good morale in the office right now. When I first started, it wasn't so good and the tide has changed. So I try to keep a pretty laid-back atmosphere in the office because people just don't work well under stress. And by doing that, we've got a lot of things accomplished. And so, my boss, Adrian, decided to move the area, the rad tech section over to our area because we were probably more able to give it a lot more attention. And I've been looking at some of your things in the background, just watching how procedures are being done and trying to get a full idea of what changes you may need and I'm not going to come in making any immediate changes.

what I wanted to do is just basically get ideas from the group, you know, as to what type of problems you're having, what you need done from the office as far as licensing, maybe consider, and look at different things we can help you do your jobs better.

For example, the -- when I left the deputy office yesterday, we were actually moving the staff,

current staff that's in your area for the rad tech section, over to our area. We're having cubicles built for the section and they were in the process of doing that when I walked out of the office yesterday. So they should hopefully be moved over by now when we get back in the morning.

We're also hiring a receptionist to handle the area. I'm trying get an individual that's in there that I can depend on that will be there every day. That will free up the processors from having to answer the phones so they can do more work and get the applications out a lot quicker. By doing that, that keeps them focused on what they're doing and having a dependable person in the office that can answer phones, that is stable and doesn't have a lot of issues to deal with on the outside. To come in, do the work and take care of the public when the calls come in regarding the application processes.

So we're going to be making some different -additional changes in the office to allow for the
staff to integrate into the staff that we have now.
We've already, in fact, some of the staff that we
have currently, they are actually augmenting some of
the duties now for this profession to help the two
individuals that are in there now. So one

individual is on medical leave, so I'm not sure when 1 2 he will, when or if he will be coming back, so in 3 the interim, what we'll probably do is end up hiring 4 a temporary person to take, take some of the slack off the individuals to make sure the work is not too 5 6 heavy on the people that's there now. 7 But as I said, what my -- my intention here today is just watch the meeting, see what goes on in 8 this meeting and if you have any ideas or questions 9 that you would like addressed regarding the 10 11 application processes in the office. That's what 12 I'm here for, because I'm not going to fix it alone. 13 It's better to fix it with the help of you all because you all know what you need and the things 14 15 that I can get done, we'll get done. If we can't 16 get certain things done, then we'll tell you why. 17 But that's -- if you have any questions of me, now 18 is the time. KATHY DROTAR: Actually, I do. 19 20 ANTHONY SPIVEY: Yes. 21 KATHY DROTAR: Congratulations on bringing Gail 22 Curry back to us because --23 (Applause) 24 KATHY DROTAR: Yes. Because since she's been 25 gone and you, I'm sure, seen the problems that have

been there. But I'm telling you, Gail was coming, I was going to come in to inform the Board that -- or the council that it's actually, in the days when we used to do paper applications as a process for getting new grads their licenses and getting the permanent licenses in place took, was a shorter time frame than what we've been seeing with the online. And that it's not really terribly user friendly, the system --

ANTHONY SPIVEY: Right.

KATHY DROTAR: -- that's there and I just had a grad yesterday who got her ARRT information back and wasn't able to go in and upload what she needed to do, so she could transform the permanent one. I think part of it has been everything keeps changing. So every time you have a new group of students come in, which is about every four months for us, that it changes, and so, there's, you know, the consistency, it's improved somewhat, but it's still a little on the burdensome side --

ANTHONY SPIVEY: Right.

KATHY DROTAR: -- but we'll be very happy to work with you to help straighten anything out because we know because of that 1801 date that you can't always see what's on our side either, but

you're working on that. So thank you for being open to suggestions. We're look forward to working with you.

ANTHONY SPIVEY: And I'm also an advocate of technology because you can do it a lot faster on the computer and one of the things I mentioned in meetings at the department is, you know, I see commercial businesses that do things effortlessly because of technology and a lot of times, it's mainly because of the systems that we can afford to pay for. So, you know, I'm always pushing in the office to, you know, spend the money to get it right the first time instead of keep patching it continuously.

And also, speaking of Gail, Gail, you know, she's a program administrator, so she runs the entire area there. And also, we are hiring Friday, we have a new supervisor coming in to the area, Carla Rabey (ph). She will be actually the direct supervisor of this area. Until she gets up on board, you know, you can direct all your questions and inquiries to Gail. As soon as Carla gets into the position and is up to speed, then she'll be a point of contact. Like I said, we're getting the office up and running and my goal is to put it back

where it should be in a proper running place.

RANDY SCHENKMAN, CHAIRPERSON: Great. Anybody else have any comments, questions?

JAMES FUTCH: I just wanted to say to those of you that haven't seen the big picture, the group that Dr. Spivey and Gail are part of is not the group that was most recently handling the rad techs as Dr. Spivey said for the past what, three years, Gail, three years, something like that. And in the short time that they've been back to the new group, one of the things that I've seen is consistent supervision that's there all the time. That was, I think, one of the big contributing factors to when the front line staff were having issues, there were also some shortages in the front line staff in the new group, the supervision in between was not always able to be there and be consistent from day to day.

I think that what we've seen so far very much,
I think that's one of the reasons that Dr. Spivey's
bureau chief, Adrian Rogers, saw and decided to make
the change. So that's very good.

And Kathy, how is -- and Becky, anybody else who's got students, how are we doing so far with the students? Is the school lists program letters being answered? Have you seen --

KATHY DROTAR: After I e-mailed Gail directly and said -- I e-mailed and said, you know, I have grads that have jobs and can't take the job because the license, temporary license hasn't been issued. And then Gail e-mailed back and those people got taken care of right away. But it's still a very slow process. But understanding that, you know, the personnel issues.

JAMES FUTCH: I kind of feel like we had some issues slip underground and then it's been kind of given to Dr. Spivey and Gail to resurrect and you've got some pieces. Go ahead.

GAIL CURRY: First of all, I'd like to say I'm glad that this group is back under me and Dr. Spivey, because we are very diligent about making sure that programs run the way they should. And I will let you know that right now, the process -- you have two processors that are working the whole State of Florida for EMTs, paramedics and rad techs. Two processors. Those two processors are also having to answer the phone. This was before we did some shifting. But the processors were also answering the phone a half a day.

When you're sitting on the phone, you can't get anything done. You can't get the processing of the

applications done because the phone rings constantly. Since we have taken over, the group that Dr. Spivey and I had originally, has stepped up. I have made phone arrangements where everybody goes down for an hour every day and does the phone. That relieves your two processors to process applications. That has alleviated some of the problems.

Right now, I'm working with James to get the process back in running order as far as the exam things because I don't really know what's going on. So James is guiding us through that, along with Lynne and Kelly Nesmith, who have been very beneficial to me. So I'd like to tell all of you thank you.

I can tell you that between Dr. Spivey and myself, we will get this program back where it needs to be. And I'd like to also reiterate what he said about letting us know what's going on on your side, because we don't know. We only see what we have in our office.

So give us a little time, but please stay in contact and let us know if there's something we can do better. If there's something that's just not how it should be. And then we can work on those issues.

And the last thing I want to say is that right 1 2 now, I am very involved because I don't have a 3 supervisor for your section yet, but once that 4 supervisor comes on, like Dr. Spivey said, that person will be your initial contact person because I 5 have all those other boards I have to take care of. 6 So change is coming and it's going to be, it's going 7 8 to be good. Thank you. 9 JAMES FUTCH: Along the lines -- Carla, I met She seems like an excellent candidate, 10 Carla. 11 excellent supervisor. She had -- the thing I liked, 12 she has experience in, already in the lovely 13 computer system that we all deal with inside the department; the online system that you deal with 14 15 from the applicant's perspective and she's -- and 16 she has many different groups she's worked for 17 inside of MgA. She seems like a really competent 18 supervisor for the staff. Now you just have to 19 have, put more staff to supervise. We'll get that 20 going. 21 That's it for me. I'm just standing up here 22 waiting to turn the lights off. 23 RANDY SCHENKMAN, CHAIRPERSON: Okay. Anyone 24 else have anything to say? 25 Okay. So now we're going to go on to Lynne.

JAMES FUTCH: I'll make this so you can actually see the screen. See if the buttons do the same thing it did last time. There you go. Nice and cozy.

LYNNE ANDRESEN: Good morning, everyone. I'm Lynne Andresen.

COUNCIL MEMBERS: Good morning.

LYNNE ANDRESEN: I work for James in the radiologic technology section. I'm the enforcement coordinator. And I thank you all for coming today, for your time, your expertise, your contributions to the council and to our profession.

I handle a lot of things for James besides just enforcement. You know, anything with MQA as far as applications; renewals. I interface or work with the Bureau of Enforcement, with CSU, ISU, PSU, with ARRT.

I'm going to talk a little bit about the profession, application requirements, discipline, medical events. I'm going to hand it over to Ginni Shaw, my enforcement counterpart with the radiation machine program, and then pick it back up and offer you some case examples and let you kind of know where we are with case load, as far as in PSU and resolutions and cases.

So the licensure statute is Part IV, 468, and it was actually created in 1974, and it's the reason the council exists. And you can read a little bit here about what that statute says.

And basically, it is the purpose to establish standards of education, training and experience and to require the examination and certification of users of radiation and radiation-emitting equipment.

Here's some approximate numbers for the different licensure. You guys can read that. And some of you guys actually hold licensure. I know I do myself; Ginni does. And then some of you actually represent some of these areas.

And you can see there's a difference in the total number of licenses and total technologists and that's because some technologists actually hold more than one license.

There are two pathways for licensure:

Examination and endorsement. So the applicants that come in through examination, they are required to complete an application, along with a fee. And this can be in paper form or an online format. And this will go through Miss Gail and Dr. Spivey's area.

They have to be at least 18 years of age at the time of the application and very importantly, be of good

moral character. Not have committed any offenses that would be grounds for discipline under our discipline standards. And they have to have successfully completed a two-year accredited radiologic technology program.

You guys remember back last September when we had the hurricane and that adversely affected Puerto Rico. And we had an influx of people coming into Florida and so that created a lot of extra review on the part of MQA for educational backgrounds to be essentially equivalent. And then with our team as well, Kelly and myself. We actually manually reviewed, reviewed all those applications that came in from Puerto Rico. And we're still reviewing to this day.

All right. There are two background questions on the application, which you can read, basically, and it's a yes-or-no answer. There's no maybes. There's no not answering the question. So once they answer yes, then it goes through a process of them completing a background history form and submitting the required information, as you can see, anything that would correspond to their offense.

Disciplinary guidelines under Rule 64E-3.011. So any time an applicant, employer, certificate

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

holder or other person has committed any of the acts set forth in that statute, the department can impose penalties as recommended in these guidelines.

Up on our website, under the Florida Department of Health, you can access the statutes and review them that correspond with our profession. The rule, the administrative code, and also, the disciplinary guidelines. So those are available to the public. Anyone can look at them at any time. And all violations are sufficient for refusal to certify an applicant.

If I'm going too fast, you guys let me know.

Many factors are considered when determining discipline and this reviews some of them. Danger to the public. The number of offenses this person's The length of time since the date of the committed. The length of time that they have violation. practiced. The actual damage caused by the violation. Previous disciplinary action by the department, by a national organization or registry, which would mean if they've been sanctioned by ARRT. And also, prior rehabilitation efforts. So maybe if they have gone under some sort of rehab or PRN before in the past.

We go back to disciplinary grounds and actions.

So the department may make or require any investigations, inspections, evaluations, tests. We can require submission of any documents, statements that we feel are necessary to make a determination whether a violation has been made.

That -- and a lot of times, you know, that could be maybe we require some sort of medical examination, additional drug screening, PRN evaluation, additional inspections, maybe through the Bureau, for an inspector to go back out, or investigations through the Bureau of Enforcement with MgA.

All right. These are some of the examples for grounds of discipline: Obtaining or renewing a certificate through fraud. That could be at our level, the State level, or at the national level, through ARRT. A certificate that has been revoked, suspended or acted on by a specialty board or certification authority of another state. That would be like maybe their license had been acted on from another state.

Being convicted or found guilty of a crime that directly relates to the practice of radiologic technology or their ability to practice.

Being convicted or found guilty of a crime

against a person. Making or filing a false report or record that the certificate holder knows to be false. And the, seems to be the catch-all, engaging in unprofessional conduct.

And being unable to practice radiologic technology with reasonable skill and safety to patients, by reason of illness, or use of alcohol, drugs, narcotics, chemicals or other materials.

Basically, impairment.

Failing to report to the department any person that the certificate holder knows is in violation of any rules of the department.

And this seems to be another widely used one: Violating any provision of this part or any rule of the department.

Employing any individual who is not certified to practice radiologic technology could be an unlicensed activity.

Testing positive for any drug or -- on any confirmed pre-employment or employer-required drug screening.

Failing to report to the department within 30 days if they've had anything -- any action against their certificate or otherwise acted against by a national organization such as ARRT.

Having been found guilty of any offense under 435.04 or a similar statute. And failing to comply with recommendations of the department's impaired practitioner program, which would be PRN.

At this time, I am going to transition over to Miss Ginni Shaw with the radiation machine section. She's going to go over a few things for you guys. Regulatory authority, medical event reporting, medical event investigations and medical event enforcement and administrative fines as they relate to that section or the facility side of things.

Ginni?

GINNI SHAW: Thank you. All right. Medical events. Each state is independently responsible for regulating radiation equipment. The State of Florida Bureau of Radiation Control is responsible for that in Florida. This is authorized under Chapter 44 in the Florida Statutes and Chapter 64E in the Florida Administrative Code.

As one of the responsibilities of this, the Bureau also receives and evaluates reports of medical events.

Approximately 50 percent of states have regulations with mandatory reporting requirements of medical events and Florida is one of those.

Here are a couple of voluntary reporting programs. So you have Radiology Oncology Incident Learning System or ROILS. That's going to be for the facilities to report and the Conference of Radiation Control Program Directors, CRCPD, that's going to be more for the state and local agencies to report.

ROILS is sponsored by AAPM and ASTRO for accredited facilities. Their mission is to provide shared learning and prevent errors, that sort of thing, in a secure, non-punitive environment. They also receive tips and tools. They have webinars available for the facilities. You can track your internal incidents and near misses; those types of things. And so receives tips and tools, best practices and general patient safety initiatives for them.

And here are their requirements or what kind of constitutes an event or condition for them. So omitted procedure, wrong site, wrong patient, wrong procedure, wrong modality and/or laterality. I can't say that word. Total or partial geometric miss. Wrong dose to all or part of tumor or normal tissue and mechanical failure.

So CRCPD is going to be for, like I said, the

requirements in place. They do have a committee on radiation medical events, the Healing Arts Council H-38. Same sort of goals, shared lessons learned, prevent errors, look for trends, improve patient care and safety; that sort of thing.

These are what constitute a medical event for CRCPD. And this is kind of going to look a lot --very similar to what ours is in Florida

Administrative Codes. So wrong patient, treatment modality or treatment site. Weekly dose differs by greater than 30 percent from the prescribed dose. Total administered dose differs by greater than 20 percent from total prescribed dose. Fraction dose differs by greater than 50 percent for any single fraction of a multi-fraction treatment.

Equipment failure, personal error, accident, mishap or other unusual occurrence that causes significant physical harm to a patient.

So then we'll go to medical events in Florida Administrative Code. I'm going to go over these three here because that's what we handle in our section: The therapeutic x-ray machine, particle accelerator and electronic brachytherapy.

So definitions for therapeutic x-ray machine

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

and particle accelerator you're going to find in 64E-5.101(85) and then the definition for electronic brachytherapy is going to be 64E-5.1601(8).

So radiation from a therapeutic x-ray machine or particle accelerator that results in any of the following is what's going to constitute a medical Unintended permanent functional damage to an event: individual's organs or a physiological system as determined by a physician. Wrong individual, which happens, surprisingly. Mode of treatment. Wrong treatment or wrong treatment site. Fractionated treatment of fewer than three fractions where the total administered dose differs greater than 10 percent of the total prescribed dose. Weekly administered dose is greater than 30 percent of weekly prescribed dose and total administered dose differs by greater than 20 percent of total prescribed dose.

This is for electronic brachytherapy. Except for one called by patient intervention. So anything that the case -- the patient kind of does to mess up their, their treatment wouldn't, wouldn't count for this.

Total dose delivered differs by greater than 20 percent of total prescribed dose. Single fraction

of a fractionated dose off by 50 percent or more.

Of course, wrong individual and wrong treatment

site.

So we had five medical events reported to the Bureau in 2017. There were three wrong sites, one wrong patient and one wrong dose.

We do have reporting requirements, like I said before. So this is going to be found in 64E-5.345, reports of medical events.

So the notification requirements. They have to call the Department by telephone no later than the next business day. They have to notify the individual or the responsible relative or guardian of the individual within 24 hours. That is unless the referring physician has already done so or the referring physician believes informing the patient would be harmful. In this case, they would have to give us medical justification as to why they didn't tell the patient.

They also have to report -- give us a written report within 15 days. So that report is going to include the referring physician's name, the prescribing physician's name, a brief description of the event, why the event occurred, their corrective actions, what they have done to prevent reoccurrence

and whether or not they have told the patient or not. And if not, like I said, give us a medical justification.

It shouldn't include any information that's going to identify the patient. So no names, no date of birth, nothing at all that can show us, you know, lead to us knowing any information about the individual, themselves.

So after the report, what comes next? So after they submit that report to us, we set up a site visit by the state investigators. And there's also a possible notice of violation, possible fine for the facility and possible fines to the individual.

The site visit. So it's state investigators. It says two to four. There's going to be, in our case it will be me and Miss Lindsey. You have someone from enforcement from the x-ray machines. You have someone in enforcement from technology and then you could also have someone training or you could have, like, an inspector come with you. Someone like that. So typically two, but it can be up to four.

There's going to be an entrance interview and overview of investigation process. This is typically going to be with management. We'll go

over the results of the facility's investigation, their internal investigation and corrective actions that they've taken.

We will do interviews with physicists, chief therapists and dosimetrists or therapists involved. And these are just individual interviews. We can do interview with an oncologist. If it's necessary, we can do an interview with the oncologist. They will show us documentation of existing or recommended procedures and training. Sometimes they will change their policies and procedures, so they will show us all those records. There will be an exit interview with management and then an overview of the administrative fine process.

Decision making. So after the site visit, we'll come back to Tallahassee and we kind of put a report together. We kind of try this 15-day thing. We try to do it -- we're going to try anyways. So they have to let us know within 15 days. We're going to try to have a site visit within 15 days and then we're going to try to have the draft report completely done within 15 days. So that's our goal for sure.

The report includes a synopsis of the event, the individual interview statements from the

therapists; the facility's corrective actions. And then it's going to include their written report and then any records obtained during the investigations we'll include as exhibits. Any of the medical records, which are, of course, redacted and the treatment plans and the prescription and all of that stuff will be included as well. And then the report will be used by the agency to identify violations and their severity.

Authorization for enforcement. This will be in Florida Statute Section 404.162. We can modify, deny, suspend or revoke a license or registration. Administrative fines are not to exceed \$1000 per violation per day.

And, of course, we consider a lot of factors. So the severity of the violation, the actions taken to correct the violation, any previous violations. Just the fact that they reported, we take that into consideration as well as many other things.

So you'll find in the general statement of policy and procedure for radiation machine enforcement actions. It's kind of -- that document has violations for all types of things. So even just the machine violations that we find when we go out and do inspections; that sort of thing, but

there are some medical event violations up in the higher severity levels.

Primarily, it's just going to be administrative fines, but they do have potential for criminal penalties just based on the severity of the violation. There's severity Levels I through V. I being the worst.

So fines are generally imposed for initial
Severity Levels I and II violations. Fines for
Severity III through V are unlikely, but they are
possible for repeat offenders. If we have someone
making the same violation over and over, having the
same reason for a medical event happening and
they're obviously not taking corrective action, then
we would, even if it's a III through V, then fines
are possible.

Individual penalties. So the Bureau can also impose discipline against individuals and that's where Miss Lynne comes back in and sort of talks about the enforcement on the radiologic technology side of things. Thank you.

LYNNE ANDRESEN: Okay. So once the radiation machine section, they've completed their side of the report, then the -- actually, the report is forwarded and the information to our section, the

radiologic technology section to review. 1 Basically, 2 James and myself. And if the event involves any 3 potential infractions of any health care 4 practitioner, not just radiologic technologists, then a complaint will be submitted to the Division 5 of Medical Quality Assurance or MQA and we'll 6 include all the relevant information that we have. 7 Once it's received in MQA, it will be actually 8 9 forwarded to the Consumer Services Unit or CSU and a case number will be assigned. That information will 10 11 then be put into LEADS. That's their online 12 database. It may be forwarded to ISU, the 13 Investigative Services Unit, but it will, ultimately, the case will end up in the PSU or 14 Prosecution Services Unit of the Division of MOA. 15 I want to tell you a little bit about the 16 17 differences between CSU, ISU and PSU. So CSU, that's where the case will start out. 18 19 It's responsible for the initial intake of the complaint or any complaints, actually. And they 20 21 will actually conduct an analysis and determine if the complaint is legally sufficient. 22 23 At that point, the complaint would then go to 24 ISU, more than likely, and they are responsible for 25 the actual investigation process. They'll conduct

interviews, they will collect documents and evidence, they will prepare reports; serve subpoenas and any official orders for the department. And then at some point, they will transition the complaint to PSU.

The PSU are the attorneys and they are responsible for the legal aspects of the complaint and they also regulate all the health care boards and councils.

Once the PSU attorneys review the complaint information, they will recommend a course of action based on probable cause, and these actions can include an emergency order, expert review, a closing order, or an administrative complaint.

Sometimes when they receive these cases, since this is not their area of expertise, they will request an expert review. And I would just like to share that we've got Kathy Drotar participates with this process and does offer expert review from time to time with PSU and we appreciate her service.

This timeframe is very individualized and can be very lengthy. And that the timeframe includes from the submission of the complaint to PSU, to the end or the closing or final order.

If the technologist involved with the complaint

is registered on a national level with ARRT, ARRT is notified. They do have their own ethic guidelines and procedures and they will process any investigation independently from ours.

And then unless an emergency order has been issued, the technologist may continue to work in their field. I don't know if any of you use the online look up for a technologist, but when you go to look up to see if they are expired or active, there's also another tab for any disciplinary action. And the technologist may be under investigation or they may have an active complaint, but like I said, unless there has been an emergency order issued, they can still work.

All right. So we have some cases pending with MQA that I track on a routine basis. They are in the LEADS database. And right now, there are approximately 91 open cases with MQA. There are about 10 percent in the consumer services unit, which are basically the ground level of the complaint process; about 30 percent with ISU that are being investigated, and the majority of them are actually with the attorneys in PSU.

Now, this caseload includes radiologic technologists, unlicensed individuals and

facilities. A lot of times, our inspectors with BRC, when they go out to conduct their inspection of a facility, they may run across individuals who are actually out there taking x-rays and are unlicensed. So a complaint will be initiated and sent to MQA and they will investigate the individuals and a lot of times, of course, they would be fined and additional action will be taken.

These are some examples of cases that we have open with MQA. There can be medical events.

Unprofessional conduct. Unlicensed activity. Those with a history of current or previous ARRT sanction. And here's a new one, default on student loans. So they are taking that seriously. Probably, I would say there are probably 15 or 18 cases in that total caseload that are technologists that have been deficient on their student loans.

Impairment, including history or current use of drugs, DUI, positive drug screen, et cetera. Sexual misconduct and fraud.

Okay. So these are the cases in terms of the fiscal year. So as -- I think you remember me saying that these cases can be rather lengthy. The process. So we have 3 percent of that total number are going back from fiscal year 2014-15; 7 percent

back from fiscal year 2015-16; 30 percent from 2016-17 and 60 percent are within our current fiscal year.

So I'd like to give you a couple case examples of some of the cases that we're currently tracking and that are open with MQA.

This one is an example of engaging in unprofessional conduct. And this was a medical event. So we received the complaint and this was -- this dates back to 2013, where a 59-year-old patient received one fraction of radiation treatment delivered to the wrong site. And this medical event was actually not reported for more than four months. And this is still an open case back from 2013.

Here's another -- this is an example of the statute loan case. And it -- the complaint actually comes from the Florida Department of Education. And it's my understanding that the individual is sent correspondence and they are actually able to mediate and come up with a payment plan with the Department of Education. So as long as they comply with that, then they take them off, you know, the case list.

Okay. So this is a violation -- an impairment violation. And this is a true story. So we received the complaint and the subject provided

response on the website, when trying to renew his license, making harassing statements and wild accusations, including that the Department wanted him to die. A preliminary inquiry was made to determine the subject's welfare. Subject stated to the sheriff's deputies that he takes medication for depression and that he wanted to blow his head off with a gun. The subject was taken into custody under the Baker Act and transported to the local medical center.

I believe his license is expired. I think so.

But we do receive some, some that are a little out
there like that.

And then this is an example of an individual whose ARRT license was received -- a sanction, a suspension. So we actually received information from ARRT that they suspended this individual's license due to criminal charges in another state relating to sexual misconduct. And I don't know if you guys remember, we had a reporting requirement that if they do have history of sanction with ARRT, that they are to report that within 30 days. Because even if they don't, ARRT will report it to us. So it's best be honest, basically.

All right. Do you guys have any guestions for

```
either Ginni or myself? Facility related,
1
2
     technology related?
 3
          REBECCA McFADDEN:
                             I have a question.
4
          LYNNE ANDRESEN:
                           Sure.
          REBECCA McFADDEN: The facilities -- obviously,
 5
    we -- if the employee doesn't pass their drug test
6
    or drug screenings, you know, we, obviously, will
7
    terminate them if they don't declare it prior to and
8
     go through some rehabilitation.
          what is the requirement of that facility and
10
11
     how do they go about reporting that to the
    Department of Health? Because, obviously, it's the
12
13
     individual's responsibility to report. But what is
     it -- what is the facility's responsibility as far
14
15
     as being, you know, a clinical facility and, and
     employing someone who doesn't pass that?
16
17
                           James, would you like to add
          LYNNE ANDRESEN:
18
     anything to that? She's asking about the facility's
19
     side versus the technology side.
20
                             Requirements. Individual.
          REBECCA McFADDEN:
21
          JAMES FUTCH:
                        For --
22
          REBECCA McFADDEN: For drug screening. Like --
23
          LYNNE ANDRESEN: Like impairment.
24
          REBECCA McFADDEN: -- for impairment, yes.
25
          JAMES FUTCH: There is a requirement for when
```

you take action against somebody. You guys -- what 1 2 usually comes to us on the impairment stuff, it 3 seems someone, a person is self-reporting. The fact 4 the person self-reports, they self-report to the impaired practitioner provider, PRN, and under law, 5 they don't tell us about anything. They try and 6 help the person with the impairment and they won't 7 report them to us until the person stops complying 8 with the requirements of the program for drug testing, all the rest of it. 10 11 But when you guys take action against someone, 12 it's often their -- you see some sort of probable cause to test them at work. You go through the 13 process of testing and then it's your department 14 15 that does this. 16 **REBECCA MCFADDEN:** HR. 17 JAMES FUTCH: Human resources. Your group 18 reports it to us just like they do Code 15 reports 19 and some other sort of things that happened to a patient. So that's how it comes to us. And we very 20

And in terms of you all's liability, if you don't, I'm not the lawyer, but I think if you're not going to take --

much appreciate that. That happens.

21

22

23

24

25

REBECCA McFADDEN: Well, a situation had come

up and this was the reason that we had a staff that we had someone who we did have to let go for that reason. And it wasn't -- and within weeks, that they started employment at another facility locally. So when that happened, you know, I, you know, it kind of troubled me, so obviously, I reached out to that management.

But I just, you know, I just wondered what, you know, how that could happen. I mean, obviously, she had gone through the, you know, the protection PRC course.

JAMES FUTCH: PRN.

REBECCA McFADDEN: PRN.

JAMES FUTCH: But you know, you saw the timeline on these cases. We took a big picture approach to this whole subject. We wanted to give you -- we talked so much in the past about medical events. We kind of focused in on that. We wanted you to step back and kind of have a big picture for how all of this ties together.

So Lynne started off in the beginning talking about people coming into the profession. Because one part of coming into the profession you saw is good moral character. Well, Randy leaned over and said, how do you tell somebody is good moral

character? You just ask them, of course. Everyone is honest.

REBECCA McFADDEN: Facebook page. What do you mean?

JAMES FUTCH: Being of good moral character concept is something from the 1950s. It's quaint, it's nice, but case law has pretty much rendered it almost moot.

So the other part of the incoming statute which also ties into discipline is, we have a statute that says we may not serve on somebody who's committed an act that would have been a disciplinary violation, if it had been committed when they were certified by us. Of course, they're not certified with us yet. So that's why it ties into all the rest of these discipline statutes. On the front end, a lot of times, occasionally we have someone who does that.

But the big picture on all this is there's lot of different ways for complaints to come to the department. Some through our inspectors, some through medical events, some through lots of other mechanisms by which you decide you report. They had to fire somebody; take some sort of action against them.

The 60 percent -- was it 60 percent -- over the

past fiscal year, currently 91, and there's a couple that are two or three or four years old. That's sad. But that's actually quite good if you look at some of the other professions. There are 30,000 technologists and there's only 90 cases, of which a fair percentage them are student loan that come to us in this process.

But the point I was trying to make was, you report someone. It could be literally years before we're able to take any action against them. Which is why we appreciate when the national registries, ARRT or NMTCB reports folks to us. There's a national practitioner databank that states report to. But given our own experiences, it could literally be several years before we're able to actually take an action against someone. And if it's impairment related, then you have the whole PRN kind of sideways requirements. Hands are tied while the person tries to get their act together with PRN's help, and that works out sometimes.

But that time frame also can add to the delay. So you may take an action against them, and we're going to get involved. At the point where they go to PRN, we're going to stop because we have to. It's a requirement. And then they're going to do

PRN possibly a couple years and then come back to 1 2 If they stop complying, unfortunately, it's got 3 to go back through the process. It could be a 4 really long time. So the answer to your question --They can technically just 5 REBECCA McFADDEN: 6 keep their license. JAMES FUTCH: Nobody else is going to know 7 except for you. 8 9 Right. Not just in this REBECCA McFADDEN: situation, but even if they have committed a crime, 10 11 it's the same situation where we can have people out there licensed and --12 13 JAMES FUTCH: Yeah. You saw one example that said, ARRT that reported someone who had allegations 14 15 of criminal activity. 16 So what happens on the crime side is, 17 typically, 95 percent of the time, we wait. And 18 they open the case. They have all the information, 19 make some preliminary inquiries and they put it on hold and wait for the legal system to do its thing 20 21 and wait for if the person is found not guilty 22 and/or they're going to drop the charges. An awful 23 lot of time, it's something involving a crime with drugs, and the rest of it, especially if it's the 24

first offense, they're going to do a diversionary

25

process and they will exit the legal system after a 1 year of complying with whatever the terms of that 2 3 were, you know, monitoring and community service and 4 the rest of it. And that will end up in charges being nol-prossed and not prosecuted. 5 6 So the criminal side of it, factor another year or two possibly, until something actually happens 7 and you've got some judgment that says, yes, you 8 9 are --10 REBECCA McFADDEN: WOW. 11 JAMES FUTCH: -- either found guilty or the 12 statute doesn't care. You can be adjudication of 13 quilt withheld. 14 REBECCA McFADDEN: But not reporting that 15 adjudication withheld or not reporting that you are 16 under possible crime, when you go to renew --17 JAMES FUTCH: We ask them in the renewals. 18 REBECCA McFADDEN: Right. So how does that 19 actually -- what if they didn't put it in there? 20 mean, does the State have access to that in their 21 databases that this person has been charged but not held --22 23 JAMES FUTCH: I guess technically, we do. 24 We're not looking for that. 25 REBECCA McFADDEN: I'm just wondering about the

renewal process and, you know, how -- if you're answering the questions, if someone doesn't answer them truthfully.

JAMES FUTCH: Sometimes -- we had a gentleman once who, this was up in Jacksonville -- and some of these things are such a severe nature, directly can affect the patients. There's so much evidence.

What happened, so we had a gentleman in Jacksonville who was an interventional tech. And this one came to us by the newspaper. He was switching out morphine for saline. Putting saline and stealing the morphine from the auto injectors. He would go in and set the room up and he would just swap out the doses. So he was taking the morphine for himself. And I think he was selling it, too, maybe. And can you imagine how much fun that procedure was and that surgery with saline instead of morphine?

So he was -- that was a big splash across the news. That one we had -- the department has the ability to do an emergency suspension. You heard Lynne talk about that. And that's basically -- this is my two, this is my two cents, not a lawyer way of explaining this -- but this has such high visibility and there's such direct access to patients to affect

lots of peoples' immediate health care outcomes. 1 2 And there's so much evidence we saw on the video, in 3 the room, doing it. He admitted to it. There's not 4 going to be a question. Even if somehow he manages not to be convicted, we're still going to order a 5 suspension order. Those are really hard to do. 6 It's really hard to get all the attorneys to 7 actually -- I shouldn't say that. The attorneys 8 often want to, but to make it through the, all the 9 hoops they have to jump through, that is a high bar 10 11 for folks to, to leap through. So --12 REBECCA McFADDEN: Well, thank you. I mean, 13 it's surprising to me that it is that difficult, you know, when people are out there committing crimes, 14 15 licensed professionals, you could potentially put a patient in harm. So that's just my personal 16 17 opinion, I guess, with it. JAMES FUTCH: So, I'm sorry, your talk -- any 18 19 questions? 20 LYNNE ANDRESEN: I had something I wanted to 21 say. Somebody has a question? 22 I just want to say we work very hard to create 23 a positive pro-active relationship with MQA. 24 know, the licensure renewal area, and we look 25 forward to working with you guys. And we work very

hard to create a really good relationship with the 1 2 Bureau of Enforcement, especially the PSU attorneys 3 so that we can work through some of these cases. 4 And we met with them last week and reviewed, what 5 was it about, maybe 17, 18 cases. 6 JAMES FUTCH: In total 18. They added a few of them. 7 LYNNE ANDRESEN: And so that -- I mean, you 8 9 look at the total number of about 91 and 18, that's, you know, a significant number. And so they are 10 11 working -- I mean, some of them are going to be actually dismissed. Some of them are administrative 12 13 complaints. So they are working, you know, I think at this point in time, hard to try to work through 14 them, that total number. Don't you agree, Jim? 15 I think the total number is 16 REBECCA McFADDEN: 17 very low, to be honest. I mean, I feel like there 18 are a lot of things out there that haven't been 19 reported, I guess is where I'm going to -- or that 20 we don't know about yet. 21 (Mobile phone rings) REBECCA McFADDEN: Whoo, that's --22 23 (Laughter) 24 JAMES FUTCH: By way of introduction, this is 25 Allen Moody. Everybody is reaching for their cell

phones now.

So there were two more points. One of which is, I apologize for the AC unit to be on that side of the room because it's really kind of hard to hear back there. It's really quiet over here. You can hear everything, but over there it's a little harder, so we'll try and speak up. Me especially, a little bit more.

I wanted to ask -- a couple things. This is such a highly technically inclined profession, professions. We have the nuclear medicine side; radiation therapy side. There's 2,000 nuclear med techs and roughly 2,000 radiation therapy techs and some odd whatever number you said, 19,000, 20,000 radiographers. And then you get down into the interventional ones and all the rest of it.

We really could use more experts willing to help either the Bureau of Radiation Control on its own side dealing with machines and dealing with rad materials licenses, helping with the -- persons that want to sit on the council, but also on the disciplinary side and on the side, for the technologists, but also on the side dealing with, deciding to take action against a facility.

We're always looking for some more folks who

are willing to be expert witnesses. There's actually a committee for -- maybe Kathy can tell us about it.

KATHY DROTAR: Abbason.

JAMES FUTCH: Abbason. So there's a company out there that is contracted to the State of Florida Department of Health to supply expert witnesses. So there's this extra little bit of, I don't know what you call it. Protection, because it's a company and you're working for the company. So something about your liability is different. So that makes everybody feel better.

Especially if you have any colleagues, yourselves, other folks, retired technologists, in whatever particular field you're in. It's hard to get the cases prosecuted. The lawyers are great people. We're often a training ground for folks fresh out of law school that go to work either at the State Attorney's Office, they go to work for the Department of Health. It depends on if you want to do criminal law later on, if you want to do some kind of administrative law later on. But they really don't have a lot of direct experience. Some of the senior people have been there for a while do.

So it helps to have people who are willing to

be experts in the State of Florida. I'll give you an example. I actually testified in a federal, a federal court several years ago. They wanted -- they had a facility owner, materials licensee, also a radiologist, I think staff who was accusing him of doing things in some improper way.

And somehow I gotten snared in this because, you know, my name is on the website some place. And I had to actually go -- they subpoenaed me and also some of our inspectors. I think Neil got, one of the other guys got pulled into this. And had to go to Ocala; had to testify. And the only thing they wanted to know was whether PET/CT was nuclear medicine. That was it. That was the whole thing.

You go through all of that, you know, here's the folks on this side, the folks on that side, and they were, like, arguing over points of this, that and the other thing. We're admitting this, no, Your Honor, we can't admit that. And finally, the judge just had kind of enough of it and he just leaned over to me and said, Mr. Futch, if you can just tell me this. Is this PET, is this, is this nuclear medicine? And I'm like, yeah. There's like 6,000 places that you could have, you know, figured this out.

But the expert review stuff, it seems like that 1 2 we could really use some help and assistance in 3 those areas. You do have to be willing to go and 4 testify and back it up, whatever you say in writing, if somebody wants to take it to a hearing. 5 is, you know, the same thing you said to begin with. 6 7 Okay. Is that it? Mm-hmm 8 LYNNE ANDRESEN: 9 JAMES FUTCH: Who's next? MARK SEDDON: I have a question, actually. 10 Did 11 we ever have an update on the wrong site medical 12 event definition? I know the last time you presented some options. 13 JAMES FUTCH: I think --14 15 CLARK ELDREDGE: Actually, I realized a few 16 minutes ago I forgot to include that in my 17 presentation. 18 MARK SEDDON: Okav. 19 CLARK ELDREDGE: Yeah, because we were 20 actually, I had something written out about a month 21 ago and when I put -- I left it out. I was going, 22 why did I do that? 23 KATHY DROTAR: Quick question. Any possibility 24 that we might have a mechanism for pre-approval for 25 first-time applicants or, like, new students that

1 are coming in to the programs that might be able to, 2 if they've got something, like a DUI or something, 3 that they would be -- because ARRT, as you know, has 4 the pre-application process. But even when they go through that ethics review, if they are approved, 5 then the State also does a review once they apply 6 for the license. But they won't know until, like, 7 before, until, like, they're ready to graduate from 8 their program. And sometimes there are -- they go 9 10 through, what is it, the PRN program and then they 11 have requirements or maybe not granted a license. 12 CHANTEL CORBETT: This is a silly question, 13 but why would they not know that they have those issues? 14 15 KATHY DROTAR: No, that they know they have 16 issues, but are they going to be able to be granted 17 a license. REBECCA MCFADDEN: We had a situation where we 18 19 had an applicant for the program --20 JAMES FUTCH: Before they spend two years. Before they spend the money 21 CLARK ELDREDGE: and the effort. 22 23 RANDY SCHENKMAN, CHAIRPERSON: And the time. 24 KATHY DROTAR: To advise students better on 25 whether it's --

CHANTEL CORBETT: I would think if you have a violation that potentially is going to prevent you from licensure, I would think that you would take the initiative to check on that.

KATHY DROTAR: But you don't know and there's no way you know until you make the application. You can't make the application until three months prior to graduation from the program.

JAMES FUTCH: Yeah. This has come up before, so I understand what you're asking. And the short answer is, nothing has changed with regard to our statutory authority. The best advice that I've been able to give in that regard is to have them apply for the basic operator. Because the basic operator can be granted without the two-year program. They self-attest to review the study guide, which is actually, we're going to talk about a little later, sitting over there on my desk, on my chair.

So the good thing is, whichever one of the different kinds of licensure you're applying for, all of the stuff that you're talking about is done for all of the different licenses. So if someone wants to go into the radiography program at Keiser or the nuclear medicine program at, what is the name of it? St. Andrew -- they can apply for the basic

machine operator. You have to be 18. 1 2 self-attest to having reviewed the study guide. 3 the rest of the legal stuff, all that will work our way through. It will take a little while to put all 4 5 the paperwork together. 6 If we grant that, we're not going to change our minds two years later when they graduate as a 7 radiographer, the rest of the program. That's the 8 closest that we can come up with that I know of 10 right now. 11 Thank you. Yeah, because if KATHY DROTAR: 12 there is an issue, it could take four months for the 13 license to be, to be issued because of that review 14 process. Thank you. MARK SEDDON: I have a couple questions. Going 15 16 back to your presentation. 17 So the discipline that we're talking about 18 here, the medical events is machine-based only. 19 Materials, it would be not Ginni, but somebody else coming from Tallahassee? If there was a materials 20 medical event? 21 GINNI SHAW: For materials? 22 23 LYNNE ANDRESEN: Yeah. 24 JAMES FUTCH: So Lynne would end up being 25 involved, but Clark and Ginni are on the actual

1	machine side.
2	MARK SEDDON: Right. But the process is still
3	the same. It's just different individuals.
4	JAMES FUTCH: Mm-hmm. Do you want to add
5	anything?
6	CYNTHIA BECKER: We have very few issues on the
7	materials side. It would be somebody from the
8	materials program, like Ginni from the x-ray
9	program, but it would still be Lynne, possibly, if
10	it was a technology.
11	MARK SEDDON: Right. It's still the same
12	for the process is still the same.
13	CYNTHIA BECKER: Right. Of course, the
14	inspector.
15	REBECCA McFADDEN: I'm sorry to interrupt you,
16	Mark. To get in touch with that person, how would
17	we
18	CYNTHIA BECKER: On the materials side?
19	REBECCA McFADDEN: Is it on the website?
20	CYNTHIA BECKER: On the website, yes. It's the
21	radioactive materials section and there's, Charlie
22	Hamilton is the administrator.
23	REBECCA McFADDEN: Okay. Sorry, Mark.
24	MARK SEDDON: No. It's still the same number,
25	emergency number, in terms of reporting.

CYNTHIA BECKER: Yes.

MARK SEDDON: But then on the front end, which is the discipline part, so I'm trying to get a feel for liability. There's a comment in here, statement about if you employ an individual who's not certified. So does that mean that the facility is liable or is it the individual, like the employer, person?

JAMES FUTCH: Yeah. This practice act, this takes the lawyers a few moments to wrap their brain around it, because this practice act actually, we don't have the thing up anymore, when it looks at the discipline section, it actually grants the Department the authority to take action against the individual or the firm who employs them if they aren't certified.

So the authority over the, over the facility is strictly in the context of the rad tech statute, the Rad Tech Practice Act, is employing somebody who's not certified.

So let's say Leo goes into Florida Hospital.

Took forever and a million years to do something
like this. But Leo Bakersmith, one of our long-time
inspectors, in checking the machine standards, in
looking at the licensure of the folks coming in, if

you find somebody who's working, who's not 1 2 certified, he's going to fill out a complaint form 3 and that then goes back through our hands. That's 4 going to result, same set of facts, is going to result in two complaints, basically. One against 5 the facility for employing someone who's not 6 certified to practice radiologic technology. And 7 one against the unlicensed person, themselves. And 8 there actually could possibly end up two different 10 lawyers. 11 okay. So, like, how about an MARK SEDDON: 12 example. I know we've actually had this discussion 13 in the past. We have another, like a nurse, who's operating 14 15 a CR in, like, a doctor's office. JAMES FUTCH: There's three complaints. 16 17 there's one against the facility. Let's say the 18 person is -- this honestly happened -- the 19 unlicensed person is running the CR for the 20 radiologist. 21 This isn't quite as clear-cut when it comes to the nurse because there's a cardiology exemption and 22 23 we talked about this before. But it is certainly possible that another licensed person or another 24 25 licensed individual, but there were four people

1 involved in doing whatever was happening. 2 could be multiple complaints and it's all going to 3 end up in the pipeline that Lynne talked about. 4 Going to the CSU part of MQA. 5 MARK SEDDON: Gotcha. Okav. 6 JAMES FUTCH: And what's going to happen is, if they're found to be legally sufficient, the ones 7 that pertain to the technologists, they're going to 8 9 come and be handled by, essentially, us. The one that pertains to the licensed medical 10 doctor, whoever he may be, that's going to end up 11 12 with the Board of Medicine eventually. If it's 13 legally sufficient, the Board of Medicine is going to act upon that like they would any other 14 15 disciplinary matter for a licensed individual. 16 If it's anybody who's not licensed at all, 17 there's a special attorney who just handles unlicensed activity. And so all the unlicensed 18 19 cases are going to end up with her. 20 Right. So any variation from the MARK SEDDON: 21 MQA for the technologists act, will actually branch out to all their -- all the other areas. 22 23 Medical physicists even JAMES FUTCH: Mm-hmm. 24 has happened. 25 MARK SEDDON: Medical physicists, exactly, same

```
thing. For medical events, if there's a medical
 1
 2
     event that involves a physician having a -- you ask
 3
     for a investigation, you report that to the medical
 4
     board?
          JAMES FUTCH: Well, we would report it to the
 5
 6
     same place.
          MARK SEDDON: The same place and they would
 7
 8
     report to --
 9
                       Right. So, obviously, we have
          JAMES FUTCH:
     actually submitted a couple of those in the past.
10
                                                         Ι
11
     think at least one, maybe two medical physicists a
12
     couple times. A physician, I can't even remember
13
     why anymore. But something that was pretty
     egregious that happened.
14
15
          So we do it this way. We fulfill, we being the
     Department of Radiation Control, we fulfill our
16
17
     responsibility because it originated in some of the
     areas where our inspectors, came to our knowledge
18
     somehow. So we fulfill our responsibility when that
19
20
     complaint is submitted to MQA and then it, it's --
21
     we know it's never going to come back to us and it
22
     goes over to whatever part of the department that
23
     person is certified or licensed by.
          Say it's a podiatrist, for example.
24
25
          EFSTRATIOS LAGOUTARIS: Isn't it always?
```

1 (Laughter) 2 LYNNE ANDRESEN: James, I just want to add 3 also, even anonymous complaints start out in CSU. 4 So it's telephone, e-mails, zzz mail, they start out, that's the baseline of the complaints. 5 6 MARK SEDDON: And these can take, it looks like 7 some of these take a very long time to come to any fruition. 8 JAMES FUTCH: Think of it as the criminal justice system only inside of administrative law. 10 11 All the usual issues. 12 MARK SEDDON: So for the one example you guys 13 have for the -- there was a medical event. The normal medical event, you said you're trying to get 14 15 them completed within 15 days. 16 JAMES FUTCH: That's our part of it. 17 MARK SEDDON: Your part. 18 JAMES FUTCH: Yes. That's just getting the 19 information. So what was the breakdown? Three 20 percent are in CSU, 15 percent are in ISU. The vast majority are rare. Are with the lawyers. 21 22 LYNNE ANDRESEN: PSU. 60 percent. 60 percent. 23 Those 15 days are just kind of on GINNI SHAW: 24 our side. We want to try to have it rolling on our

side to hand over to them.

25

1	MARK SEDDON: Right.
2	GINNI SHAW: And then you guys get to us, your
3	report within 15 days. Then we see you guys within
4	15 days. And then we try to generate the final
5	report within 15 days. So 45 days altogether we're
6	trying to get the report done and handled on our
7	side and handed over to them is our goal is what
8	we're going to try to do.
9	MARK SEDDON: Okay.
10	CLARK ELDREDGE: Well, actually, I would like
11	to clarify. That was 15 days to draft.
12	MARK SEDDON: Right.
13	CLARK ELDREDGE: But then it has to go through
14	James' hands and he's going to mark it up.
15	(Laughter)
16	JAMES FUTCH: Okay.
17	GINNI SHAW: Right. The draft report. Going
18	for review, I guess I should say.
19	CLARK ELDREDGE: To be routed through the
20	internal review process.
21	MARK SEDDON: Okay. Very good.
22	CHANTEL CORBETT: I'm sorry. You mentioned CPT
23	license use. Okay. I didn't know.
24	JAMES FUTCH: Yeah. It would come together at
25	the same time.

```
I'm just the guy turning the lights on.
                                                   Who's
1
2
     next?
 3
          RANDY SCHENKMAN, CHAIRPERSON: Anybody have any
4
    more questions or comments?
          Okay. We're going to skip ahead a little bit,
 5
6
     if that's okay, and we're going to have Clark
7
     give --
                           I'm going to start -- take us
8
          CLARK ELDREDGE:
     to lunch and then I probably won't get through by
9
10
     then, but --
         GINNI SHAW: Food for thought.
11
          CLARK ELDREDGE: Yeah. Then we'll have Allen
12
13
     start after lunch to try to keep you awake after
     lunch and then you'll get back to me to put you to
14
15
     sleep.
16
          The first thing I wanted to discuss is not in
17
    my slides or anything. It's the kind of question I
18
    want to make sure that we're all on the same page,
19
     right? And we all have the basic, what I think is a
20
     basic understanding about it. Radiation is
21
     hazardous. It does hurt people, right? It's a tool
    we've taken and we decided to use it because it
22
23
     provides us, for certain cases it provides us
24
    with -- in human, on human exposure, clarify that.
     It provides us medical information that can be used
25
```

to save a life, treat a life, prevent a disease, 1 2 that the risk from the radiation is much less than 3 the benefit we're getting to preserve and help 4 peoples' lives, correct? I mean, that's -- it's a preventive, right? 5 6 So we have a case right now that we're beginning to pursue, of a facility that has been 7 exposing people to diagnostic radiation services, 8 but nothing's being done for medical purposes. So the person goes in. A doctor has actually written a 10 prescription for this exposure. But there's no 11 12 health care provided related to that radiation 13 exposure. Nothing that is in that kind of 14 definition. 15 They think there's -- they feel that there's a 16 benefit there, but it is not -- what am I trying to 17 say? It's not being used for the treatment, for the 18 prevention or diagnosis of disease. 19 So if this scenario that we're pursuing, would 20 you all agree, as a council, that's an appropriate 21 thing for us to pursue and take administrative action against? 22 23 RANDY SCHENKMAN, CHAIRPERSON: What do they do? 24 what are they using the radiation for? 25 STRATIS LAGOUTARIS: Does the doctor own the

machine? 1 2 REBECCA McFADDEN: We need an example. 3 CLARK ELDREDGE: The doctor does not own the 4 machine. I'm trying to make sure -- they are 5 measuring body fat index. 6 NICHOLAS PLAXTON: DexaScan. 7 RANDY SCHENKMAN, CHAIRPERSON: Oh, okay. I'm not trying to use that 8 CLARK ELDREDGE: 9 word. That's why I'm trying to talk --So it's not being used in the 10 GINNI SHAW: 11 x-ray and the healing arts. 12 CLARK ELDREDGE: Is not being used -- which 13 actually is the first thing in my presentation is working on the definition of healing arts. 14 CHANTEL CORBETT: It's just being used for 15 16 analysis. 17 CLARK ELDREDGE: No. The doctor writing the 18 script, it never comes back to him. It's never 19 reviewed by another licensed person. 20 GINNI SHAW: It's not generating a report and 21 giving a diagnosis. 22 CLARK ELDREDGE: It's not generating a report. 23 CHANTEL CORBETT: It's got to be generating a 24 report. Maybe not a written one, but somebody has 25 got to be looking at the percentages because there's

1 no other point to doing it. 2 It may be an athletic trainer. CLARK ELDREDGE: 3 It may be --CHANTEL CORBETT: Right. That's what I'm 4 5 saying. They're still getting data. 6 Initially. I just mean --GINNI SHAW: 7 CLARK ELDREDGE: But the whole purpose is that it's a medical professional. 8 CHANTEL CORBETT: So who's writing the scripts? CLARK ELDREDGE: A physician somewhere licensed 10 11 by the State of Florida. And this person has never 12 put in their, as far as we can tell, is never 13 actually put in as a patient of theirs. Sounds vaguely familiar like certain other 14 15 practices were dealing with pills down in south 16 Florida at one point but, you know, where doctors 17 were writing scripts without ever really seeing a 18 patient or evaluating them. 19 MATTHEW WALSER: We talked about this a meeting 20 or two ago. Are you talking specifically about a 21 DEXA scan? 22 CLARK ELDREDGE: Okay. Yeah. 23 MATTHEW WALSER: I'll go ahead and say it. 24 I think, didn't we talk about this a couple meetings 25 ago? It was kind of a new and upcoming thing?

We were looking at different 1 REBECCA McFADDEN: 2 ways that radiation was being utilized in airports 3 and -- the sheriff's offices and jails, they were 4 utilizing it there. JAMES FUTCH: Okay. We definitely talked about 5 6 security scanners. 7 REBECCA McFADDEN: Right. JAMES FUTCH: We actually have a regulation in 8 9 the Florida Administrative Code that's, that's based upon an ANSI, AAPM standard for that. But there's 10 11 no physician ordering that. CHANTEL CORBETT: So what's the State 12 13 requirement for licensure? Is there one for 14 operating a DexaScan? 15 JAMES FUTCH: For Dexa? For ionizing 16 radiation? 17 They do have technologists. GINNI SHAW: 18 CLARK ELDREDGE: They've hired technologists to run the machine. The doctor has written a script 19 20 saying give the person a Dexa. It sits there, per 21 It's not being used, as I say for, for any -se. MATTHEW WALSER: I just wonder if that 22 23 individual takes that report to a nutritionist or 24 a --25 RANDY SCHENKMAN, CHAIRPERSON: Does it go some

1 place else? 2 MATTHEW WALSER: An athletic trainer or --3 GINNI SHAW: The way that they advertise it on 4 their site, they have a website and it's like -- can I say the name of the place? 5 6 JAMES FUTCH: No. It almost is advertised like a gym 7 GINNI SHAW: with personal trainers and those things. And so you 8 just go in and they just offer this to you. 9 don't know that you're even seeing a physician, 10 11 period. 12 CHANTEL CORBETT: So as a "patient", though --13 leave that in quotes -- patient getting this done, are you signing something saying you are being 14 15 exposed to, you know, x-rays? GINNI SHAW: I'm not sure. The site doesn't 16 17 say that. 18 CHANTEL CORBETT: Because honestly, I think 19 there's a break between, like, a legit physician 20 ordering this to be done, and then it being recorded 21 and billing on the backside. I see those maybe as 22 separate things. Maybe that's just --23 MATTHEW WALSER: For the health care of the 24 patient, you know. But I think that -- I see where 25 you guys are going. There is a doctor somewhere

that receives a name of a person that they've never 1 2 seen. There's no medical chart. They write a 3 script for a DEXA scan electronically. Probably 4 goes directly to the facility. And the doctor probably has some kind of financial kickback for 5 6 being the guy or girl. WILLIAM ATHERTON: I'm curious as to who's 7 paying for the scan because --8 9 CLARK ELDREDGE: Well, the patient is paying about -- it's about 125 bucks or 80 with a Groupon. 10 11 MATTHEW WALSER: With a Groupon? 12 CLARK ELDREDGE: Groupon. Yeah, you know, and this is --13 RANDY SCHENKMAN, CHAIRPERSON: So the patient 14 15 is paying when they walk in. 16 CLARK ELDREDGE: When they walk in. 17 MATTHEW WALSER: Where you're treating 18 somebody, where you're writing a prescription 19 without having any kind of medical documentation. CHANTEL CORBETT: And that's got to be 20 21 determined, too. Because, I mean, as much as Kelly 22 Health is a thing now. MATTHEW WALSER: It's still on the chart. 23 24 CHANTEL CORBETT: No, I know. I'm not saying 25 they even know at this point whether that's true.

```
You know, this person may be getting an electronic
1
2
     form of this patient.
 3
          CLARK ELDREDGE: The patient -- the individual
4
     does fill out a questionnaire.
 5
          CHANTEL CORBETT: Okav.
          CLARK ELDREDGE: It's faxed in: it's faxed
6
     back.
7
8
          CHANTEL CORBETT: Okav.
9
          CLARK ELDREDGE: But at that point, the
     individual ordered the treatment and has not done
10
11
     anything with it.
12
          JAMES FUTCH: So the results are not going back
     to the ordering physician?
13
                           They're not going back to the
14
          CLARK ELDREDGE:
15
     ordering physician.
16
          JAMES FUTCH: What was written on the script
17
     for? What was it being ordered for?
18
          CLARK ELDREDGE: Our inspectors never did
19
     provide that. Hopefully -- all they did in that
20
     inspection was, yes, they saw that the physician had
21
    written the script, but that the operator then said
    nope, nothing is done with it. It's not used in any
22
23
    way.
24
          CHANTEL CORBETT: That can't be true.
25
          CLARK ELDREDGE:
                           Well, other than the operator
```

1 turns around and reviews it and says, you know, 2 again, oh, well, here are the measurements. This is 3 what they --4 ADAM WEAVER: The operator is interpreting the 5 data? 6 The operator -- according to CLARK ELDREDGE: 7 the, yeah, the operator or some other person at the facility is interpreting for them. Or it's part of 8 9 the package software. WILLIAM ATHERTON: Well, the machine software 10 11 will print it out. CLARK ELDREDGE: The machine software just 12 13 prints it out. 14 ADAM WEAVER: Right. 15 WILLIAM ATHERTON: They're just reading the 16 English, whatever it says. 17 Right. CHANTEL CORBETT: 18 RANDY SCHENKMAN, CHAIRPERSON: But it's from a 19 website you said that looks like a gym? 20 The way that it is --GINNI SHAW: 21 CHANTEL CORBETT: Probably is with body fat. 22 GINNI SHAW: The way it's portrayed, it's like 23 a personal trainer. 24 RANDY SCHENKMAN, CHAIRPERSON: So the patient 25 would take it to the -- wherever this facility for

1 the gym is or wherever the trainers are or whatever. 2 CLARK ELDREDGE: They are trying to put them in 3 the gym. 4 RANDY SCHENKMAN, CHAIRPERSON: Yeah. 5 CLARK ELDREDGE: So you can get your weekly 6 scan to see how cut you are in this arm versus that 7 arm. ADAM WEAVER: They do it weekly or do they have 8 9 a set frequency? CLARK ELDREDGE: A package of 12 for a year, 10 11 you know, that --CHANTEL CORBETT: What's the radiation? 12 WILLIAM ATHERTON: It may be related to some 13 kind of kickback. 14 15 Well, ACR actually has their CLARK ELDREDGE: 16 guidance for bone density and those uses and they 17 list the long, five pages type thing that says, 18 here's the appropriate use. And they've got a 19 paragraph that says it can be used for flipping for 20 body mass when you're dealing with, a list of specific digestive and metabolic diseases and the 21 22 treatment of that. So there is that guidance out 23 there for the appropriate use from ACR. 24 JAMES FUTCH: Yeah. If someone were to file a 25 complaint against a physician along the lines of

what Lynne was talking about, for example, that's going to go to CSU. They're going to start looking for statutes under 458 if it's an MD and try and say, this looks like they're not doing that or something like that. You're going to have to have a fair, some amount of material to at least kind of give a hint that this is what it looks like it might be part of.

If they find that to be legally sufficient, they'll probably send it to ISU and ask for further investigation of the physician for, you know, whatever he's not doing under 458.

So it's going to come back to how much documentation and how much testimony do you have to show that he's writing a prescription for the treatment of, or at least for the, for an image or sort of analysis data to see if this particular bodily function is impaired so he can treat it. You're going to have to have something that shows that on the front end and then some testimony on the way through that shows that's not actually being done and something else was being done.

Like they decided, I don't know how to do this or what this is even for. But you -- what do you do with this information? Does anybody know what you

1 do with this information in the gymnasium? 2 NICHOLAS PLAXTON: You tell them to work out 3 more. 4 CHANTEL CORBETT: Yeah. It's to analyze your 5 progress. 6 CLARK ELDREDGE: Well, the thing about it is, for body mass, this is my kind of what's the point. 7 What's the practical point, I quess is the question. 8 9 Is that if we're talking about that type of body mass thing, you know. First of all, you go to 10 11 your physician. He's going to look at you and say, 12 you need to lose five pounds. There's nothing magic about that. It doesn't take radiation. 13 If, you know, there's the eggs for air 14 15 displacement, there's the water tanks for water 16 displacement and they are accurate within three 17 percent or something like that and their whole buoyant about this thing, it's accurate to like one 18 and a half percent. So the benefit of getting that 19 20 extra percentage versus another technology that does

look and see that it kind of defeats the whole purpose of the benefit of the information, the cost of the risk, the radiation, versus also the fact that in our codes, it says in 502 -- in 502, 5.502,

not expose you to radiation, kind of that's where I

21

22

23

24

25

it does state that as prescribed by a physician and 1 2 for the purposes of the healing arts. So it 3 actually says -- it's a requirement for use of radiation machines on humans. It has to be for 4 5 that. 6 Now, you know --7 JAMES FUTCH: Usually we stop at the point where the doctor writes the prescription. 8 9 But before, it's been in a CLARK ELDREDGE: doctor's office. And this is not in anywhere a 10 11 facility that is any related to a diagnostic center or doctor's office. In fact, the letters we have 12 13 issued requesting clarification to the facility requesting the registration, has been, you're not a 14 doctor's office, you're not a diagnostic, you're not 15 this sort of health care facility. How are you 16 17 using this for the healing arts? 18 ADAM WEAVER: How did you classify the x-ray facility? The doctor's office? How did you --19 CLARK ELDREDGE: They applied as a doctor's 20 21 office. They applied for MD. GINNI SHAW: That's where we stopped. They 22 23 applied and we're --24 CLARK ELDREDGE: We had two that were -- there 25 were two of these facilities registered prior to

recognizing the issue. And then there's one more 1 2 that's requested to be registered. And so, the two 3 that are currently registered, we've sent a letter saying, after audit of your inspection, we noticed 4 that you didn't explain -- that there's no evidence, 5 6 your own statements were that you're not doing anything for the healing arts. Please tell us why. 7 And then the other one that was applying, we've 8 9 said, we see it's not one of these type facilities. Tell us how this is going to work. How you're going 10 11 to be using this for medical treatment. And those were mailed out earlier this month. So it hasn't 12 13 been 30 days yet for them to reply. JAMES FUTCH: Have we talked to the 14 manufacturer of the device? 15 16 CLARK ELDREDGE: GE? You know --17 JAMES FUTCH: I'm just curious what they're 18 saying. WILLIAM ATHERTON: To make it a little more 19 20 complicated, there was -- we had a presentation, I 21 don't know, a couple meetings back, there was a special petition that jails got to have radiation 22 23 without any medical purpose whatsoever. CLARK ELDREDGE: We did give them an exemption 24 25 from -- although, if you think about, they're

actually doing diagnostic, energy type exposures. 1 2 There are, again, limits on the total radiation dose 3 they can give the people. I would almost think 4 somebody can probably sit down and do a cost benefit analysis for the fact that the guys, how many people 5 6 might die in the jail for whatever they're trying to smuggle in, verses the risk of the individual 7 getting radiation, you know. 8 9 WILLIAM ATHERTON: Well, that might be true, but I also think that, that sounds more dangerous to 10 11 me than the DEXA scan, although I understand. 12 CLARK ELDREDGE: Yeah. 13 CHANTEL CORBETT: Do you know what the radiation is for the 12 scans? Let's say they get 14 15 all 12 in the year. CLARK ELDREDGE: I can't tell you off the top 16 17 of my head, no. 18 JAMES FUTCH: We've done it before. 19 ADAM WEAVER: A whole body DexaScan is probably 20 around 40 --21 CLARK ELDREDGE: Yeah, it is small. In fact, that's one of the sales --22 MARK SEDDON: It's real small. 23 24 CHANTEL CORBETT: It's for a member of the 25 public.

1	ADAM WEAVER: Well, that's per scan.
2	CLARK ELDREDGE: Per scan, but again
3	ADAM WEAVER: If you're doing the whole body,
4	assuming it's a dual energy machine.
5	CLARK ELDREDGE: At the same point, you know,
6	the codes basically say, without healing arts
7	purposes.
8	CHANTEL CORBETT: Healing arts, I mean, is that
9	defined as
10	CLARK ELDREDGE: Well, we might as go ahead and
11	well, let's start with, let's start the first
12	one, shall we?
13	JAMES FUTCH: Have you caused enough mayhem yet
14	for us to move to the next part?
15	Seriously, do you want to, like, invite a
16	manufacturer to come in and talk to the Council
17	later on and try to answer these questions?
18	CLARK ELDREDGE: We could.
19	ADAM WEAVER: They are the ones who write the
20	programs for these machines.
21	JAMES FUTCH: Do you want the Power Point?
22	CLARK ELDREDGE: Yeah. Go ahead and open it.
23	I will apologize for this Power Point. I was
24	going to hand out printouts so there would be
25	something for you to read in front of you and look

at. The 30 copies are sitting in the printer back at the office and so, this is going to be really ugly for parts of this. But so, I'll have, the outline of this is -- these are all discussion topics. So I'll introduce what I want to talk about. I will put a little bit of language that we're considering and we all get to discuss with that, things like:

Are we completely off base? This is not something we need to worry about. Is this something you would like to prefer us to go back and research more? Is this something, if you actually want to take a vote and say, yeah, this is a great idea. Take this forward and try to clean it up or whatever rule.

So healing arts. An issue about harm to patients and what that means. Vendor registration. Something on actual authorizations for therapy. Therapy authorization for the therapy machines.

Particle therapy. Taking pictures with radiograph with x-rays versus just doing an analysis of the material. Systems that are going to be modified outside of what was originally designed and changes in technology, which kind of over compasses a lot of what we're talking.

We have a problem that -- we actually have an issue with going both through the statutes in search of the rules, nobody ever has defined what healing arts are. In Florida Statutes, it's referred to in -- the phrase "healing arts" is used to describe what types of medications and materials might be reimbursed for insurance or over the counter, some of that type of stuff. Various standards for how payments and things are done. What requires a prescription or not.

It's used -- it's not acupuncture, but come on.

I'm trying to say the word. Hypnosis. There's

actually something that hypnosis and other sections

where it says when working with a practitioner, when

it can be used with a working practitioner for

healing arts. And then in our codes, we use this

phrase "healing arts". About the healing arts

self-referral.

why people aren't supposed to be, you know, in this case, where you can't go and ask for an x-ray without a doctor determining that it's for your health benefit. Except for people that go out and do a self-referral for mammo.

So I would propose that we actually add under -- into the definitions in our codes, a

definition of healing arts, that it's the practice 1 2 of a licensed practitioner as defined under these 3 sections. And these are actually the lists of 4 osteopath, medical physician, PA, the folks who are currently recognized as being able to order, handle 5 diagnostic, diagnostic tests. And then 446 is the 6 dentists because they have to be able to use it in 7 their practice for taking x-rays of the jaw and the 8 9 teeth. And so basically, this would clear up the 10 11 question that -- it's actually trying to clear up 12 the fact that we consider healing arts actually the 13 prevention, treatment -- purpose of diagnosis and treatment of disease. There's actually a definite 14 15 medical component and clear up this type of feedback 16 on the bone density. 17 Do you all have --18 RANDY SCHENKMAN, CHAIRPERSON: Anybody have any 19 comments? 20 CLARK ELDREDGE: Comments, discussion. 21 CHANTEL CORBETT: Playing Devil's advocate, I mean, if you're saying prevention of disease, 22 23 obesity is considered a disease, so --24 CLARK ELDREDGE: But it's also under the

practice of licensed practitioner ordered it --

25

```
CHANTEL CORBETT: You're saying a doctor's
1
2
     order again.
 3
          CLARK ELDREDGE: Yeah, but they are not
4
     reviewing it and offer any prescriptive device.
     It's the practice of a licensed practitioner, but
 5
    practice is reviewing the medical charts --
6
          CHANTEL CORBETT: Right, which we don't know if
7
     they're doing.
8
9
          CLARK ELDREDGE: Right. And working with the
10
     patient for 125 bucks.
11
          NICHOLAS PLAXTON: They could be -- I mean, I
12
     don't know the whole situation, but they could be
13
     taking this questionnaire and ordering it. Then
    maybe they're getting the, it's just a number that's
14
15
     coming back. Maybe they review the numbers and flag
16
    which ones are abnormal. It's hard to say.
                                                  I mean.
17
     I don't know. But I can see them fitting into this
     definition.
18
          CLARK ELDREDGE: Well, if they are doing that,
19
     that's fine.
20
          NICHOLAS PLAXTON: Yeah, that's what I'm
21
22
     saying. Are they doing it?
23
          CLARK ELDREDGE: The point is if they're not.
     If the doctor is doing that and they're actually
24
25
     thinking it's appropriate for the person, but
```

that's -- but anyway, but the idea here is that there is no definition of healing arts.

KATHY DROTAR: Clark, are you also saying that it not just about ordering it, but that the treatment that's ordered after is being ordered by a physician as well, because that's what we're designated as medical treatment as opposed to somebody reading a paper and saying, well, this is what it is.

CLARK ELDREDGE: Treatment, right.

KATHY DROTAR: Now, if they have a protocol that the doctor's given them for, for a specific, but we don't know any of that information, so I think it's hard to go back and, you know, just add in what we all think might be happening without having the facts there.

CLARK ELDREDGE: Well, the thing is, this is to establish the standard of how we want to evaluate it. Okay? The fact that this is not so much to, if there's a problem or not, but to make sure if we -- if a problem does present itself, that we have a standard that we believe is appropriate for evaluating the situation. And that we're not going off and doing something inappropriate. And so, that's what the purpose of adding a definition of

healing arts. That it is actually the practice of 1 2 providing medical care, the continuum. 3 KATHY DROTAR: Continuum. CLARK ELDREDGE: The continuum of care as 4 people are doing under their licenses. 5 6 KATHY DROTAR: For the real purpose that the exam was ordered for and still under the physician's 7 8 care. CLARK ELDREDGE: Care. And that's just the whole --10 11 KATHY DROTAR: Whoever. 12 So this is, this basically CLARK ELDREDGE: establishes the standard at which we have to 13 evaluate something. 14 15 MARK SEDDON: So the licensed practitioner --16 ADAM WEAVER: This is just for x-ray machines? 17 Is this for --18 CLARK ELDREDGE: This would be for any, any, 19 this is all of radiation, basically. Is it used for ultrasound? 20 ADAM WEAVER: 21 No, no, this is only under CLARK ELDREDGE: 22 BRC, only under ionizing radiation. 23 ADAM WEAVER: okay. 24 Because again, we have no CLARK ELDREDGE: 25 authority to put a rule anywhere else. This would

```
go into our sections of the rules because no where
1
2
     else in any rule or statute has anybody defined it.
 3
    They've used the phrase repeatedly in statute and in
     rules --
4
          ADAM WEAVER: Mm-hmm.
 5
6
          CLARK ELDREDGE: -- but they never defined what
     it was. So for the scope of exposing somebody to
7
     ionizing radiation, we think that --
8
          ADAM WEAVER: You think that's language that
    you need to put that in here, that this is only
10
11
     concerning ionizing radiation?
          CLARK ELDREDGE: It would be in our rules.
12
13
    This would be a --
          ADAM WEAVER: This would be part of the --
14
15
          RANDY SCHENKMAN, CHAIRPERSON: So part of
16
     those, each of those sections, it has that written
17
    out?
18
          CLARK ELDREDGE:
                           Right. Well, those sections
19
     define who the practitioners of healing arts are.
         MARK SEDDON: That's pretty broad, isn't it?
20
                                                        Ι
21
     mean, it encompasses a lot.
22
          CLARK ELDREDGE:
                           It encompasses a lot and
     that's fine. These are already the people that
23
24
    we've accepted as doing radiation, providing --
25
          MARK SEDDON: But those licensed practitioners
```

are not defined from Bureau of Radiation Control, 1 2 but actually, that's just Florida Statute in 3 general, correct? 4 CLARK ELDREDGE: Right. These are the people 5 who we accept as practitioners. MARK SEDDON: Yeah. So that could still be 6 7 changed by other professions. CLARK ELDREDGE: Other professions. Under the 8 statute. It could be defined by the statute, but 9 that's a legislative and our government, that's the 10 11 prerogative. 12 MARK SEDDON: They put chiropractic --13 CLARK ELDREDGE: The chiropractics in there. 14 MARK SEDDON: Dentistry. 15 Yeah, actually, dentistry was CLARK ELDREDGE: 446. And that's where the licensed practice for 16 dentistry, that's that section. All the other ones 17 18 list the chiropractics, the osteopaths, the 19 naturopaths, the whole -- the standard group of people that are currently, considered as licensed 20 practitioners for medical care in the State of 21 Florida. 22 23 JAMES FUTCH: So --STRATIS LAGOUTARIS: I just have a question. 24 25 Forgive me if it doesn't make any sense.

Is it so broad of a statement that it would 1 2 give someone like myself, the podiatrist, the 3 authority to order a DexaScan on a patient and that 4 I'm not treating necessarily their foot or ankle? CLARK ELDREDGE: No, but this again, 5 6 incorporates your, your licensed practice thing. no, it doesn't -- this is outside. You would still 7 be limited by your practice standards. 8 STRATIS LAGOUTARIS: Okav. I mean, this is not too broad. 10 CLARK ELDREDGE: 11 This says the various physician categories -- I'll 12 use that term physician broadly in this case. 13 Medical professionals. Medical practitioners, excuse me. This is the broad list of those, and 14 15 they are still limited by their standards of 16 practice. 17 STRATIS LAGOUTARIS: Thank you. 18 JAMES FUTCH: Could I say one thing? 19 CLARK ELDREDGE: Yeah, please. 20 JAMES FUTCH: So the definition you guys are 21 seeing, 468.3101(m) is licensed practitioner as 22 defined in the rad tech statutes, which is very 23 broad. And it includes everything that we all think 24 of as physician. It could also, has been construed 25 to include physician assistant and nurse

1	practitioner working underneath the appropriate
2	supervision of those individuals. Although it
3	doesn't explicitly say that.
4	And then the dentist is the 466 tie in?
5	CLARK ELDREDGE: 466 is the dentist, yes.
6	JAMES FUTCH: So all of those things are
7	defined in the statute, which is why Clark, I think,
8	is referring to them.
9	CLARK ELDREDGE: I'm referring to them because
10	are these statutory definitions.
11	JAMES FUTCH: Right. They are already tied
12	into some part of the use of ionizing radiation.
13	Mostly through my statute. And these are there's
14	no, nothing in 404? That's even close?
15	CLARK ELDREDGE: No.
16	JAMES FUTCH: Which is kind of odd.
17	CLARK ELDREDGE: Yeah. That's why I had to go
18	to and so that, it's just that, all these people
19	on that list are covered by their practice standards
20	as handled by their boards, et cetera, et cetera.
21	ADAM WEAVER: Where are you planning to add
22	this definition?
23	CLARK ELDREDGE: To 64E-5.101, the definition
24	sections.
25	JAMES FUTCH: So Clark, in his statute, in his

enabling statute 404, is the phrase healing arts 1 2 used somewhere? 3 CLARK ELDREDGE: We use it in code. It's not in --4 JAMES FUTCH: Is there anything in the statute 5 that you can hang this on? That's close to this? 6 That's the whole problem. 7 CLARK ELDREDGE: There's no definition of healing arts in statute. 8 9 They refer to healing arts in several statutes throughout -- if you go to our wonderful legislative 10 11 website and search for healing arts. But that's the 12 reason for adding one to our statute, to clarify 13 what exactly it is we're envisioning when you say as prescribed by a physician and for the purpose, as a 14 15 licensed practitioner, and for the purposes of 16 healing arts, we need to know what those arts are. 17 And those arts are the practice bound by -- there's 18 practice standards. And this is just pulling back 19 into the practice standards. So if a physician is 20 actually ordering an x-ray, that it is for the 21 purpose of -- he's doing, he's going to do something with that result that falls within the practice 22 23 standards. 24 Because right now, you know, healing arts may 25 be, you know, with no clear definition, it would be

1 what the lawyers want to argue it is versus the fact 2 that it's supposed to be construed, limited -- I 3 think the intent is to limit within the practice 4 standards as done by the boards. 5 ADAM WEAVER: Have you shown this to your lawyers yet? 6 CLARK ELDREDGE: We've discussed it with them 7 but not shown it to them, no. 8 MARK SEDDON: Do physical therapists have -are they considered licensed practitioners? 10 11 CLARK ELDREDGE: Not under the rad tech 12 section. 13 ADAM WEAVER: Not for ionizing radiation. NICHOLAS PLAXTON: What about nurse 14 15 practitioners? I know they now have authority to do things on their own outside of physicians. 16 17 that --That's under the current. 18 CHANTEL CORBETT: 19 NICHOLAS PLAXTON: The latest was allowing them 20 to do things outside. CLARK ELDREDGE: What level? That's updated. 21 It would have to be updated, it would have to be 22 23 updated within the rad, rad section for it to go 24 into effect here. So this is strictly a --25 RANDY SCHENKMAN, CHAIRPERSON: We were just

14

15

16

17

18

19

20

21

22

23

24

25

1 discussing how this Section 468.301, whatever, 2 what's stated in there that would, along with this 3 statement, prevent someone like this doctor from 4 doing what he's doing. CLARK ELDREDGE: It would actually turn around. 5 It would go back to the practice standards. 6 whether or not what he's doing with the medical 7 treatment is within practice standards. 8 9 And I'm not saying whether or not our friends 10 11 we're talking with them on this case. But it would 12

down the hall are actually investigating this, since we're talking with them on this case. But it would be a lot, part of the restriction on the -- in the case that we discussed earlier with the body fat monitoring, it would be somewhat dependent on us working with them to determine that the -- that it is a violation of the practice standards that --

RANDY SCHENKMAN, CHAIRPERSON: Do the practice standards say anything about if a physician orders a study, they have to review the results?

CLARK ELDREDGE: That's -- I can't answer that.

That's what -- we're working with them on that.

CHANTEL CORBETT: Just in regular medicine, you have physicians all the time who order a test to be done and then those results don't necessarily -- I mean, you can go for a follow up with that same

physician's office months later and somebody else 1 2 reads it and they've never even seen the results. 3 So --ADAM WEAVER: They just read the report. 4 Right. They will eventually 5 CHANTEL CORBETT: 6 call for it maybe, but they don't automatically get it. 7 ADAM WEAVER: Or the summary or the conclusion. 8 9 Something like that. CHANTEL CORBETT: So it may be the same thing. 10 I mean, the doctor could call and get the result for 11 12 anybody. 13 MARK SEDDON: Or their partner is reading it. Right. There's nine million 14 CHANTEL CORBETT: 15 ways --16 MARK SEDDON: Happens a lot in cardiology 17 offices where one person reads a nuclear stress 18 test. CHANTEL CORBETT: They go into the hospital and 19 20 they don't read it at all. 21 MARK SEDDON: And somebody else actually 22 follows that patient. 23 CHANTEL CORBETT: Right. 24 I think the big thing for MATTHEW WALSER: 25 these guys, is there an actual medical record for

```
each patient that this person is prescribing a scan
1
2
     for, is there an electronic medical record or file,
 3
     somewhere in the file cabinet in somebody's office
4
     that --
          CHANTEL CORBETT: With the results.
 5
6
          MATTHEW WALSER: Yes. With names, date of
7
     birth, all of that, the questionnaire form.
     know, is there an actual file. Because that is in
8
9
     the Medical Practice Act.
10
          CLARK ELDREDGE: Exactly.
11
          CHANTEL CORBETT: I mean, all gyms in the old
12
     days, when you did any other kind of body fat thing,
     you know, you had your whole list of your progress.
13
     So I would, I would assume that --
14
15
          CLARK ELDREDGE: But that was the gyms and your
16
     trainers. That wasn't a physician who was
17
    monitoring. It was part --
18
          CHANTEL CORBETT: That's what I'm saying.
19
     monitoring is no part of this. The way it's
    written. But it's saying to order it.
20
                         Isn't that -- doesn't that
21
          KATHY DROTAR:
22
     really go back to, like, a medical practice issue as
23
     opposed to the radiation event?
24
          CHANTEL CORBETT:
                            Right.
25
          KATHY DROTAR: And, you know, everybody meeting
```

the other requirements that would be necessary for. 1 2 is there a radiation control plan or safety plan or 3 are they doing things that are within the correct 4 parameters as far as the radiation goes? ALLEN MOODY: That was my question, too. Isn't 5 6 there -- is there no requirement that they track those doses received and be able to --7 In Florida, the physician 8 CLARK ELDREDGE: 9 decides what's the appropriate dose for his patient. ALLEN MOODY: But I mean, when your guy who's 10 11 writing it for the gym says, okay, you can have 12 this, but there's -- is it an open-ended thing or is it --13 CLARK ELDREDGE: It's open ended. There's 14 15 nothing in our -- it's up to the -- again, but if 16 the physician's not considering that, that very well 17 could be a --18 CHANTEL CORBETT: Is this a script for a 19 one-time thing or is it a script for 12 in a year? 20 MATTHEW WALSER: The Groupon that I just found 21 was one time for \$102. CLARK ELDREDGE: Yeah. And to be a little 22 23 bit --24 The gym right over here. MATTHEW WALSER: 25 CLARK ELDREDGE: What does a doctor do for 102

bucks? 1 2 MATTHEW WALSER: Write a prescription. 3 CHANTEL CORBETT: Probably more than he does at a walk-in clinic. 4 WILLIAM ATHERTON: If it's an issue, won't it 5 6 eventually go back to the medical board of that 7 practitioner? 8 Right. CLARK ELDREDGE: 9 Why don't you give it to WILLIAM ATHERTON: them and make them tell them to --10 11 CLARK ELDREDGE: There's two parts here. 12 Again, it's our machine part and whether the people 13 should be permitted to use -- have the machine at that location operating, expose humans to it. And 14 our codes --15 16 They applied for these CHANTEL CORBETT: 17 licenses or registrations for the x-ray. They've 18 already got two that are registered. So obviously, 19 they submitted the proper documentation. 20 CLARK ELDREDGE: Well, two were registered 21 without anyone there -- when, you know, you assumed 22 things certain, when paperwork comes in, that people 23 are agreeing to follow the codes and rules. When 24 you --25 CHANTEL CORBETT: Right. You're saying they

```
have a registered technologist working the machine
1
2
     and you're saying that there's a physician ordering
 3
     the test.
4
          CLARK ELDREDGE: But again, the code requires
     also for the purposes of the healing arts. And
 5
    that's the question we're asking at this point is --
6
          CHANTEL CORBETT: As you've already said,
7
     there's no definition for that. So you can't say
8
9
    you're going against the definition because there is
10
     none.
11
                           Well, we can ask them how
          CLARK ELDREDGE:
12
     they're doing it and see what they say.
13
          KATHY DROTAR: Who's going to make the decision
     that it's not for healing --
14
15
          CHANTEL CORBETT:
                            Riaht.
16
          KATHY DROTAR: No matter what kind of
17
     definition you put on it.
                        Right. Like those medical
18
          MARK SEDDON:
19
     cosmetic clinics that have lasers for veins, quote,
    the doctor owns it, but then, it's really just for,
20
21
     you know, cosmetics. So how is that -- I mean, it's
     similar type as this. Like, that's not really
22
23
     healing arts, but it's still medical procedures
24
     being done.
                  Botox.
25
          NICHOLAS PLAXTON: You can consider it healing
```

1 arts because the patients feel better, they 2 cosmetically look better. 3 CHANTEL CORBETT: And for varicose veins. 4 NICHOLAS PLAXTON: Yeah. 5 RANDY SCHENKMAN, CHAIRPERSON: Just to let you 6 all know, lunch is ready. So I don't know whether -- I'm not sure exactly what you want us to 7 do with this, Clark. Is it just to get our input or 8 what? CLARK ELDREDGE: It's -- okay. The language 10 11 sections here, I gather I want to hear, I guess the 12 question I would ask the council is one of three 13 things: If, you know, does anybody think this is --14 15 does the council feel that this is ready for prime 16 time to proceed? Is there any suggestions that you 17 think we need to go work on more, or that's 18 interesting and we'll think about it later. 19 of, you know, if you all are motivated enough to 20 offer a formal opinion, we'd be happy to have one. 21 So does anybody want --22 ADAM WEAVER: Can I ask one question? Have you 23 compared notes with any other states through, like 24 your CRCPD? Because I know this isn't unique to 25 Florida. I think it started in California. So have

1 you checked to see what other states --2 CLARK ELDREDGE: The states that have this 3 doesn't have any regs that don't -- it doesn't 4 reflect it. They have no authority. ADAM WEAVER: Do they have any comments in 5 6 regard to -- the risk that the patients are, are 7 being exposed to, which is --I have no -- I do not have 8 CLARK ELDREDGE: any, shall I say, numerical data that I can provide 9 on that. And I don't think it's necessarily 10 11 appropriate to -- the anecdotal stuff from the conference calls, I don't think is --12 13 ADAM WEAVER: Okay. CYNTHIA BECKER: Other than we know other 14 15 states are wondering or considering how to also license these facilities or register these 16 17 facilities. And the issues are out there. Just 18 like they were with security scanners when we 19 started on that a few years ago, so --20 CLARK ELDREDGE: The comments range from --21 well, the comments have ranged from -- I guess I am 22 speaking in anecdotal this time. From we have no 23 authority or no way to regulate, to it's a bad idea 24 type thing, as opposed to, there was no --25 CYNTHIA BECKER: Right. You're going to have

```
states that say we don't allow it. We don't want to
1
2
     allow it or we didn't even know it exists. I've
 3
     heard that, too.
                       So --
4
          ADAM WEAVER: Right.
                           We should find out more next
 5
          CYNTHIA BECKER:
6
    week -- this week.
          GINNI SHAW: I can pick peoples' brains next
7
    week at CRCPD.
8
9
          ALLEN MOODY: It's just hard for me to believe
     that a physician, quote unquote, who orders some
10
11
     radiotherapy is not required to track a patient's
12
     dose.
13
          NICHOLAS PLAXTON:
                             It's not therapy.
14
          WILLIAM ATHERTON: It's not therapy.
15
          RANDY SCHENKMAN, CHAIRPERSON: It's diagnostic.
16
         ALLEN MOODY: You know.
         GINNI SHAW: It's diagnostic. To be honest, it
17
18
     is low dose.
          ADAM WEAVER: It's more than the inmates are
19
20
     getting, but not that much more.
21
          ALLEN MOODY: I wasn't thinking about that. I
22
    was thinking about your guy with the, using it for
23
     the muscle mass. Reducing muscle mass. That would
24
     be, to me that would seem like it would fall under
25
     some kind of, under supposed therapeutic usage.
```

```
CHANTEL CORBETT: It's not increasing.
1
                                                  It's
2
     just analyzing.
 3
                        Just analyzing the data.
          ADAM WEAVER:
          RANDY SCHENKMAN, CHAIRPERSON: Well, do we want
4
     to approve this or do we want to have further
 5
     discussion?
6
          KATHY DROTAR: Further discussion.
7
          ADAM WEAVER: Further discussion.
8
9
          CLARK ELDREDGE:
                           Okav.
          RANDY SCHENKMAN, CHAIRPERSON: All in favor of
10
11
     further discussion, say aye.
12
          COUNCIL MEMBERS:
                            Ave.
13
          RANDY SCHENKMAN, CHAIRPERSON: Opposed?
14
          (No response)
15
          RANDY SCHENKMAN, CHAIRPERSON: Okay. So we
    will continue this.
16
          CLARK ELDREDGE: All right. After Allen's
17
18
     presentation after lunch.
19
          DOUGLASS COOKE: On your way out, everyone's
     food is already prepared. If you'll walk to the
20
21
     register, pay for your lunch and then sit down and
22
     they will bring it to you as soon as you're seated.
23
    Okay? Thank you all very much.
24
          (Proceedings recessed at 12:10 p.m.)
25
          (Proceedings resumed at 1:32 p.m.)
```

```
RANDY SCHENKMAN, CHAIRPERSON: So we're going
 1
 2
     to continue on with the agenda as it was originally.
 3
          BRENDA ANDREWS: All right, everybody.
 4
     Convene, everybody.
          JAMES FUTCH: I know it's after lunch. We're
 5
 6
     going to turn the lights down.
          RANDY SCHENKMAN, CHAIRPERSON: So we're up to
 7
     Allen.
 8
 9
          JAMES FUTCH: Cindy, do you want to introduce
     him?
10
11
          CINDY BECKER: Introduce him, yes. Okay.
                                                     So
     this is Allen Moody. He's our chemist
12
13
     administrator. He has been with us a very long time
     and exited for a very short time and then came back
14
15
     with us for a very long time again. That's because
16
     he loves us so.
17
          ALLEN MOODY: It must have been something like
18
     that, yes.
19
          CINDY BECKER: And I'm hoping we can also talk
20
     you into some time doing this presentation with
21
     other organizations.
         ALLEN MOODY: Right. Well, I was saying I'm
22
23
     going to go on the road with this. Apparently, it's
24
     a bit hit. It debuted at the Health Physics Society
25
     meeting a little while, when was that? About --
```

1 April 6. BRENDA ANDREWS: 2 ADAM WEAVER: April. 3 ALLEN MOODY: Apparently, it was a big hit, so this is the -- an encore performance. Like I said, 4 we may go on the road with this at the rate this is 5 6 going. Now, this is one of the more -- I said at the 7 Health Physics meeting that, you know, you talk 8 about Florida and peoples say that Florida is full 9 of bizarre people doing bizarre things and 10 11 unfortunately, this is a prime example of it. 12 But, this, I got involved with this back in the summer of 2017. After -- when this person's 13 materials had been basically temporarily confiscated 14 15 by one of our -- by our field person, Kelly 16 Anderson. And I'll talk a little bit about more 17 about what went on from there. 18 But I introduced the gentleman without names --19 without a name. He is a retiree living in Florida. 20 He has a hobby. His hobby is he is an element collector. He wants to collect all the elements in 21 22 the periodic table, which includes, of course, the 23 radioactive ones. Apparently, there are others out 24 there like him, which can be kind of a scary

thought. Because there -- you will see that there's

25

actually, apparently, a market for this material, too, that I was not even aware existed.

He's an amateur experimenter. We'll have more on that later. And he managed to combine these two interests with a profit motive and became an entrepreneur selling stable elements and homemade radioactive compounds on EBay.

He buys uranium and thorium and the elements and some of the compounds from commercial suppliers in the U.S., though he says he's purchased thorium from China as well. He's purchased quite a bit of counting equipment. I'll have some slides on that. Also on EBay. He said that sometimes universities surplus these things without even knowing what they're really for. He says he can repair this equipment, too.

He has acids and a few simple chemicals, but he doesn't seem to be familiar with some basic chemical separation tools. If you're going to do radionuclide studies, that's basically what I do, you have to have certain -- have anti and cation resins for doing chemical separations and he doesn't seem to -- he didn't seem to be at all familiar with that. Or with very -- or with liquid extraction, which is another method that's sometimes used to

separate radionuclides. So his ability to do actual 1 2 separation, chemical separations is very limited. 3 So I'll have a little bit more about that. 4 He's got an extensive library of books on 5 radiochemistry, though some are pretty old. He sells -- he was selling stable elements, 6 certain stable elements, but hazardous elements like 7 sodium and phosphorus. I mean, sodium is a fire 8 hazard if it's exposed to water and phosphorus is a fire hazard if it's exposed to air and it's just 10 11 chemically toxic. But those elements EBay would no 12 longer let him sell. They basically told him he 13 could no longer sell those. But they did allow him to continue selling the uranium and thorium 14 15 compounds. He says he does not sell internationally and 16 17 requires a driver's license, but otherwise doesn't restrict his sales. 18 19 He came to our attention and the attention of 20 the NRC and the Florida Department of Health Bureau 21 of Radiation Control for manufacturing what's called AM/BE neutron sources. They're americium and 22 23 beryllium sources for creating neutrons. He claims 24 he never sold of the AM/BE sources, but he said he

loaned one to someone.

25

1 ADAM WEAVER: Not me.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ALLEN MOODY: His lab seems to be a free-standing garage apartment. We speculated maybe his wife won't let him do it in the house. It's actually, his residence sits up a hill from where his garage apartment laboratory is.

The radiation level in his, in his lab is about eight times background with no samples open. to make a parenthetical note here that at the time we measured that, we basically were returning his stuff. This was, his stuff, 107 samples from his laboratory were -- had been out of his house from about, I think July or August when this was first taken out, until we returned it in November. So basically, a lot of, a lot of his material had been taken out of there and presumably that -- they had several months for the radiation level to go down in there. And so we walk in there. Matt Sinison with He took radiation readings. On a background of about three MicroR, we're getting 24 in the place. And this, remember again, a lot of the radioactive materials were actually not in the place at the They were all sitting out in the car that we brought back -- brought down there to return his stuff.

He says he sells -- sales were about \$1500 to \$2000 a month, which is not bad for, I guess for a retiree.

Much of what he sells, including his homemade compounds, is packaged in small screwtop vials with neatly printed labels, though sometimes he uses septum vials for some reason. I guess convenience. I've got pictures of this.

Just handling his vials without opening them, we needed to take weights and do qualitative identifications, left me with significant contamination on my gloves, which I think is probably radon. We actually did -- had Matt taking swipes of the area, my work area, and he was not picking up anything. So whatever was there was either not surface contamination or it was very short lived. So presumably, we're talking about mostly radon contamination in the area.

To his credit, with rare exceptions, his compounds and materials seem to contain the nuclides advertised. We actually used an Ortec germanium detector to do qualitative and I.D.'s on all this stuff and with a very few exceptions, it all seems to be pretty much what he says it is.

This is his glove box, which he's manufactured

out of, I guess out of leucite. His glove ports are just slits cut into a rubber membrane. His hose, his exhaust hose from the glove box exhausts to his kitchen stove. It really does. I'll show you where it connects, actually. And he's actually pretty proud of this.

You know, I worked in Los Alamos. He basically wanted me to compare that to -- I didn't want to go there.

This is his lab bench top or -- which is his stove. And this is -- that's the exhaust from his stove is where he plugs in his, quote unquote, glove box hose goes up there. You can see he's got a balance, he's got a little microscope. He's got his other little -- his other tools that he uses. We've got more pictures of his work area in greater detail that are in the supplemental photos.

His safety equipment is just dust masks. And they're not fitted masks. They're not -- actual respirators have to be form fitted. And what he's got are just basically dust masks.

His counting equipment has got quite a bit of stuff, including a germanium detector, which shocked me because you have to have liquid nitrogen for those. You have to have a supply of liquid

nitrogen, but he says he gets it. That Dewar down there is, I recognize that is for a germanium detector, which is high-resolution gamma.

I guess you really can find a lot of things on EBay. He's mostly geared for gamma spectroscopy. He doesn't really have any equipment for alpha spec, but he does have quite a bit of stuff for gamma.

where we came into this, we received 107 tagged samples of his material from our incident response coordinator Kelly Anderson, who also photographed them. Most of the photographs here are hers. Some sample bags contained multiple small vials. You'll see that.

We did nuclide identifications with an Ortec portable high purity germanium. It's a state-of-the-art field instrument, but I'm going to show you how that even can mislead you. We weighed the vials without opening them. We did not want that stuff contaminating our laboratory.

where empty vials of his existed, we were able to estimate a net weight of the contents in the vials by subtracting the weight of the empty vials. We had comparable size of empty vials.

where we had a good estimate of the net weights of the contents, we used his chemical assessment of

the compound. We took his word as to what it was, plus with the qualitative identification from the Ortec. The stoichiometry or the chemical composition was expected and the specific activity of each nuclide to determine an absolute activity. And the following slides are some of the material we got.

This was originally identified by Kelly, using Ortec as highly enriched germanium. It's not. The gentleman said -- it is, in fact, a glow-in-the-dark button for military uniforms from World War II. It's radium 226.

From the purpose -- for gamma identification, radium 226 has a 186 keV energy line. Uranium 235, which is highly enriched uranium, also has a 186 keV energy line. Even a germanium can't really tell the difference or we can tell the difference with very -- with great difficulty because the resolution on these systems is typically about one kilo electronvolt and the energy difference between the Uranium 235 and radium 226 is actually point seven so you usually can't even tell the difference with the -- between these.

As far as the Ortec goes, if you actually held this material in front of the Ortec a little longer,

16

17

18

19

20

21

22

23

24

25

the radium 226 identification would pop up on it. 1 2 But if you just did a quick, put it in front of it, 3 it identified it as HEU. So that's one of the 4 things about using instrumentation. You have to be careful about and use all the available information 5 that you have; consider the context of the material. 6 You know, this is sort of the lesson that, lessons 7 learned I think that might be useful in terms of --8 in doing field identifications, too. You always --9 if you have anything, any information that might be 10 11 pertinent, then please consider it when you -- don't 12 just take the instrument's word for what it says it 13 is. 14 не

And also, it did say note the cute cow can. He has the most entertaining containers. Seriously.

And there's another one.

I said the double ring purpose here, this one does not normally expect to find americium, which is itself repurposed from smoke detectors in one's teatin, but that's some of the metal pieces glued on the disks, the arrow, turned out to be.

we did -- we didn't give him back his americium. We could keep that under law, because you could not -- you can't repurpose americium from smoke detectors.

By the way, the smoke detectors, I was pretty amazed. He had industrial smoke detectors, not the little units that were typical in houses. The industrial ones had about 80 microcuries per detector. Which we actually gave him back his intact ones because we couldn't keep them because he had not repurposed them yet. So we had to give those back to him.

This is a little bit of a quality control issue. Remember, I said she had taken several, she had grouped these into terms of what they, what they were -- he had identified them as. And so these are all supposed to be ammonium diuranate. You can see the colors are a little bit variable. Going from yellow to basically red orange. So he's -- he does have a little problem in terms of quality control.

These are labeled uranium hydride. They look homemade, and from what he told me, they are. So -- and, yes, he was combining uranium metal and hydrogen gas under heat. He did seem to know that you do not do this with any air present in there. He understood this. But, you know, it's still something that is a little bit alarming.

This one, he was trying to create, he was trying to get Protactinium 231, which is, I believe,

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

a uranium 235 daughter, to chemically deposit on the 1 2 He had his doubts that it had worked. metal strip. 3 And, in fact, we did gamma spectroscopy and were not 4 able to detect protactinium positively in it. has, like, three energy lines and at least one of 5 those were not there. So we were not able to, we 6 weren't able to really positively I.D. protactinium 7 in there. 8

And this one, he had on the, on the label, he says neptunium -- neptunium and then AM 241, the arrow to Neptunium 237. It read on gamma as pretty much pure americium. It's about one microcurie there.

Remember, he can't really do chemical separations and so, there's going to be some Neptunium 237 there because it's an americium 241 daughter. But mostly what's there is americium 241.

This one -- so I've been to labs where they wouldn't let you open something like this except in a glove box. A real glove box. Not one of his. It contains fine black uranium oxide powder. Very easily disbursable stuff. When I opened this container, I thought, well, maybe there was a smaller container inside. Nope. You opened it up and there's the fine powder there.

And sometimes he's just not sure. And when he wasn't sure, sometimes he had this neatly printed label that said "unknown compound". Like I said, to me that seems like an oxymoron. To have a neatly printed label that says unknown compound, but that's what he did.

Anyway, he had this neatly printed label saying unknown compound. Sometimes when he didn't know, he didn't bother with a label and just wrote on there, okay, what it might be with a question mark on it.

So this is what we did. So under the law, americium 241 cannot be repurposed. So the Americium 241 we removed from smoke detectors, which I said again, they're 80 microcurie commercial smoke detectors. Were industrial detectors. Were retained by BRC. Which amounted to about, nine samples. We had -- we kept nine of them. One of which was weirdly, just seemed like fasteners. Little screws. But it read as AM 241, so we held on to it.

So his Pentek detectors were returned. This means we also retained the AM/BE sources he had which contained toxic beryllium powder, which is so weird, because I expected he would use beryllium foil. It wasn't foil. It was powder.

He was not over the legal quantity for natural 1 2 uranium or thorium, so all of his uranium and 3 thorium metal and compounds were also returned. He told me the stories behind some of the 4 number of his items. He's very enthusiastic about 5 6 this. He has a story for almost everything that he 7 created. He was advised to consider not just his own 8 safety but the safety of those who purchased his 9 material, which I can do. I can tell him, look, 10 11 consider the health of other people. And I asked him about himself and his attitude was, he's an old, 12 13 like, he was an old person. He's -- so it doesn't matter anymore. But he's selling it to people who 14 might be a little bit younger, so --15 16 And I can do questions at this point, but you 17 want to go ahead and go for the extras? Go for the 18 extra photos. Matt sent us -- he had better photos than I 19 did. I'm so jealous. He had much better photos 20 21 than I did. Okay. This one, he has a shelf of mineral 22 23 I assume mostly radioactive material. specimens. 24 Radioactive ones.

And then next slide, please. That's another

25

view of it. 1 2 And this is his, this is his pride and joy. 3 This is his periodic table. The ones -- so he 4 obviously has not filled in everything from down in the -- let's see. Down in the actinides he's still 5 working on that. But he's, you see he's got 6 specimens of all the other elements. 7 I think that clock was wrong. Wrong, by the 8 way. I don't think it was quite that late in the 9 afternoon when we visited. 10 11 Next slide. JAMES FUTCH: Why does he have a clock in 12 13 there? ALLEN MOODY: It's apparently made that way. 14 Ι 15 don't know if this is something he bought commercially made or if this is something he made 16 17 himself. I don't know. 18 NICHOLAS PLAXTON: They used to use like a 19 paint on there. CHANTEL CORBETT: Radium. 20 21 NICHOLAS PLAXTON: Radium on there. ALLEN MOODY: Well, no, because it has a slot 22 23 for Radium down here. It has a slot for radium up 24 here. That's where radium should be. And I think 25 he's got something in that slot.

1 Next slide? 2 He's got -- this is just a work bench in there. 3 I don't know exactly what else he has in there. 4 Next slide. Another view of his glove box. 5 6 JAMES FUTCH: Is that an acetylene tank in there? 7 Huh? 8 ALLEN MOODY: 9 JAMES FUTCH: What's the gas tank down there? ALLEN MOODY: He's got, well, he says he has, 10 11 like I said, I know he's played with hydrogen 12 because I know he said he was using hydrogen. 13 Hopefully not in this. But he -- if he's got a gas supply to this, I have no idea. But, you know, 14 15 unless he was using some sort of an inert gas in 16 here for some reason, which I would hope if he was 17 doing that, he had better ventilation than what we 18 saw. 19 CYNTHIA BECKER: He had the stove. 20 ALLEN MOODY: Kitchen stove, laboratory, prep 21 area. He seems to have a little, either a hot plate or stirrer or -- actually, I think it's a hot plate 22 stirrer over here. Of course, he's got his balance 23 24 over here and his microscope. 25 JAMES FUTCH: Is this his actual kitchen?

1 ALLEN MOODY: Huh? 2 JAMES FUTCH: He's fixing food in this kitchen, 3 too? 4 ALLEN MOODY: I hope not. REBECCA MCFADDEN: This is the little apartment 5 6 up the hill. ALLEN MOODY: It's a garage -- it's basically 7 8 like a garage apartment. REBECCA MCFADDEN: The mother-in-law suite. ALLEN MOODY: There's a garage area, there's 10 11 like a carport area in the middle of it and then there are rooms on the side. And the rooms on the 12 13 side is where he keeps his library. And he has a library of, like I said, of mainly older 14 15 radiochemistry texts. Next slide. 16 This is a, this is his chemical storage area. 17 18 He's got his all his chemicals up here or whatever 19 he was using. And I assume he's got basic acids and a few other basics up there. Like he said, he does 20 not have the resins or the extractants to do or 21 22 chelating agents that you would need to really do 23 separation, proper chemical separations. 24 Next slide. 25 I think this is where we started bringing it

```
1
     back.
            when we brought these materials back, for
 2
     safety consideration, it was like, we double bagged
 3
     them in plastic bags when we were bringing it back
 4
     from the car. And I think we kept the windows down,
 5
     too.
 6
          Well, there was a lot, there was a lot of Radon
     in this stuff, okay? There's a lot of radon in this
 7
 8
     stuff.
 9
          RANDY SCHENKMAN. CHAIRPERSON: Put it in a
     metal box.
10
11
          ALLEN MOODY: It looks like he's got a
12
     centrifuge back there. He does seem to have one.
          JAMES FUTCH: Is that for the uranium market?
13
14
          ALLEN MOODY:
                       Huh?
          JAMES FUTCH: Is that for the uranium market?
15
16
          ALLEN MOODY: I don't know. No, I don't think
     he's doing -- I do not think he's quite up to, to
17
18
     doing, to doing enrichment with these. But that was
     the thing about it. All his material, except for
19
     the americium, was natural material. So because of
20
21
     the regs, the regs are so structured, that he can
22
     have, you know, John Lacey (ph) was saying kilogram
23
     quantities if he wanted to, of natural material.
24
     And so he was -- had quite a bit of it.
25
          There was a lot of stuff we really couldn't put
```

He had bottles of yellowish liquid, 1 a number on. 2 which was yellowish. It's probably uranium, but 3 because it's in liquid form, you can't -- because 4 it's in solution, it was very, very hard to get a number. We couldn't really get a number on it. 5 6 Because uranium, natural uranium's gamma energies are fairly low and so they're going to be strongly 7 absorbed by water. So it's in an aqueous solution. 8 It's going to be very, very hard for us, especially 9 to tell how much is there. Especially considering 10 11 the fact that, you know, you don't have -- you do 12 not really have a gamma geometry for a jar that's 13 about this big (indicating). Next slide. 14 This is a rack of his electronic equipment. 15 He's got -- I don't know how much of this stuff 16 17 actually works, but he has, you know, quite a bit of 18 it. 19 Next slide. I'm not quite sure, this is -- somebody asked 20 me about what this was. I'm not sure. 21 Whether that's some kind of an oven or what it is. Does 22 23 anybody recognize this thing? 24 It looks like an old furnace. ADAM WEAVER: 25 CHANTEL CORBETT: You were saying he was doing

```
something under heat, right, that couldn't have
1
2
    oxygen.
          ALLEN MOODY: What he was doing, what he was
 3
4
     doing --
 5
          ADAM WEAVER: Passing gas through it.
         ALLEN MOODY: What he was doing was, he had
6
     uranium metal and he was basically reacting it with
7
     hydrogen. Like I say, you have to have -- all the
8
     air has to be gone or else it's going to blow up on
9
     you the minute you apply heat to it. But what he
10
11
    was describing was, he was saying, oh, I varied the
12
     temperature and I'd see the hydrogen and see the
13
     uranium changing as it turned into hydride and then
     I changed the temperature and it would go back to
14
15
     uranium metal and he was very enthusiastic about
16
     that, about the chemistry. Not safety but -- is
17
     that the last one?
18
          JAMES FUTCH:
                        Nope.
19
          ALLEN MOODY: That's another view of his
     electronics.
20
          JAMES FUTCH: Is this used stuff?
21
          ALLEN MOODY: Yeah. A lot of it is used stuff.
22
23
     I assume -- he says he can work on this stuff and
24
     says he can make the, make the equipment work. But,
25
     you know, he was just buying what he ever he could
```

```
get off EBay, somebody's surplus, if somebody was
1
2
     going to throw it away. I guess he was scavenging
 3
     it for electronic components.
4
          This guy would, you know, be kind of
     frightening if he seriously got into the terrorists,
 5
6
     got into terrorism or something like that.
     knows, he knows his stuff to a large degree. There
7
     are issues, like I said, in chemistry that he does
8
     not seem to have a lot -- a great deal of knowledge
     of. But he's, you know, he's -- the electronics he
10
11
     says he understands. Apparently, he knows how to
12
    work a Germanium detector. He knows basic -- the
13
     stuff he can do with acids and bases, he knows that,
     that end of it.
14
15
          STRATIS LAGOUTARIS: What did he do for a
16
     living that he retired and suddenly took up this
17
     hobby? What was he a retired schoolteacher or
18
     something?
19
          ALLEN MOODY: Do you want to know what he said
20
     he was?
21
          STRATIS LAGOUTARIS: Yeah.
22
         ALLEN MOODY: He said he was a neuroscientist
23
     in his career.
24
          MATTHEW WALSER: What did he do to get on the
25
     radar screen?
```

1 ALLEN MOODY: How he got on the radar screen, 2 remember I was talking about this americium and 3 beryllium sources? He had posted a YouTube about 4 that. Apparently, he was -- you know, he says he didn't sell any of these things, but it's kind of 5 hard to understand why he would make a YouTube about 6 them if that had not been his intention. 7 Apparently -- but he posted a YouTube about this and 8 then the NRC got wind of it and then they contacted 9 10 us. 11 CHANTEL CORBETT: You said the background was 12 only three microbar? 13 ALLEN MOODY: Well, the background outside was three microbars. The background where we can get a 14 15 clean background was about three microbars. About 16 24 inside. 17 CHANTEL CORBETT: Yeah, I was going to say 18 because the landfills locally in Central Florida. 19 their monitors are set up for, like, 24 microbars. So most of that would still go pass through --20 21 Pretty low. ADAM WEAVER: ALLEN MOODY: Remember, also, like I said, that 22 23 was after, about three, four months after we had 24 taken all this stuff out of there before we put it 25 back that it was reading that.

1 CHANTEL CORBETT: Right. 2 So there was really nothing REBECCA McFADDEN: 3 that he could be charged in doing wrong. You didn't find any over the amounts which he was able to have. 4 So he -- nothing could be shut down. He's still 5 6 there doing his thing? ALLEN MOODY: As far as we know. 7 I have no idea. No, our part in this ended when we took him 8 9 back his stuff in November. 10 REBECCA McFADDEN: Right. 11 ALLEN MOODY: We returned his materials in 12 November and if he wants to cheerily go on selling 13 his stuff on EBay, as far as we know, it's legal as long as it stays away from the americium. It's not 14 15 really recommended practice, I would think. But, you know, we've got into this discussion here so 16 17 many times that things are probably not a good idea 18 but are not illegal. 19 WILLIAM ATHERTON: Just why is the americium 20 special? 21 ALLEN MOODY: Because there's a law that says 22 you can't repurpose the americium 241 in smoke 23 detectors. 24 WILLIAM ATHERTON: Was there a logic behind 25 that?

```
1
                        I don't know why. Anybody know
          ALLEN MOODY:
2
    why the req. was written that way.
 3
          ADAM WEAVER: It's transuranic material.
4
          ALLEN MOODY: Transuranic material, yeah.
          JAMES FUTCH: So it's five microcuries per
 5
6
     device. Well, that's home units.
          ALLEN MOODY: Home units. These are industrial
7
8
     ones and they are 80.
9
          JAMES FUTCH: You guys all know this anyway.
     How many smoke detectors do you have in your house?
10
11
     Five times, whatever that is in microcuries. You
12
     have 10 or 15 microcuries in your house. Deposit it
     on a piece of metal.
13
          ADAM WEAVER: Industrial units have more.
14
                                                     Thev
15
    would be more sensitive.
16
          ALLEN MOODY: Is that the last one?
17
          JAMES FUTCH: But you have to leave it there.
18
    You can't scrape it off and put it in a jar.
19
          ADAM WEAVER: He just cut them off.
         ALLEN MOODY: You can't do what he did was
20
21
     trying to put it on metal strips or you know,
22
    whatever.
23
          ADAM WEAVER: Well, adding beryllium makes it a
24
     potential neutron source.
25
          ALLEN MOODY: Well, it does, but -- I don't
```

```
have a picture of it here. I only have a picture on
 1
 2
     my phone, of his so called americium beryllium
 3
     sources. I couldn't get neutrons, I couldn't read
 4
     neutrons off it with the Ortec. The Ortec actually
     has a neutron meter on it. But that doesn't mean it
 5
     wasn't emitting neutrons. It might just emit at a
 6
     lower level than we could see with that detector.
 7
          But, again, the main hazard from those, that
 8
 9
     stuff is basically the fact that instead of using
     foil, and I don't know why on earth he didn't use
10
11
     foil. He was using beryllium power and beryllium
12
     powder is acutely toxic. An inhalation hazard. You
13
     do not -- you do not want to disassemble one of
     these things. They're dangerous just from inhaling
14
15
     the beryllium.
16
          Is that it? Okay. Any other questions?
17
          JAMES FUTCH: That's it. That's the beginning.
18
          ALLEN MOODY: That's the beginning. Any other
19
     questions?
          RANDY SCHENKMAN, CHAIRPERSON: So what was the
20
21
     difference between the yellow to the red orange?
22
          ALLEN MOODY:
                        I don't know. It's a peculiarity
23
     of his chemistry.
24
          RANDY SCHENKMAN, CHAIRPERSON: But they
25
     didn't -- it didn't register differently?
```

1 ALLEN MOODY: No, because it's still, it's, 2 it's a purity issue. But it's the same thing. He 3 had some, he had one compound that was, that was green, brown and black. 4 ADAM WEAVER: Those could be different forms of 5 uranium. 6 7 ALLEN MOODY: Because remember, he has no quality control. So it could be that or it could be 8 9 just impurities, various chemical impurities in the stuff that's making it this color versus that color. 10 11 Uranyl, by itself, the uranyl cation is yellow. Most compounds, that's why most uranium compounds 12 13 But, you know, if you have various kind are vellow. of chemical impurities, they could be various other 14 15 colors. 16 ADAM WEAVER: They used to make plates called 17 Fiestaware that were painted with different uranium 18 chemicals and they were green, orange, yellow. 19 JAMES FUTCH: Some blue. 20 ADAM WEAVER: Blue, it could be all kinds of 21 different -- actually, the blue may have contained 22 thorium. You can look it up. It's not the new 23 Fiestaware because we have some of that in my house. My wife likes that. The old stuff. You can buy it. 24

It's probably still on EBay.

25

ALLEN MOODY: He has one. He has a Fiestaware plate. He has a Fiestaware plate. He has, he has samples that are supposedly trinitite. You know, you can't even -- actually, if you go to, and I've been to the, I've been to the Trinity's test site. You can't even get that anymore because they've taken it all away because they didn't want people walking off with radioactive material. So I don't know where -- but he's, he's done a lot of shopping online and I guess you really can get anything on the internet these days.

JAMES FUTCH: Did he -- when NRC informed you guys, did anybody contact the sheriff's office in the county which he resides and make them aware of his existence? Not that he's done anything illegal.

ALLEN MOODY: Actually, we went down there. We had a deputy, I believe the deputy went with our survey person down there because we weren't quite sure of his state of mind. So, you know, a deputy, I believe, went with Kelly when we first went down there and got the material. And then we pretty much decided he was -- I don't know if you call him a harmless crank, it's definitely crank, but it's not really a hazard in terms of violence. We said, okay, fine.

1 So I went back with, with Matt Sinison in 2 November to return the material and to talk with him a little bit and see, you know -- get some, get a 3 4 few answers, basically. NICHOLAS PLAXTON: I was going to say this 5 6 story reminds me, I don't know if you believe it, 7 maybe you read that story about the radioactive boyscout. Do you guys remember that? 8 9 This is like, sounds just like that where the 10 kid, for his Eagle Scout, made a reactor in his 11 backyard. It was actually in my neighborhood when I 12 was in Michigan. I had to go back and look and see 13 when I went to school. It was right outside the school when I went to elementary school. 14 15 ADAM WEAVER: They didn't give him his merit 16 badge. Not that they ever gave him one. 17 NICHOLAS PLAXTON: But the Navy eventually hired him to be on a nuclear sub. 18 19 ALLEN MOODY: Well, I mean, this guy, it would be nice if you could find some constructive way for 20 him to use this enthusiasm. But he's retired. What 21 22 are you going to do with him? 23 JAMES FUTCH: Allen, do you want to hire him? 24 He can come work in your lab. 25 ALLEN MOODY: Yeah. But I could make his

```
business much more efficient. He could actually, he
 1
 2
     could actually be selling pure stuff instead of
 3
     making --
 4
          JAMES FUTCH: Maybe you shouldn't hire him.
          CHANTEL CORBETT: We can make him more
 5
 6
     profitable. Come on in.
          NICHOLAS PLAXTON: Yeah, the radioactive
 7
     boyscout died a few years ago from the radiation
 8
 9
     poisoning.
          ALLEN MOODY: That's a thing, too. If he were
10
     actually doing purification, he would be generating
11
     a lot of radioactive waste because that does --
12
13
          JAMES FUTCH: Did he become -- did he, after
     your talk about safety, did he become more aware of
14
15
     the, the importance of controlling airborne alpha
16
     emitters and radium oxide plain black powder.
17
          ALLEN MOODY:
                        I talked with him about all that.
18
     He is seeing this thing from the point of view of,
     well, it's not, it doesn't matter for me because
19
20
     he's, because he's, you know, he's at that age.
21
     But, you know, I did tell him that some of this
     stuff is hazardous. The dispersal of the stuff
22
23
     especially. Because we -- that is the worst thing.
24
     The worst thing is to have a disbursable alpha.
25
     Because, you know, you get it in, in your lungs and
```

```
it's, you know, it's a very high cancer risk for
 1
 2
     anything, any powder and that -- while it's more
 3
     true of Plutonium or higher activity, specific
 4
     activity nuclides, it's still true of, you know, of
     things like, well, certainly of americium.
 5
                                                  But also
 6
     to some degree, I guess uranium, too.
 7
          RANDY SCHENKMAN, CHAIRPERSON: Does anybody
     have any more questions or should we move along a
 8
 9
     little bit?
          Very interesting. Thank you.
10
11
          (Applause)
12
          RANDY SCHENKMAN, CHAIRPERSON: Okay.
                                                 James.
13
     you're up.
          JAMES FUTCH: Am I up? Okay. I'll sit over
14
15
     here.
          So let's start with 64E-4 because we've talked
16
17
     about that one before.
18
          Adam, I apologize if I have my back to you.
19
          ADAM WEAVER: That's okay.
20
          JAMES FUTCH: But -- so you may recall from a
21
     previous discussion that I think largely Adam and I
     had about laser, laser regulations.
22
23
          ADAM WEAVER:
                        Laser.
24
          JAMES FUTCH: And so we had in, in March of
25
     2017, we did our last rule amendments and changes
```

for the state laser regulations. So the state laser rules are a combination of the device-specific requirements that FDA theoretically requires of all devices manufactured or imported into the U.S. And the user-specific requirements that stem from a voluntary laser safety standard called ANSI Z136. And the Florida regulation that we've had has been around since 1984; we'd periodically updated it.

So we had updated it in March of last year and brought it up to speed with the current version of the ANSI laser safety standard, on the user side, which is ANSI 2014.

Along about that time, there were also some, some changes in philosophy, as often happens in regulatory agencies, and certain viewpoints kind of went out and we were encouraged to move a lot of the regulations into a, into a document incorporated by reference. So we used to have 13 laser rules. Separate rules. 64A-3 and 1 through 13 and 14. And we took all of the regulations that were in 2 through 13 and put them into a document incorporated by reference, which means it's a Word document, has all the same exact language in it. It's just in a document which now resides in a book inside the first regulation. Point 001. Nothing changes.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Obviously, we updated the ANSI reference. Nothing changes.

well, the way that finally percolated into existence is we ended up on the Department of State's landing page, if you will, for this particular rule. And the only rule that still had substance to it was the top one, 64E-4.001, and it had no subject listings to it at all. And all the rest of the rules, all said repealed, repealed, repealed, repealed. So if you don't know anything about laser safety in Florida, as Adam pointed out, not that you don't. You do, obviously. I'm saying somebody who doesn't, like a couple attorneys who contacted us saying, hey, did you repeal all your laser regulations? No, we haven't done that. if you look at that website which is the place where everybody who's looking for regulations looks, who's a lawyer, you would miss the first rule, right, and vou would see the balance of the rest of the page says repealed on it.

This took a little bit of fixing so that we were not erroneously leaving the impression with the entire State of Florida laser users that we no longer had laser regulations.

So we've finally, through Brenda's efforts and

```
1
     my own and a very cooperative person at the
2
     Department of State, ended up -- of course, the
 3
     computer decided it's not working. This would be a
     lot more effective if it would actually open.
4
          while the computer is catching up, basically we
 5
6
     got the Department of State to --
                            It's behind it.
7
          CHANTEL CORBETT:
          JAMES FUTCH: There it is. Thank vou.
8
9
          So now, this is what it looks like.
          So this is the one rule that is still in
10
11
     existence and you can see they allowed us to add
12
     back all the subjects that still exist and are still
13
     regulated by the State of Florida. So all these
     things you see, safe operations, postings, surveys,
14
15
     instrumentation, laser light shows, if you go to
16
     your light show concert, and all the places down
17
     below like this one, definitions where it used to
18
     say repealed, it actually refers you back up to this
19
     regulation for all the current requirements.
     no longer are hopefully left with the impression
20
21
     that the thing has actually been repealed.
                                                  Really.
    what's happened, it's all moved to the top
22
23
     regulation. If you go and look at the top
24
     regulation, you will now actually find everything.
25
     It's where it's supposed to be.
```

```
So what I just described is kind of one of
1
2
     those very laborious but necessary things to make
 3
     sure that people still are aware of laser regs. And
4
     that's all I have to say about Dash 4. Any
    questions?
 5
         ADAM WEAVER: Florida still has laser
6
7
     regulations?
          JAMES FUTCH: Yes, we still do.
8
9
          ADAM WEAVER: Some states don't.
10
          JAMES FUTCH: I know.
11
          ADAM WEAVER: There are some states that don't
12
     regulate lasers right now.
          JAMES FUTCH: We still do.
13
          ADAM WEAVER: Florida still has and is one of
14
15
     the first states that to have it.
16
          JAMES FUTCH: Yeah, it's us, New York, Texas,
17
    Massachusetts, Arizona.
18
          ADAM WEAVER: Yeah.
19
          JAMES FUTCH: Probably one or two others I
20
     can't remember anymore.
          All right. So that's Dash 4. The other one
21
22
     popped up.
23
          All right. So on to Dash 3. So you've
24
     actually got the language in here for a couple of
25
    these I think, Brenda.
```

NICHOLAS PLAXTON: We do.

JAMES FUTCH: So in your packet of materials, after Allen's presentation, we have some proposed, proposed rules and -- all right.

So this first one is 64E-3.003, qualifications for exam. So we began this process a number of months ago. And this section of the regulation that you're looking at, I won't go through all of this, but if you look at the bottom paragraph, this is the section that governs the standards for examination for what we call the basic x-ray machine operator on limited scope and radiography. You heard us refer to this earlier in the context of Kathy asking how someone can find out if we're going to accept their criminal history for licensure as a radiographer.

So this textbook that I'm holding, this is a textbook available from one of the publishers that's been around for a number of years. It is -- it's written to follow one of the national registry's examinations for what they call limited scope radiography. This particular one, this is the 5th edition that we're holding here.

So this section of the regulation has been around for a number of years. And it basically states that the exam that we're using is going to

	3.13,2010
1	follow along these subject areas. Because this
2	actually functions as the educational program for
3	somebody who wants to apply for a basic x-ray
4	machine operator license. And it, thankfully for
5	us, we used to have our own textbook that we
6	produced from 1983 until 2000 something. 2002,
7	2000, somewhere in that vicinity. And, of course,
8	it's kind of hard to write your own textbook,
9	especially when it has 3, 400 pages and as
10	technology and imaging changes, to try to keep up
11	with it.
12	So capitalism and entrepreneurship responded
13	and somebody said, wow, look at all these folks who
14	are taking these exams all across the country.
15	Let's write a book so they can buy it and study for
16	those tests.
17	So when we first put this regulation together,
18	this book I think was
19	KATHY DROTAR: 1st edition.
20	RANDY SCHENKMAN, CHAIRPERSON: 4th.
21	JAMES FUTCH: Well, the 1st edition was
22	completely different authors. But then this company
23	took over and these new authors
24	KATHY DROTAR: Bruce Long.
25	JAMES FUTCH: from the 2nd edition forward.

```
1
     Yeah, Bruce Long. So we updated the standards or
     are in the process of updating the standards.
 2
 3
     notice of rule development was published in --
 4
          BRENDA ANDREWS:
                           January of '18.
          JAMES FUTCH: Strangely enough, just yesterday,
 5
     this rule language was published for comment.
 6
 7
          BRENDA ANDREWS:
                           Really? Okay.
          JAMES FUTCH: I checked this morning.
 8
 9
                           Okay. Finally.
          BRENDA ANDREWS:
                       Long time promulgating rules.
10
          JAMES FUTCH:
11
     And so, basically, once this goes through, we will,
12
     we will again be up to snuff with the appropriate
13
     national practice on this particular examination.
                             James, do you mind if I ask
14
          REBECCA McFADDEN:
15
     a question? You're referring to the basic operator,
16
     correct?
17
          JAMES FUTCH: Yes.
                             If there is a student who's
18
          REBECCA MCFADDEN:
19
     currently enrolled in a program, and they are, you
20
     know, somewhat through that program, it's still
21
     required that they purchase the book?
22
          JAMES FUTCH:
                        No.
23
                             Or is that part of this --
          REBECCA McFADDEN:
24
          JAMES FUTCH: Yeah, the language -- if you
25
     actually read the language, it says -- where is it
```

1 at? 2 Oh, it's not required to REBECCA McFADDEN: 3 provide verification from graduation --4 JAMES FUTCH: Yeah, they don't. REBECCA MCFADDEN: -- the course of study for 5 6 such an applicant is to review the book. Right. So the way the basic is 7 JAMES FUTCH: handled, is they, they can, of course, go to a 8 9 national program. There are a few left. There's not very many. There are a fair number that are 10 11 medical assisting programs that have a basic x-ray 12 component to them. And then I think there's --13 Lynne, help me remember, two or three actual full basic programs around the state? 14 15 LYNNE ANDRESEN: A couple. 16 JAMES FUTCH: Everybody else is going to on the 17 application, self-certify they have reviewed this 18 textbook. 19 REBECCA McFADDEN: Okay. So if they don't --20 let's say they're in a two-year program. It's their 21 first year, they want to go ahead and get their basic. 22 JAMES FUTCH: You'll talking about full 23 24 radiology. 25 REBECCA MCFADDEN: Like a radiology -- they are

```
1
     part of a radiology program. They want to get their
2
     basic after the first year. Do they need to
 3
     purchase the book and have it reviewed in order to
4
     apply for this exam?
                       Doesn't it say or?
 5
          ADAM WEAVER:
6
          JAMES FUTCH:
                       Yes.
7
          ADAM WEAVER: Or equivalent.
                               In the language in the
8
          JAMES FUTCH: Yeah.
9
     text here at the bottom of the page, which is
     64-3.003, see how we changed the number? It says
10
11
     published by any substantial similar course which
12
     provides instruction on each subject listed in the
    ARRT limited scope study guide. So they can use the
13
     3rd edition, they can use the 2nd edition if they
14
15
    want to.
16
          REBECCA McFADDEN:
                             Okay.
17
          JAMES FUTCH: What we're doing --
18
          ADAM WEAVER: Or the text if they can find one.
19
          JAMES FUTCH: Yeah.
20
          REBECCA McFADDEN: Yeah, one of our clinical
21
     instructors asked me to just confirm and I didn't
22
    want to translate.
23
          JAMES FUTCH: No, they don't have to run out
24
     and buy this textbook.
25
          REBECCA McFADDEN:
                             Okay.
```

RANDY SCHENKMAN, CHAIRPERSON: This says the 1 2 4th edition and you're saying you have the 5th 3 edition. JAMES FUTCH: Remember when I said that there's 4 a long process involved? So when we started this, 5 the 4th edition. 6 RANDY SCHENKMAN, CHAIRPERSON: The 4th edition 7 8 on. 9 JAMES FUTCH: Yeah, at some point in the future, maybe after I'm retired, Brenda, you can 10 11 start the --12 I'll be gone. BRENDA ANDREWS: 13 JAMES FUTCH: I'm just kidding. CLARK ELDREDGE: The rule's out for comment 14 15 now. Any one of you can write in. Don't you want 16 to update it to the 5th, and then you can do it 17 right then. JAMES FUTCH: Sure. Six months from now we'll 18 19 have that one finished. All right. So that's standards for limited 20 21 scope practice. And then we will come to -- Chantel's over 22 23 there waiting to jump in on this one. 24 CHANTEL CORBETT: No. 25 JAMES FUTCH: All right. So if you turn over

to what's page three up at the top, it will say full text of the proposed rule 64E-3.002 and then 3.004.

So let me describe this one. So what you're seeing here, and it's very hard to kind of follow along in, in this because you don't see what the previous version looked like, but let me back up and explain.

So these two sections of the rule, one of these is what we call the specialty technologists section of the rule. That's .0034 and .002 is definitions. And one of the definitions in, in the definition section is the practice of radiologic technology. So we're doing two different things here. Related, but they're in two different parts of the regulations.

So several years back, we had a change in our authorizing Statute 468, which allowed us to issue new types of licenses based upon national registries that had other kinds of licenses for imaging or therapy that we did not have. So from 1978 until 2008, I think it was, we had limited scope, we had general radiography, we had nuclear medicine and we had radiation therapy. We didn't have things like CT or mammography or PET, positron emission or any of these other kinds of things.

So when that law changed, it gave us the ability through rule, to enact new kinds of certifications in Florida which matched what the national registries were putting out. At that point in time, we went through rule promulgation and we set up CT and mammography and PET, positron emission. And this section .0034, was what was set up in rule at that point in time.

So in the rule, you have to specify certain things. You have to specify who's going to qualify, which means you have to, you have to recognize the national registry credential. You have to specify what they're going to call themselves, what their titles are going to be, what their initials are going to be on the cards that Dr. Spivey and Gail's group issues. You have to specify what their practice standards are going to be. All those things were done in .0034 and everybody's happy.

We're not talking large numbers. I don't know if you remember the slide from before, but there's, you know, 20,000 plus general radiographers; 2,000 plus nuclear med techs and the number of CT and mammo and PET, all these together number in the couple hundreds. Maybe 500 I think. Something like that. Anybody remember the number? I've forgotten.

Not over a thousand. But, but still very, very important for people who are practicing in those areas and wish they have their licenses at the national level, acknowledged and allowed to practice under those licenses in Florida.

And this affects some professions differently. So, for example, people who are licensed as nuclear medicine techs, they were mostly prohibited from doing any kind of CT for a long time, even though the technologies merged together as PET/CT that we've talked about before, until this law passed. And at this point, they were able to go to the national registry, ARRT, and obtain a CT license, and then come to Florida and provide it to us and then we would issue a CT license. Now they can do full CT on a PET/CT machine or whatever combination of nuclear medicine or CT, whatever they want to do. So everything was fine and everybody was happy.

And then the other national registry, NMTCB, which is a fine registry, came along -- Chantel is our go-between for NMTCB -- and they decided to create their own CT registry. And guess what? We didn't recognize that in Florida law. So we're like, no problem. We'll go back to the statute, and okay. They've got this and this. Oh, wait a

minute. Their practice standard is not one that is for CT by itself. It's CT, it's part of nuclear medicine, and we went to the lawyers and it's like, you've got to have one that covers that.

So it took a while, through the efforts of the Society of Nuclear Medicine and NMTCB -- maybe Chantel had a part in it, I don't know. We had a person come down and talk to us, you remember this from several years ago.

The key thing that we've been waiting on for the past couple years is for the ARRT and the NMTCB -- excuse me, ASRT and the Society of Nuclear Medicine to come together and modify the existing scope of practice that ASRT was using, which we had already recognized years, some years ago, and adapt it to fit both pathways, which they did as of last June.

And we have -- so where we're at with the last, .0034 is, we've recalibrated .0034. It's made it through rule development. Brenda, help me. Where are we? Made it through rule development last month or the month before.

BRENDA ANDREWS: March.

JAMES FUTCH: Okay.

25 BRENDA ANDREWS: March 24th.

JAMES FUTCH: And the language is out. NMTCB has seen this language. ASRT has seen this language. You are seeing this language. It's extremely -- there's nothing controversial. It's basically move some stuff around; reorganize it so that it makes sense that you can now issue based upon this other national registry.

So we're down to, it's out of our hands. It's way out of our hands. It's somewhere above us in the rule promulgation process and should be coming out as a notice of rule promulgation posted on the Department of State's website at some point. And hopefully nobody has substantive changes that need to be made, which would delay it further. And once we get that, we can, we can begin accepting — don't say anything — beginning accepting CT from this other national registry.

At the same time -- and I'll come back to the point about this accepting and issuing CT -- the first half of this is the change in the definition of, in the practice of radiologic technology. So right now, we recognize in the regs, practice standards from ASRT for CT, for mammo, practice standards from ASRT, as soon as this is finished, from, from the other side of the CT world, practice

standards from Society of Nuclear Medicine for PET, 1 2 and that's great. That's all the specialty 3 technologists. But the general radiographers, 4 mostly, and to a certain extent, the radiation therapists and to a much lesser extent, the nuclear 5 medicine technologists, all they've had for a 6 practice standard in Florida for a long time is this 7 definition, this unmodified version of the 8 9 definition of the practice of radiologic technology, which basically says the practice of radiologic 10 11 technology means the performance of activities 12 requiring special knowledge and skills, including positioning techniques, safe operation of radiation 13 equipment and radiation protection. 14 15 So not too specific. And yet, there are actual practice standards that have been in existence at 16 17 the national level for decades for radiography, for 18 full radiography, for nuclear medicine and for 19 radiation therapy. So the second half of what this rule 20 21 promulgation does is adopts those, also, for use in Florida by the rest of the technologists. 22 23 And that's it. Any questions? 24 RANDY SCHENKMAN, CHAIRPERSON: Anybody have 25 comments? Anything?

KATHY DROTAR: I have a question. 1 2 JAMES FUTCH: Go ahead. 3 KATHY DROTAR: So now that NMTCB has recognized it as CT, okay. Now, how does that nuclear med 4 person train for that, because they weren't able to 5 6 do CT. So can they do that now or do they have to 7 be in a program? JAMES FUTCH: So this hasn't changed. The way 8 9 the laws are written in Florida, that person should be doing it underneath the auspices of a program. 10 11 However, it's also possible to do, I forget the 12 percentage -- we've gone through this, I don't know 13 how many times -- there's a certain percentage of the required clinical competencies that can be 14 15 accomplished. Chantel, why don't you tell me what I should be 16 17 telling them. 18 CHANTEL CORBETT: Sorry. The ARRT has the specific list of, of clinical competencies. The 19 NMTCB is based on experience hours. 20 21 KATHY DROTAR: Okay. 22 CHANTEL CORBETT: So they're two different 23 Remember when we discussed all that in multiple sessions. That's the biggest difference. 24 25 So that nuclear medicine techs, especially in

Florida, can be qualified for this without going 1 2 back to school. Because when you're a full-time 3 tech and living an adult life, it's really hard to 4 go back to a two-year school just for that. and the ARRT has always said, technically, we want 5 6 you to do one hundred percent of the scan. technically, you would have to push the button. 7 Now, for me, I've always -- the argument has 8 9 always been from other clients, all the technologists saying, look, if I've done everything 10 11 else, you know, contrast is already in the scope of 12 practice for nuclear medicine techs, so if I do 13 everything else except push the start button, can I count that? And they say no. So we've never been 14 15 able to do that without going back through a school But the NMTCB allows us to do the number 16 program. 17 of hours -- and I believe it's 400 hours -- in a 18 clinical environment. So that does not require 19 actual schooling. 20 KATHY DROTAR: So you're not actually scanning. 21 CHANTEL CORBETT: You could be scanning, yes, as part of a, like a PET/CT. 22 23 JAMES FUTCH: That's what I was trying to say. 24 CHANTEL CORBETT: Yeah, I mean it could be part 25 of that set protocol and you could still be within

```
1
    your rights to do that.
2
          NICHOLAS PLAXTON: So it's like on-the-job
 3
     training then?
4
          CHANTEL CORBETT: Well, it's not -- yes and no.
     I mean, you don't have to be part of a school
 5
6
     program, but you still have to be in that
     environment the number of hours. So if you're
7
     already a PET technologist, and you're doing PET/CT
8
     all day, there are certain parameters where it's
     allowed as part of the set protocol, where you're
10
    not doing standalone CT by itself, because that's
11
     not allowed.
12
13
          NICHOLAS PLAXTON: But once you reach that
     number of hours --
14
15
          CHANTEL CORBETT: Then you have to go take the
16
     exam.
17
          NICHOLAS PLAXTON: Take the exam.
18
          CHANTEL CORBETT: Yeah. And it includes. you
19
     have to have the educational portion as well and
20
     then the experience portion. Then you have to go
21
     take the exam, get the certification and turn that
22
     into the state once it's approved.
23
          KATHY DROTAR: Okay. So under that auspice,
24
     and you're just doing -- that enables you to do
25
     PET/CT?
```

1 CHANTEL CORBETT: Once you get your license, 2 you'll be able to do all CT. 3 NICHOLAS PLAXTON: You can do full CT without 4 PET, if you get your license. 5 CHANTEL CORBETT: Correct. 6 JAMES FUTCH: Not even a PET/CT machine. 7 NICHOLAS PLAXTON: You can work in a radiology medicine department and in nuclear medicine 8 9 department. JAMES FUTCH: I'm not sure how many will do 10 11 that, but you could. 12 CHANTEL CORBETT: Very few will do that because 13 it will be a significant pay cut, honestly. No. I was just worried on --14 KATHY DROTAR: 15 thinking on the other end. If you're, you know, 16 just observing something and not actually doing. 17 CHANTEL CORBETT: None of your new x-ray techs 18 coming out of school have done any CT for the most 19 part. KATHY DROTAR: That's not true. 20 21 CHANTEL CORBETT: Most of the ones in the field 22 do not do CT as a student. The most recent ones, 23 yes, but historically, no. They came out with no 24 cross-sectional anatomy and no CT experience and 25 they were trained completely on the job.

1 KATHY DROTAR: When I was in x-ray school, 2 there was no CT. So, yeah. 3 CHANTEL CORBETT: Nuclears have had 4 cross-sectional anatomy forever, since spec existed, so education wise, you know, I think that they've 5 always been further ahead than that. 6 I was just -- I wasn't worried 7 KATHY DROTAR: about the education. I was just wondering about the 8 ability to actually perform the scans and how much, 9 you know, and advising our nuclear medicine people 10 11 what would their students be able to do. 12 that's certainly appropriate in their curriculum 13 now. CHANTEL CORBETT: Yeah, most people in nuclear 14 15 medicine programs have CT programs. 16 NICHOLAS PLAXTON: The question I had now, what 17 we were talking about, people that are already 18 working, but people that are coming through the 19 nuclear technologist schools now, will get this as 20 they come out, right? They don't have to do 21 anything further. CHANTEL CORBETT: Correct. Most of them 22 already have the --23 24 NICHOLAS PLAXTON: They will take the test when 25 they finish their program.

CHANTEL CORBETT: Yeah. So I know HTC, I know they have theirs completely incorporated into their program where they will actually have -- they are able to sit for the ARRT and the NMTCB both coming out of school.

JAMES FUTCH: Yeah. I would hope that the programs for new folks coming out are incorporating CT as much as possible.

CHANTEL CORBETT: Right. And like I said, the nuke med programs have switched now so they are already sitting for ARRT coming out so they will have the actual exams and the hours. And like I said, some of the bigger hospital groups are very much pushing their techs to get the CT license in order to be able to run a PET/CT.

KATHY DROTAR: Right.

CHANTEL CORBETT: And so that's the little group, where you have these people who are -- have been in jobs for years and years, and basically are being told, you either go get this or we're going to just hire somebody else and you won't have a job. You know, we'll have to switch you over to do something else.

NICHOLAS PLAXTON: They are only doing it by choice. Because in order to run a PET/CT, you

1 wouldn't need it. But technically, many --2 CHANTEL CORBETT: Basically, what they are 3 doing is they are trying to prevent having to pay 4 multiple people and all that kind of thing, too. I don't know, what are you guys doing at 5 6 Florida Hospital? Do you know if they are pushing it? 7 MARK SEDDON: We have the dual -- a lot of 8 9 times we have the ASRT, the RTs running the PET/CT's. That's generally the most common. 10 11 CHANTEL CORBETT: Yeah, so they can a nuclear 12 med tech and an x-ray tech. 13 NICHOLAS PLAXTON: So you have two. 14 CHANTEL CORBETT: Yeah. 15 NICHOLAS PLAXTON: We've just nuclear med techs 16 run ours. They know how to do it. 17 CHANTEL CORBETT: And Beth's place is, too. 18 You've got the bigger groups that do just PET/CT, 19 which is really just CT for continuation correction, 20 then you've got places who are literally doing 21 diagnostic CT's in between every PET as a separate patient. So that's the two different main centers 22 23 where you're going to have it. 24 RANDY SCHENKMAN, CHAIRPERSON: Can I interrupt? 25 we only -- we have less than half an hour and I know

```
1
    we have another presentation. So can we -- did
2
     anybody have any more questions or can we end this
 3
    one and bring --
4
          JAMES FUTCH: One thing that I was curious, you
     guys have the language in front of you. You're
 5
6
     familiar, in your areas, with the practice standards
     that are out there. The national standards. Do you
7
     think we're on the right track? We're moving?
8
9
    Okav.
10
          RANDY SCHENKMAN, CHAIRPERSON: Yeah.
11
          KATHY DROTAR: Yes.
12
          RANDY SCHENKMAN, CHAIRPERSON:
                                         Okav.
13
          JAMES FUTCH: Where we going?
          RANDY SCHENKMAN, CHAIRPERSON:
                                         clark?
14
                           Back to mine. We'll probably
15
          CLARK ELDREDGE:
16
     pick one or two things out and then we'll have to
17
     table the rest, I guess, to next time or we'll be
18
    moving ahead to some of these things without your
19
     comments.
20
                        Do you have the clicker?
          JAMES FUTCH:
21
                           No. he does.
          CLARK ELDREDGE:
22
          JAMES FUTCH: I don't remember where you were.
23
          CLARK ELDREDGE:
                           Just the first one.
                                                Healing
24
     arts. Do you want to start it?
25
          JAMES FUTCH:
                        Sorry.
```

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

CLARK ELDREDGE: Harm to patient. We have in medical event reports, that a medical event, any medical use that results in unintended permanent functional damage, all right, is one thing that is considered a medical event to report. And in these reports, we also after, you know, from the other, the wrong patient, the wrong one, generally, there's some statement from the team, there was no harm to the patient. We just did, you know, a wrong isocenter, we just did this, but there was no harm caused. And I'm assuming that their whole basis for saying there's no harm is they said there's no permanent functional damage to the person. Yet with radiation safety, things we know that there are temporary functional impairments, there's, you know, increased to cancer risk as well from high doses of radiation.

So I was looking at adding a harm to patient and potentially replacing the -- this part with a medical use that results in this, instead of any medical use that results in harm to the patient and adding a definition of harm to the patient. Which includes, first, the permanent functional damage for any -- that was not intended -- is determined by a physician not intended as a expected outcome of the

procedure or treatment.

Temporary functional damage. Again, as determined by a patient, physician that was not an intended or expected outcome. And I was wondering if, there I was thinking of instead of, as we know that therapy is done for curative as well as palliative purposes -- leaving the temporary functional to a palliative or diagnostic procedure. And then any time that there's a dose that's messed up that increases the cancer risk by 50 percent over what was the anticipated from the dose provided from that procedure or some other appropriate percentage. That that would put a limit on, from the prescribed amount of the radiation necessary for the medical procedures.

So limit, you'd have the doctors saying this is how much dose we need. If the alignment of the -- if the procedure was done in such a way that either wrong part was eradiated, other dose limits that if you significantly increase the cancer risk.

Now, of course, within that you could also say that the cancer risk also has a time age limit in it. So if you actually overdose somebody who's not expect to live for three years, you don't have to worry about that part. But if it's a younger person

```
where you're trying to cure them of some disease or
1
2
     diagnose them, you know, that would be a
 3
     consideration of that being harm to the patient that
4
    you've done something that's -- because, you know,
     you'd certainly allow in that test effect
 5
6
     calculation, expected life of the patient versus how
     long it would take effect for the radiation to show
7
     up as a cancer risk.
8
9
          MARK SEDDON: The third one is not going to
     fly.
10
11
                           Not going to fly?
          CLARK ELDREDGE:
12
          MARK SEDDON: There's no way to quantify that
13
     realistically. So I mean, you can -- the first two
     you could put, you know, permanent functional
14
15
     damage. But as far as somehow saying if that
16
     someone's off by ten centimeters within the liver
17
     that you can put down what is the stochastic effect
18
     if it's 50 percent higher. There's no agreed-to
19
     value to it. You can't really look at it and say,
20
    well, looking at, you know, cancer risks from a
21
     certain amount of exposure to tissue, because
     there's --
22
          RANDY SCHENKMAN, CHAIRPERSON: There's no table
23
24
     to go to.
25
          MARK SEDDON: Yeah. There's no table.
```

CHANTEL CORBETT: There's no standard. 1 2 MARK SEDDON: There's no standard. That's 3 really kind of a gray kind decision of -- it's still 4 being researched as type of the secondary effect you're going to have from treatment. 5 6 ongoing. I don't know if you can really put that in a regulation or a definition like that. It would be 7 difficult. It would be hard for any physicist to 8 9 make that determination. For, like, if you have a, like I say, if you 10 11 miss osicenter on a treatment --12 CLARK ELDREDGE: Right. 13 MARK SEDDON: -- how would you --CLARK ELDREDGE: Well, you've got your -- if 14 15 you miss the osicenter, you know what your calculated volumetric dose to the rest of the 16 17 tissues are and how much you overcharged those tissues by. 18 19 MARK SEDDON: Yeah, so the current numbers have actual values. You can look if it's 50 percent 20 21 above the expected dose from planned to the surrounding tissue. But as far as if that is some 22 23 type of an increased risk, that's going to be the 24 part that's going to be difficult. 25 ADAM WEAVER: It's very hard to quantify that

1 and even qualify that. 2 I think if you stay away from MARK SEDDON: 3 that third one, even more the other numbers, you 4 have dose exceeds expected by 50 percent, whatever the number is, you know, more than half. 5 Well, that's actually, that 6 CLARK ELDREDGE: part of the language for the isocenter missed that 7 increased the dose to the non -- increased the dose 8 9 to over the intended dose by 30 percent. 10 MARK SEDDON: The verbiage you had before. 11 That was the language that I CLARK ELDREDGE: 12 had drafted that I forgot to include in this. 13 Right. That would make sense. MARK SEDDON: That would kind of address the 14 CLARK ELDREDGE: 15 situation. 16 MARK SEDDON: Right. That makes more sense. 17 That's easier to quantify than something like this. 18 RANDY SCHENKMAN. CHAIRPERSON: Than a risk. 19 MARK SEDDON: Than just a risk. 20 CHANTEL CORBETT: Across-the-board basis where 21 everybody is going to read it the same, be able to 22 calculate and compare this. 23 Because your risk is very patient MARK SEDDON: 24 dependent. 25 ADAM WEAVER: The second one, organ area, are

you talking about like if you're in a cardiology 1 2 setting and you get the reddening of the skin, that 3 may be more patients? CLARK ELDREDGE: Well, I mean, if you're 4 expecting to -- if you, you know, if you're doing a 5 6 cardiac, if you are doing cath lab or something, you know you're going to be causing a certain dose that 7 you're intending for the procedure, you know what 8 your procedure thing, for some reason, oh, shoot, 9 10 you know, no, we did not intend to call erythema 11 dose and you do, then --12 ADAM WEAVER: The problem with that is, you 13 know, if you had a procedure at the other hospital two days ago, you didn't get reddening of the skin, 14 15 but two days later, he's going to have another 16 procedure and it is going to be reddening, it may 17 not always be from a new facility. 18 MARK SEDDON: Or if you have temporary 19 inflammation because of, for multiple CT scans and 20 then you have --21 ADAM WEAVER: Right. MARK SEDDON: -- cardiovascular type of 22 23 procedures. 24 ADAM WEAVER: Could be other factors could 25 affect the skin.

```
Well, that's part of why the
 1
          CLARK ELDREDGE:
 2
     doctor has to look and say why.
 3
          ADAM WEAVER: But there's no way to track doses
 4
     within the state. They may track it for the
 5
     procedure, but they may not put that into the
 6
     person's record, not have it for a doctor to look
 7
     at.
 8
          MARK SEDDON: I mean, we are tracking.
     facilities are tracking skin injuries from
 9
     interventional procedures. That's kind of something
10
11
     that's --
12
          ADAM WEAVER: But if a patient came from
13
     another facility, from another hospital.
                        Right. It's always like who is
14
          MARK SEDDON:
15
     at fault.
16
          ADAM WEAVER:
                        Right.
17
          CHANTEL CORBETT: Right. I mean, you can have
18
     the cumulative dose.
          MARK SEDDON: Yeah, it's cumulative dose over
19
     six months.
20
21
          ADAM WEAVER: Right.
          MARK SEDDON: You know, if you happen to be the
22
23
     one facility that captures it, and all the other
24
     procedures are performed, no one else captures it,
25
     so who really is the -- if you don't tie this to a
```

```
medical event, it's like, well, is it, you know --
1
2
     he had what would be a fairly low-dose CT scan, but
 3
     that caused an effect because this patient had
4
     previously had, you know, all these other cardiac
     interventional procedures.
 5
          ADAM WEAVER: He could've been in a CT or
6
     could've had a nuclear medicine procedure before
7
     that. Who knows. Acupuncture is something else
8
     that could cause reddening of the skin.
9
          MARK SEDDON: Yeah. A long-time medications
10
11
     cause skin sensitivity.
12
          ADAM WEAVER: Right. Allergic reactions.
          MARK SEDDON: Is that the intention to have,
13
     this be used for some type of reporting for
14
15
     diagnostic procedures?
          ADAM WEAVER: Putting it in the definition.
16
17
          CLARK ELDREDGE:
                           Putting it in the definition,
18
    yeah. As I say, it's trying to figure out if what,
19
     you know, again, looking for more bases of what,
    what is harm versus the blanket statements we're
20
21
     being provided in medical, in therapy -- or excuse
22
    me, medical event reports. And it's like, yeah.
23
     It's almost as vague on their part with no standard
24
    of what they meant by that, you know.
25
          MARK SEDDON:
                        Right.
```

1	CLARK ELDREDGE: And so
2	MARK SEDDON: I think they may throw that a
3	lot of times, they put the statement of no harm
4	because of the, one of the criteria for medical
5	reporting is permanent functional damage.
6	CLARK ELDREDGE: Right. I think that's what
7	they're limiting it to.
8	MARK SEDDON: They're saying we don't have
9	permanent functional damage.
10	CLARK ELDREDGE: For damage, but they are not,
11	yeah.
12	CHANTEL CORBETT: You're saying it's not
13	intended or expected.
14	CLARK ELDREDGE: Right.
15	CHANTEL CORBETT: Some of the things,
16	obviously
17	CLARK ELDREDGE: You know you're going to
18	CHANTEL CORBETT: It's expected.
19	CLARK ELDREDGE: Right.
20	RANDY SCHENKMAN, CHAIRPERSON: Well, the
21	patients also sign a consent form and a lot most
22	of the consent forms have some of the known side
23	effects in them.
24	CLARK ELDREDGE: Right. And that would, you
25	know, if it's a known side effect, then it's not

1 a --2 RANDY SCHENKMAN, CHAIRPERSON: It's not an 3 intended or unexpected, yeah. 4 CLARK ELDREDGE: Right. 5 RANDY SCHENKMAN, CHAIRPERSON: So what does 6 everybody think of this one? Do you like the first two paragraphs and not the third? All three? One? 7 Definitely not three. 8 KATHY DROTAR: 9 MARK SEDDON: Yeah. I don't think three is something that would be easily defined. Number one 10 11 definitely makes sense. ADAM WEAVER: I think number two needs work. 12 13 MARK SEDDON: Two might need more work. Including diagnostic procedures, that becomes --14 ADAM WEAVER: It's so wide organ or whole 15 16 system. 17 MARK SEDDON: Yeah. Because now suddenly, if 18 you use this logic, you're now creating a brand-new 19 category of medical events in the interventional 20 world, which never in the past had been medical 21 events. Because you're seeing diagnostic procedures 22 that result in some type of temporary skin damage. 23 They're now considered a medical event, which is 24 something that's brand new, no one else has done 25 that before.

Unless it's an anticipated 1 CLARK ELDREDGE: 2 side effect of the procedure or --3 CHANTEL CORBETT: I think the problem with 4 interventional, a lot of these times these cases are not expected to get complicated; sometimes they do. 5 6 MARK SEDDON: Yeah, right. Because they go in 7 and they start the procedure and it --8 CHANTEL CORBETT: It changes. 9 RANDY SCHENKMAN, CHAIRPERSON: And some -- they 10 find things they didn't expect to. 11 ADAM WEAVER: They find something else blocked and it takes a lot more time. 12 CLARK ELDREDGE: Time, right. But at that 13 point, wouldn't that be just a continuation of 14 15 the -- if the procedure has to go longer, well, 16 that's the risk. They know, they say, okay, we have 17 to run through this longer through the block, that 18 means that would be an anticipated effect. 19 MARK SEDDON: Right. 20 CHANTEL CORBETT: I guess it depends on what 21 your definition of when they're anticipated. Like. 22 do we get to change that anticipation throughout the 23 case? 24 MARK SEDDON: Because at the end of the case, 25 they know the dose they gave.

I mean, I think that's part of 1 CLARK ELDREDGE: 2 medical practice is your anticipated outcome changes 3 throughout the treatment of a patient. 4 CHANTEL CORBETT: Right. That's why I'm saying, that definition is hard --5 6 Number two is really hard to --ADAM WEAVER: 7 CHANTEL CORBETT: -- as is. CLARK ELDREDGE: All right. Work on it. 8 9 Next. Okav. Vendors. Our statute that register -- that requires the registration of 10 11 vendors just says we -- the state shall register 12 them and that's it. Okay? So, basically, 13 everything we do with the registration is voluntary on the part of the registrant since we have no real 14 15 standards in the statutes. 16 we have plenty of people in our list that have 17 gone away and closed up and as it is, they're still 18 registered. So trying to set a date for how long 19 these vendors are registered. That they have to 20 update us and let you know to keep the registration 21 is part of the purpose of this. 22 So the current language in our rule just says 23 who's supposed to register, who installs machines, service of machines, and the servicing includes 24

fixing machines and all the components and adding

25

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

them and the form they have to respond with.

So what we're looking at saying is, okay.

Actually, I rethought this again. It probably doesn't need to be -- valid may not be appropriately, may not actually be legally supported by or something about the fact that you can only be listed as registered. I might have to change that language rather than valid to something like you can only be listed for two years as registered.

And that they have to resubmit every time they want to do an update, they fill out another form so we know they are still out there and still a legal business. To help the community, since our registration doesn't -- currently, we don't really ask any question of what they actually do. It says, are you servicing machines, are you selling machines? But that doesn't help the actual medical community or the -- the people out there and us know what the service is through our registration. That, to me, seems like it's not benefiting everybody else in the state who's using these people if you don't know what they actually are there for. Because we do get guestions from the public. How do I find somebody who services dental machines or this machine or that and we go, our only choice is going

to say, well, look, at the yellow pages, but if we 1 2 ask them what services they provide a little more 3 specifically, we'd have that as a resource for them. 4 So we'd ask them what categories, according to our listing, do you service, do you sell. Are you 5 actually a specifically authorized vendor or for a 6 7 particular brand; that type of thing. So that would also potentially give people some sort of, you know, 8 9 and as well as for the services. So this is just a kind of who are you, where 10 11 are you, and remind us every two years to make sure 12 you're out there or we pull you off the list. 13 Comments? ADAM WEAVER: I don't know how this is going to 14 fly through your -- it's like the state's going to 15 16 put out a list and say, here are the vendors. 17 CLARK ELDREDGE: The list is out there. ADAM WEAVER: It's out there now? 18 19 CLARK ELDREDGE: It's out there now. It is a legal -- we have to collect that. It's in the 20 21 statute. People who do it have to give us this. ADAM WEAVER: It's available on your website 22 23 that you can --24 CLARK ELDREDGE: You can get it by request. We 25 don't --

I'm assuming that there's 1 CHANTEL CORBETT: 2 some caveat that says we're not, you know, we're not 3 recommending. CLARK ELDREDGE: We don't recommend and we 4 still don't recommend anybody. But before anybody 5 6 can walk into anybody's facility here to touch their radiation machines, they have to be registered with 7 Before they can walk in to sell you one or call 8 you on the phone, they are registered with us. 9 there's no --10 11 ADAM WEAVER: I mean, yeah. 12 I'm just trying to make CLARK ELDREDGE: 13 that --ADAM WEAVER: You can buy x-rays now off of 14 15 EBay. 16 Which again, it's illegal for CLARK ELDREDGE: 17 them in Florida to sell you off EBay, but that's not 18 going to stop them. 19 ADAM WEAVER: Right. 20 RANDY SCHENKMAN, CHAIRPERSON: This also 21 doesn't specify whether after two years, they're 22 going to have to repay for their registration. 23 CLARK ELDREDGE: There is no fee in the 24 statute. They just have to register. We don't 25 charge them for anything for that part of it.

```
that's the next slide, which we'll stop after the
1
2
     vendors so we can move on to the next thing.
 3
          CHANTEL CORBETT: That would be the down side
4
     for the state as far as work load goes.
          CLARK ELDREDGE: It's an unfunded mandate right
 5
6
     now.
7
          CHANTEL CORBETT:
                           Yeah.
          CLARK ELDREDGE: So should we be asking for
8
9
    more information that you all can use about them
    when they register? It's a loaded way to say that.
10
11
     I apologize.
12
          ADAM WEAVER: Especially for the service part.
13
          CHANTEL CORBETT: Yeah, it depends on how
     detailed you wanted to get on that, because --
14
15
                           It will be simple. I mean, we
          CLARK ELDREDGE:
16
     can't put that much detail for our side of it.
     it would be, you know, at least you'd know that, we
17
18
     already know Henry Shine sells dental -- services
19
     dental, but at least it actually told us officially
20
     it's dental, not just service an x-ray machine.
21
    we know that they represent --
22
          ADAM WEAVER: What type of dental machine?
                                                      IS
23
     it just an intraoral?
24
                           Right. We have our list of
          CLARK ELDREDGE:
     devices.
25
```

1	ADAM WEAVER: The CT ones that they're pushing.
2	MARK SEDDON: So is there a caveat, like, for
3	service providers or installers that you guys would
4	say that, you know, we're not blessing these people
5	saying they're qualified?
6	CLARK ELDREDGE: We have no way not to. That's
7	the other part of it. By having them offer us a
8	little more information that is a way of them kind
9	of proving their qualifications, especially if they
10	say, I've been trained and authorized by Bob's or
11	GE, Logic to work on.
12	MARK SEDDON: Right.
13	CHANTEL CORBETT: So what's the current
14	requirement to be accepted? Just that you submit a
15	form?
16	CLARK ELDREDGE: Here. You want to fill out
17	the form, you can be registered today. Give me the
18	piece of paper and you're gold. So that's
19	CHANTEL CORBETT: No extra work.
20	ADAM WEAVER: I can install x-ray machines
21	then.
22	CLARK ELDREDGE: So it's a, it's a this is
23	just a way to give people more tools to be able to
24	determine who they're dealing with.
25	CHANTEL CORBETT: Well, I mean, if the list was

more detailed, in the end, it might reduce the 1 2 amount of questions you guys get at the state. So 3 that would help them kind of guide to fewer people 4 to call maybe. But redoing it every two years would increase the work, from what I'm hearing. 5 6 ADAM WEAVER: You're relying on these people being totally honest with you, saying I'm qualified 7 to work on this GE machine. Actually, it was the 8 9 last model. CHANTEL CORBETT: But that's the way it's been. 10 11 MARK SEDDON: It already exists. You've got to 12 figure out how to clean it up; make it better. 13 CLARK ELDREDGE: Make it better for everybody involved. 14 15 CHANTEL CORBETT: Right. 16 They can get people who want CLARK ELDREDGE: 17 their specific business to call them and not deal 18 with people who don't and --19 MARK SEDDON: You can't make it go away because 20 it's the statute. So you have to, right? 21 CHANTEL CORBETT: I mean, basically, as long as 22 the statement is on there, please do your due 23 diligence concerning their qualifications, blah, 24 blah, blah. That's going to already be there, so, 25 yeah.

1	CLARK ELDREDGE: That totally is there.
2	ADAM WEAVER: This is not a verified list.
3	RANDY SCHENKMAN, CHAIRPERSON: Okay. So is
4	there anybody who does not want this?
5	(No response)
6	CLARK ELDREDGE: I think the consensus
7	approves.
8	RANDY SCHENKMAN, CHAIRPERSON: Not one. Okay.
9	Okay. It's 3 o'clock. So we're supposed to be
10	ending and Brenda still has more to talk about. So
11	what does everybody want to do?
12	ADAM WEAVER: I was wondering maybe if you
13	could send these changes.
14	CLARK ELDREDGE: We can e-mail you.
15	ADAM WEAVER: Is that something you can do?
16	RANDY SCHENKMAN, CHAIRPERSON: That would be a
17	really good idea. And then we can give you our
18	comments.
19	CLARK ELDREDGE: Okay.
20	RANDY SCHENKMAN, CHAIRPERSON: Is that okay
21	with everybody?
22	MARK SEDDON: Yes.
23	CLARK ELDREDGE: Sounds good to me.
24	RANDY SCHENKMAN, CHAIRPERSON: Brenda? Your
25	turn.

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

My turn. Okay. BRENDA ANDREWS: My part is pretty brief. If time permitted, I wanted to talk more about our travel issues because I am trying to streamline and figure out where we're having our glitches and our problems and those who have been successful, just to get an idea of if it's all the system or if it's maybe passwords that aren't being put in to the standard or if it's -- just trying to find out where the problems are. But that will have to wait until another time. It's taken up a lot of your time and my time to try to figure out this Some people are getting approved; some svstem. people are not.

I want to talk about the communication between myself and council members. I feel like there's a lot of times that I can't get through or we don't communicate back and forth so that I can help get things done that need to be done. So that's -- but that's going to have to wait for another time.

The main thing I really wanted to talk about was the appointments and reappointments. As we have discussed, we have a new member, Dr. Plaxton, and we're happy to have him on board for another -- for a three-year term. His term will end on March 7th, 2021.

Also, Dr. Cognetta was reappointed. He was not able to be with us today because of a prior -- a commitment, but he has been reappointed. And the person who is not registered as a radiologist, you know that long term. The long one. But he will be with us probably with the next meeting. His term will also end on March 7th, 2021.

We have nine council members whose terms are going to end July 9th. And most of you I have heard from who want to be reappointed or apply for reappointment. You know, we have discussed how the system works now. There has been no change in the fact that we don't automatically reappoint people. They have to go through the same vetting process and the opportunity is opened up through the societies for nominees.

If you do tell me that you want to be considered, that is included in the letter that goes out to the societies and we let them make those decisions.

So right now, I will be sending out society letters, probably between the end of this week and next week. My goal is to have everybody vetted by the second week in June -- which is a quick turnaround time -- but since the Surgeon General's

office likes to have at least 15 days to a month to 1 2 review everything and we have quite a few council 3 members right now that are coming up -- it's usually 4 one or two. This is probably the biggest group we've had for reappointments ever. 5 6 So I want to thank you all for your submissions and I will be processing those between this week and 7 next week. Any questions on that? 8 9 The other part we have to do is to plan for the next -- the upcoming meeting. In the back of your 10 11 packages are calendar -- oh, one more thing. I have 12 included in your packages the updated list of council members. That includes Dr. Plaxton on here 13 and Dr. Cognetta's reappointment. So if anything 14 15 has changed or anything needs to be added for this, please let me know. You just send me an e-mail. 16 17 So we have calendars for September through 18 November. It just gives us three months out to look 19 at. 20 RANDY SCHENKMAN, CHAIRPERSON: What's your 21 preference? 22 BRENDA ANDREWS: We've been doing them in 23 September and May. It seems to be a good time -- a 24 good month for everyone. So we can start with

September to see if there's a date in there that

25

1	
1	looks good for everyone.
2	Labor Day is on the 3rd, which is a Monday, and
3	then we have the 11th, 18th and the 25th of
4	September.
5	RANDY SCHENKMAN, CHAIRPERSON: So does anybody
6	have any dates they know they're not going to be
7	available on those dates?
8	STRATIS LAGOUTARIS: Okay with me.
9	RANDY SCHENKMAN, CHAIRPERSON: Okay. So what's
10	best for you guys? Does it matter?
11	BRENDA ANDREWS: It won't matter to me.
12	RANDY SCHENKMAN, CHAIRPERSON: Okay. Does
13	anybody have a preference?
14	CHANTEL CORBETT: How about the 18th?
15	BRENDA ANDREWS: The 18th, mid month? Okay.
16	CHANTEL CORBETT: Why not.
17	BRENDA ANDREWS: September 18?
18	RANDY SCHENKMAN, CHAIRPERSON: Is that okay
19	with everybody, September 18th?
20	BRENDA ANDREWS: Okay. Very good.
21	RANDY SCHENKMAN, CHAIRPERSON: Okay.
22	BRENDA ANDREWS: Thank you.
23	RANDY SCHENKMAN, CHAIRPERSON: Okay. So do we
24	have a motion to adjourn the meeting?
25	WILLIAM ATHERTON: So moved.

```
1
                          Second.
          KATHY DROTAR:
 2
          RANDY SCHENKMAN, CHAIRPERSON:
                                           Okay.
                                                  Have a
 3
     great day, everybody. The meeting is adjourned.
                            Thank you.
 4
          BRENDA ANDREWS:
          (Proceedings concluded at 3:03 p.m.)
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
```

1	CERTIFICATE OF REPORTER
2	STATE OF FLORIDA:
3	COUNTY OF HILLSBOROUGH:
4	
5	I, RITA G. MEYER, RDR, CRR, CRC, do hereby certify
6	that I was authorized to and did stenographically report
7	the foregoing proceedings and that the foregoing
8	transcript is a true and correct record of my
9	stenographic notes.
10	I FURTHER CERTIFY that I am not a relative,
11	employee, attorney or counsel of any of the parties, nor
12	am I a relative or employee of any of the parties,
13	attorneys or counsel connected with the action, nor am I
14	financially interested in the outcome of the action.
15	DATED this 4th day of June, 2018.
16	DATED CHTS Tell day of Salle, 2010.
17	A Muss
18	1 and 1 may
19	RITA G. MEYER, RDR, CRR, CRC
20	
21	
22	
23	
24	
25	

\$	141:4 181:17 1801 16:24	226 113:12,14,21 114:1	458 77:3,12 466 92:4,5	64E-5.1601(8) 31:3
	181 3:16	231 115:25	468 23:1 145:17	64E-5.345 32:8
\$1000 35:13	183 3:17	235 113:14,21	468.301 95:1	67 3:10
\$102 98:21	186 113:14,15	116:1	468.3101(m)	
\$1500 110:1	·	237 116:11,16	91:21	7
\$2000 110:2	18th 181:3,14,15, 19	24 32:14 109:20 126:16,19	4th 140:20 144:2, 6,7	7 3:5 40:25
0	19 4:20	241 116:10,16,17	0,7	7th 178:24 179:7
001 135:25	19,000 53:14	117:12,13,19 127:22	5	
002 145:10	1950s 46:6	24th 148:25	5.502 78:25	8
0034 145:10	1974 23:2	25th 181:3		8 3:6
146:7,18 148:19	1978 145:20	28 3:9	50 28:23 30:15 32:1 160:10	80 73:10 115:4
	1983 140:6	2nd 140:25	161:18 162:20	117:14 128:8
1	1984 135:8	143:14	163:4 500 146:24	9
1 135:19	1:32 104:25		502 78:25	-
10 31:13 39:19	1st 140:19,21	3		9-26-17 7:20
128:12	2	3 40:24 138:23	59-year-old 41:10	9/26/17 3:5
102 98:25		140:9 177:9	5th 139:21 144:2,	90 47:5
105 3:12	2 135:20	3.004 145:2	16	91 39:18 47:1 52:9
107 109:11 112:8	2,000 53:12,13	30 27:22 30:12		95 48:17
11th 181:3	146:21	31:15 39:21 41:1 42:22 80:13 83:1	6	9th 179:9
12 3:7 76:10	20 30:13 31:17,24	163:9	6 106:1	
81:14,15 98:19	20,000 53:14 146:21	30,000 47:4	6,000 55:23	A
125 73:10 86:10	2000 140:6,7	33 3:9	60 41:2 46:25	AAPM 29:8 71:10
12:10 104:24	2002 140:6	3:03 182:5	65:22	Abbason 54:4,5
13 135:18,19,21		3rd 143:14 181:2	64-3.003 143:10	ability 26:24
133 3:14	2008 145:21		64A-3 135:19	50:21 108:1 146:2
139 3:14	2013 41:10,14	4	64E 28:18	155:9
14 135:19	2014 135:12	4 3:4 138:4,21	64E-3 3:14	abnormal 86:16
15 32:21 34:19,20, 22 40:15 44:18	2014-15 40:25	40 81:20	64E-3.002 145:2	absolute 113:5
65:15,20,23 66:3,	2015-16 41:1	400 140:9 152:17	64E-3.003 139:5	absorbed 123:8
4,5,11 128:12 180:1	2016-17 41:2	404 92:14 93:1	64E-3.011 24:24	AC 53:3
180:1 15-day 34:17	2017 32:5 106:13 134:25	404.162 35:11	64E-4 3:14 134:16	accelerator 30:24 31:1,5
17 52:5	2021 178:25	435.04 28:2	64E-4.001 136:7	accept 90:5
178 3:15	179:7	44 28:18	64E-5.101 92:23	139:14
18 23:24 40:15	21 12:14	446 85:6 90:16	64E-5.101(85)	accepted 89:24 175:14
52:5,6,9 59:1	22 3:8	45 66:5	31:2	1

Index: \$1000..accepted

ADVISORY COUR 5/15/2018
accepting 149:15,16,19
access 25:5 49:20 50:25
accident 30:17
accomplished 13:9 151:15
accredited 24:4 29:9
accurate 78:16, 18
accusations 42:3
accusing 55:5
acetylene 120:6
acids 107:17 121:19 125:13
acknowledged 147:4
ACR 76:15,23
Across-the- board 163:20
act 42:9 46:12 47:19 61:9,11,19 63:14,21 97:9
acted 26:18,20 27:24
actinides 119:5
action 25:19 27:23 36:14 38:11 39:11 40:8 44:1, 11 46:23 47:10, 16,22 53:24 61:14 68:22
actions 25:25 32:25 34:2 35:1, 16,22 38:12
active 39:9,12
activities 150:11

activity 27:18 40:11 48:15 63:18 113:4,5 134:3,4

acts 25:1

actual 25:18

CIL ON RADIATION	PROTECTION
37:25 59:25 83:18 96:25 97:8 108:1 111:19 120:25 142:13 150:15 152:19 156:12 162:20 171:17 acupuncture 84:11 166:8	addressed 15:10 adjourn 3:16 181:24 adjourned 182:3 adjudication 49:12,15 administered
acutely 129:12	30:13 31:13,15,16
Adam 7:6 75:4,14 76:8 79:18 81:19 82:1,3,19 88:16,	administration 12:25
20,23 89:5,9,14 92:21 94:5,13 96:4,8 101:22 102:5,13 103:4,19 104:3,8 106:2	administrative 25:7 28:10,19 30:10,21 34:14 35:13 36:3 38:14 52:12 54:22 65:10 68:21 71:9
109:1 123:24 124:5 126:21 128:3,14,19,23 130:5,16,20 132:15 134:18,19,	administrator 4:14 5:6,21 6:11 9:11 17:16 60:22 105:13
21,23 136:11 138:6,9,11,14,18 143:5,7,18 162:25 163:25 164:12,21,	administrators 6:13 admit 55:19
24 165:3,12,16,21	admitted 51:3
166:6,12,16 168:12,15 169:11	
170:6 172:14,18,	admitting 55:18
22 173:11,14,19 174:12,22 175:1, 20 176:6 177:2,	adopts 150:21 Adrian 13:10 18:20
12,15	adult 152:3
adapt 11:4 148:15	adversely 24:7
add 43:17 47:21	advertise 72:3
60:4 65:2 84:24 87:14 92:21 137:11	advertised 72:7 110:21
added 52:6	advice 58:12
180:15	advise 57:24
adding 87:25	advised 118:8
93:12 128:23 159:18,22 170:25	advising 155:10
addition 9:2 12:7	advocate 17:4 85:21
additional 14:20 26:8,9 40:7	affect 11:1 50:7, 25 164:25
address 163:14	affected 24:7

addressed 15:10
adjourn 3:16 181:24
adjourned 182:3
adjudication 49:12,15
administered 30:13 31:13,15,16
administration 12:25
administrative 25:7 28:10,19 30:10,21 34:14 35:13 36:3 38:14 52:12 54:22 65:10 68:21 71:9
administrator 4:14 5:6,21 6:11 9:11 17:16 60:22 105:13
administrators 6:13
admit 55:19
admitted 51:3
admitting 55:18
adopts 150:21
Adrian 13:10 18:20
adult 152:3
adversely 24:7
advertise 72:3
advertised 72:7 110:21
advice 58:12
advise 57:24
advised 118:8
advising 155:10
advocate 17:4 85:21
affect 11:1 50:7, 25 164:25
affected 24:7

Index: a	cceptinganalyzir
affects 147:6 afford 17:10 afternoon 3:11 9:10,22 119:10 age 23:24 133:20 160:22 agencies 29:6 30:1 135:15	124:3,6,19,22 125:19,22 126:1, 13,22 127:7,11,21 128:1,4,7,16,20, 25 129:18,22 130:1,7 131:1,16 132:19,23,25 133:10,17 Allen's 104:17 139:3
agency 35:8 agenda 3:1 7:18 105:2 agents 121:22 agree 52:15 68:20	Allergic 166:12 alleviated 20:7 allowed 137:11 145:17 147:4 153:10,12 allowing 94:19
agreed-to 161:18 agreeing 99:23 Agreement 9:17	alpha 112:6 133:15,24 altogether 66:5
ahead 19:12 67:5 70:23 82:10,22 118:17 142:21 151:2 155:6 158:18 air 4:25 6:22 12:14,15,16 78:14	AM/BE 108:22,24 117:22 amateur 107:3 amazed 115:2 amend 11:5
108:10 115:21 124:9 airborne 133:15 airports 71:2 Alamos 111:7	amendments 134:25 americium 108:22 114:18,23, 24 116:12,16,17 117:12,13 122:20 126:2 127:14,19,
alarming 115:23 alcohol 27:7 alignment 160:17 all's 44:22	22 129:2 134:5 ammonium 115:13 amount 77:6 160:14 161:21
allegations 48:14 Allen 9:10 52:25 67:12 98:5,10 103:9,16,21	176:2 amounted 117:16 amounts 127:4 analysis 37:21 69:16 77:17 81:5
105:8,12,17,22 106:3 109:2	83:21

119:14,22 120:8,

10,20 121:1,4,7,

10 122:11,14,16

analyze 78:4

analyzing 104:2,

174:11 authors 140:22, 3 area 10:25 13:10, assume 97:14 11 14:1,2,8 17:17, 118:23 121:19 23 **anatomy** 154:24 apparently 124:23 18,20 23:23 38:16 105:23 106:3,23 auto 50:12 155:4 51:24 110:14,18 107:1 119:14 assumed 99:21 and/or 29:21 111:16 120:21 automatically 125:11 126:4,8 48:22 121:10,11,17 assuming 82:4 96:6 179:13 163:25 159:11 173:1 Applause 15:23 Anderson **awake** 67:13 134:11 areas 23:13 56:3 106:16 112:10 assurance 3:7 aware 107:2 63:22 64:18 140:1 applicant 24:25 9:24 12:3 37:6 Andresen 5:9 131:14 133:14 147:3 158:6 25:11 57:19 142:6 22:5,6,8 36:22 **ASTRO** 29:8 138:3 43:4,17,23 51:20 applicant's argue 94:1 awful 48:22 Atherton 7:10 52:8 56:8 59:23 21:15 arguing 55:17 73:7 75:10.15 65:2,22 142:15 **aye** 104:11,12 applicants 23:19 76:13 80:19 81:9 argument 152:8 **Andrew** 58:25 56:25 99:5,9 103:14 **Arizona** 138:17 127:19,24 181:25 В Andrews 5:16 application arm 76:6,7 athletic 70:2 72:2 6:17 105:3 106:1 14:18 15:11 22:19 Bachelor's 12:22 141:4,7,9 144:12 23:21,25 24:17 atmosphere arrangements 58:6,7 142:17 148:23,25 178:1 **back** 11:24 14:6 20:4 13:7 180:22 181:11,15, 15:2,22 16:12 applications attention 13:12 17,20,22 182:4 arrow 114:21 17:25 18:10 19:5, 14:12 16:4 20:1,7 108:19 116:11 14 20:10.17 22:22 anecdotal 22:15 24:13 24:6 25:25 26:10 **ARRT** 16:12 **attitude** 118:12 102:11.22 applied 79:20,21, 34:16 36:19 40:25 22:17 25:21 26:17 **ankle** 91:4 23 99:16 attorney 63:17 41:1,10,14 45:19 27:25 39:1 40:12 48:1.3 53:5 56:4 anonymous 65:3 **apply** 57:6 58:13, Attorney's 54:19 42:15,17,21,23 59:16 62:3 64:21 25 124:10 140:3 47:12 48:14 57:3 **ANSI** 71:10 attorneys 38:6, 67:14 69:18 74:7, 143:4 179:10 143:13 147:13 135:6,11,12 136:1 10 39:23 51:7,8 12,14 77:13 80:21 148:11 151:18 applying 58:20 52:2 136:13 83:1,11 86:15 answering 19:22 152:5 156:4,11 80:8 87:14 93:18 95:6 24:19 50:2 audit 80:4 **arts** 30:3 69:11,14 97:22 99:6 105:14 appointments answers 132:4 79:2,17 80:7 82:6, augmenting 106:12 109:24 178:21 8 83:16 84:4,5,16, 14:23 114:22 115:5,8 Anthony 6:18 approach 45:16 17 85:1,12 87:2 122:1,3,12 124:14 12:3,4,5 15:20 **August** 109:13 88:1 89:19 93:1,8, 126:25 127:9 16:10,21 17:4 appropriately 9,11,16,17,24 **auspice** 153:23 132:1,12 134:18 171:5 anti 107:21 100:5,23 101:1 137:12,18 145:6, auspices 151:10 158:24 Approval 3:5 16 147:24 149:18 anticipated authority 26:19 152:2,4,15 158:15 aspects 38:7 160:11 169:1,18, approve 7:19,20, 28:8 58:12 61:14, 178:17 180:10 21 170:2 21 104:5 **ASRT** 148:12,14 17 88:25 91:3 background 149:2,23,24 157:9 anticipation approved 57:5 94:15 102:4,23 12:12,22 13:14 169:22 153:22 178:12 assessment authorization 24:16,21 109:8,19 112:25 anybody's 173:6 approves 177:7 35:10 83:19 126:11,13,14,15 assigned 37:10 anymore 61:12 approximate authorizations backgrounds 64:13 118:14 23:9 24:10 83:18 assistance 56:2 131:6 138:20 approximately authorized 28:17 backside 72:21 assistant 7:5 apartment 109:3, 28:23 39:18 172:6 175:10 91:25 backyard 132:11 6 121:5,8 **April** 106:1,2 authorizing assisting 142:11 **bad** 102:23 110:2 apologize 53:3 145:17 aqueous 123:8 Associates 7:5 82:23 134:18 badge 132:16

Index: anatomy..badge

bagged 122:2	Becky 4:13 18:22	130:4 133:16	brain 61:10	17,22 6:8,9 8:5,
bags 112:12	began 139:6	blah 176:23,24	brains 103:7	13,16,23 10:10 11:4 18:20 22:16
122:3	begin 56:6	blanket 166:20	branch 63:21	26:10,11 28:16,21
Baker 42:9	149:15	blessing 175:4	brand 168:24	32:5 36:17 52:2
Bakersmith	beginning 10:24	block 169:17	172:7	53:18 90:1 108:20
61:23	45:21 68:7		brand-new	business 5:14
balance 111:14	129:17,18 149:16	blocked 169:11	168:18	12:17,25 32:12 133:1 171:13
120:23 136:19	believes 32:16	blow 42:7 124:9	BRC 40:2 88:22	176:17
Baptist 5:25	bench 111:10	blue 130:19,20,21	117:16	businesses 17:8
bar 51:10	120:2	board 6:5,19 7:9	break 72:19	button 113:11
base 83:9	beneficial 20:14	9:3,19 12:10 16:2 17:21 26:18	breakdown	152:7,13
based 36:5 38:12	benefit 68:3,16 78:19,23 81:4	63:12,13 64:4	65:19	buttons 22:2
71:9 145:18 149:6	84:22	99:6 178:23	breast 6:2	buy 130:24
151:20	benefiting	boards 6:11,20	Brenda 5:16 6:17	140:15 143:24
baseline 65:5	171:20	12:7,21 13:2 21:6 38:8 92:20 94:4	105:3 106:1 138:25 141:4,7,9	173:14
bases 125:13 166:19	beryllium 108:23	Bob's 175:10	144:10,12 148:20,	buying 124:25
	117:23,24 126:3 128:23 129:2,11,		23,25 177:10,24 178:1 180:22	buys 107:8
basic 58:14,25 67:19,20 107:18	126.23 129.2,11,	bodily 77:18	181:11,15,17,20,	
121:19 125:12	Beth's 157:17	body 69:5 75:21 76:20 78:7,10	22 182:4	
139:11 140:3 141:15 142:7,11,	big 18:5,13 45:15,	81:19 82:3 95:13	Brenda's 136:25	cabinet 97:3
14,22 143:2	19 46:18 50:19	97:12	Brian 4:8	calculate 163:22
basically 11:11	96:24 106:3	bone 76:16 85:16	bring 13:2 104:22	calculated
12:20 13:18 23:5	123:13	book 135:24	158:3	162:16
24:17 27:9 37:1 39:20 42:24 50:22	bigger 156:13 157:18	140:15,18 141:21 142:6 143:3	bringing 15:21	calculation
62:5 82:6 85:10	biggest 151:24	books 108:4	121:25 122:3	161:6
88:12,19 106:14 107:20 108:12	180:4		broad 89:20 91:1,	calendar 180:11
107.20 108.12	Bill 7:10	boss 13:10	10,14,23	calendars
21 115:15 121:7	billing 72:21	bother 117:9	broadly 91:12	180:17
124:7 129:9 132:4 137:5 139:24	Birky 4:8	Botox 100:24	brought 109:24 122:1 135:10	California 101:25
141:11 149:5	birth 33:6 97:7	bottles 123:1	brown 130:4	call 32:11 54:9
150:10 156:19 157:2 170:12		bottom 139:9		96:6,11 131:22 139:11,20 145:9
176:21	bit 22:18 23:3 37:16 53:8 54:8	143:9	Bruce 140:24 141:1	146:13 164:10
basics 121:20	67:5 83:6 98:23	bought 119:15	bucks 73:10	173:8 176:4,17
basis 39:16	105:24 106:16 107:11 108:3	bound 93:17	86:10 99:1	called 31:20
159:11 163:20	111:22 112:7	box 110:25 111:3,	built 14:3	108:21 129:2 130:16 135:6
bay 4:23 5:2	115:9,14,23 118:15 122:24	13 116:20 120:5 122:10	buoyant 78:18	calls 14:18
Becker 6:7 8:7,10	123:17 132:3	boyscout 132:8	burdensome	102:12
60:6,13,18,20	134:9 136:21	133:8	16:20	cancer 134:1
61:1 102:14,25 103:5 105:11,19	bizarre 106:10	brachytherapy	Burea 5:15	159:16 160:10,20,
120:19	black 116:21	30:24 31:3,19	bureau 3:6 5:7,	22 161:8,20

Index: bagged..cancer

candidate 21:10 Cindy 6:7 8:5 **cation** 107:21 144:1,7 150:24 Chapter 3:14 130:11 157:24 158:10,12, 28:18 10:18 105:9,11,19 capitalism 14 161:23 163:18 **caused** 25:18 character 24:1 **claims** 108:23 140:12 167:20 168:2,5 82:13 159:11 45:24 46:1,5 **captures** 165:23, 169:9 173:20 clarification 166:3 24 177:3,8,16,20,24 **charge** 173:25 79:13 causing 164:7 180:20 181:5,9, car 109:23 122:4 charged 49:21 clarify 66:11 12,18,21,23 182:2 **caveat** 173:2 127:3 67:24 93:12 cardiac 164:6 challenging 10:7 175:2 166:4 **charges** 42:18 Clark 5:6 9:1,22 **cell** 52:25 **change** 8:19 11:4 48:22 49:4 11:11 56:15,19 cardiology 62:22 18:21 21:7 34:10 57:21 59:25 Charlie 60:21 96:16 164:1 center 4:14 42:10 59:6 145:16 66:10,13,19 67:6, 79:11 cardiovascular 149:20 169:22 chart 73:2.23 8,12 69:3,8,12,17, 171:7 179:12 centers 157:22 164:22 22 70:2,7,10,22 charts 86:6 71:18 73:9,12,16 changed 13:6 cards 146:15 centimeters **check** 58:4 74:3,6,9,14,18,25 58:11 90:7 124:14 161:16 care 14:17 19:6 75:6,12 76:2,5,10, 143:10 146:1 checked 102:1 15 78:6 79:9.20. **Central** 126:18 21:6 30:6 37:3 151:8 180:15 141:8 24 80:16,24 38:8 49:12 51:1 centrifuge changing 10:2 68:12 72:23 79:16 checking 61:24 81:12,16,21 82:2, 122:12 5,10,18,22 85:20, 16:15 124:13 88:2,4,8,9 90:21 cheerily 127:12 24 86:3,9,19,23 cents 50:23 Chantel 5:3 career 125:23 chelating 121:22 87:3,10,17 88:4,9, 57:12 58:1 66:22 certificate 3:17 careful 114:5 12,18,21,24 89:6, 69:15,23 70:4,9 24:25 26:15,17 **chemical** 107:18, 12,18,22 90:4,8, 71:12 72:12,18 **Carla** 17:19.22 27:2.11.24 22 108:2 112:25 13,15 91:5,10,19 73:20,24 74:5,8, 21:9,10 113:3 116:14 92:5,7,9,15,17,23, certification 24 75:17,21 76:12 121:17,23 130:9, 25 93:3,7 94:7,11, **carport** 121:11 23:7 26:19 153:21 78:4 81:13,24 14 21 95:5,20 97:10, 82:8 85:21 86:1,7 case 3:10 11:7 certifications 15 98:8.14.22.25 chemically 94:18 95:22 96:5, 146:3 22:23,24 31:21 99:8,11,20 100:4, 108:11 116:1 10,14,19,23 97:5, 32:17 33:16 11 101:8,10 **certified** 4:15 5:3 11,18,24 98:18 37:10,14,18 41:4, chemicals 27:8 102:2,8,20 104:9, 6:6 7:8 27:16 99:3,16,25 100:7, 14,16,22 46:7 107:17 121:18 17 144:14 158:14, 46:13,14 61:6,16, 15 101:3 104:1 48:18 68:6 84:20 130:18 15,21,23 159:1 20 62:2,7 64:23 119:20 123:25 91:12 95:11,13 161:11 162:12,14 chemist 9:11 126:11,17 127:1 169:23,24 certify 25:10 163:6,11,14 164:4 105:12 133:5 137:7 165:1 166:17 caseload 39:24 **cetera** 40:19 144:24 147:20 chemistry 167:1,6,10,14,17, 40:16 92:20 148:7 151:16,18, 124:16 125:8 19,24 168:4 22 152:21,24 cases 22:25 **chair** 6:25 58:18 129:23 169:1,13 170:1,8 153:4.15.18 38:15 39:15,18 172:17,19,24 **CHAIRPERSON** chief 6:3,9 18:20 154:1,5,12,17,21 40:9,15,21,23 173:4,12,16,23 34:4 4:1,4 5:24 7:16,23 155:3,14,22 41:5 45:15 47:5 174:5,8,15,24 8:1,3 10:16 11:9, 156:1,9,17 157:2, 52:3,5 54:16 China 107:11 175:6.16.22 20 12:1 18:2 11,14,17 162:1 63:19 67:23 169:4 176:13,16 177:1, 21:23 57:23 67:3 chiropractic 163:20 165:17 6,14,19,23 catch-all 27:3 68:23 69:7 71:25 6:12 7:11 90:12 167:12,15,18 73:14 75:18,24 classify 79:18 169:3,8,20 170:4, catching 137:5 chiropractics 76:4 85:18 89:15 7 173:1 174:3,7, 90:13.18 clean 83:14 categories 91:11 94:25 95:17 101:5 13 175:13,19,25 126:15 176:12 172:4 103:15 104:4,10, **choice** 156:25 176:10,15,21 13,15 105:1,7 171:25 181:14,16 clear 85:10,11,15 category 168:19 122:9 129:20,24 93:25 Christen 7:3,4 **Chantel's** 144:22 134:7,12 140:20 **cath** 164:6

Index: candidate..clear

clear-cut 62:21 commercial 17:8 context 61:18 36:23 65:15 consensus 107:9 117:14 177:6 114:6 139:13 **clicker** 158:20 completely commercially 34:22 83:9 140:22 consent 167:21, continuation **clients** 152:9 119:16 154:25 156:2 22 157:19 169:14 clinic 99:4 commitment completing consideration continue 39:6 24:21 35:19 122:2 161:3 clinical 4:19 6:12 179:3 104:16 105:2 108:14 43:15 143:20 committed 24:1 complicated considered 151:14,19 152:18 continuing 5:22 80:20 169:5 25:1,16 46:11,13 25:13 85:23 90:20 **clinics** 100:19 48:10 94:10 159:5 comply 28:2 continuously 168:23 179:18 **clock** 119:8,12 committee 30:2 41:21 17:14 54:2 consistency complying 44:8 continuum 88:2. close 92:14 93:6 16:18 committing 48:2 49:2 3,4 **closed** 170:17 consistent 51:14 component contracted 54:6 closest 59:9 18:11,17 **common** 157:10 85:15 142:12 contrast 152:11 closing 38:13,24 constantly 20:2 communicate components contributing 125:3 170:25 constitute 30:7 178:17 code 25:7 28:19 18:13 30:21 44:18 71:9 31:6 communication composition contributions 93:3 100:4 constitutes 178:14 113:4 22:11 29:19 **codes** 30:10 community 8:17 compound 113:1 control 5:8,15,23 78:25 82:6 84:16, 49:3 171:13,18 117:3,5,8 130:3 constructive 6:8 28:16 29:5 25 99:15,23 132:20 company 5:5 compounds 53:18 64:16 90:1 Cognetta 179:1 54:5,9,10 140:22 construed 91:24 107:7,9 108:15 98:2 108:21 94:2 110:5,20 118:3 115:9,16 130:8 Cognetta's comparable 130:12 180:14 112:23 consultant 5:15 controlling computer 17:6 133:15 colleagues 9:4 compare 111:8 21:13 137:3,5 54:13 163:22 consulting 5:5 controversial concept 46:6 149:4 collect 38:1 compared consumer 37:9 106:21 172:20 101:23 **concert** 137:16 Convene 105:4 39:19 collector 106:21 concluded 182:5 compasses contact 17:24 convenience 83:24 20:23 21:5 131:13 110:7 color 130:10 conclusion 96:8 competencies contacted 126:9 convicted 26:22. **colors** 115:14 condition 29:19 130:15 151:14,19 136:14 25 51:5 conduct 27:4 **Cooke** 5:14 competent 21:17 contained combination 37:21,25 40:2,11 112:12 117:23 104:19 135:2 147:16 complaint 37:5, 41:8 130:21 20,22,23 38:5,7, cooperative combine 107:4 conference 29:4 10,14,23,25 container 137:1 102:12 combining 39:12,21 40:5 116:23,24 coordination 115:19 41:9,16,25 62:2 confirm 143:21 containers 5:18 64:20 76:25 comment 61:4 confirmed 27:20 114:15 coordinator 4:19 141:6 144:14 complaints confiscated contaminating 5:10 6:21 22:10 37:20 46:19 52:13 comments 11:10 112:19 112:10 106:14 62:5,16 63:2 65:3, 18:3 67:4 85:19, Congratulations contamination copies 83:1 20 102:5,20,21 110:12,16,18 15:21 150:25 158:19 complete 23:21 **Corbett** 5:3 57:12 172:13 177:18 contents 112:21, 58:1 66:22 69:15, connects 111:5 completed 24:4 23 70:4,9 71:12 25

Index: clear-cut..Corbett

72:12,18 73:20,24 74:5,8,24 75:17, 21 76:12 78:4 81:13,24 82:8 85:21 86:1,7 94:18 95:22 96:5, 10,14,19,23 97:5, 11,18,24 98:18 99:3,16,25 100:7, 15 101:3 104:1 119:20 123:25 126:11,17 127:1 133:5 137:7 144:24 151:18,22 152:21,24 153:4, 15,18 154:1,5,12, 17,21 155:3,14,22 156:1,9,17 157:2, 11,14,17 162:1 163:20 165:17 167:12.15.18 169:3,8,20 170:4, 7 173:1 174:3,7, 13 175:13,19,25 176:10,15,21 181:14,16 correct 35:17 68:4 90:3 98:3 141:16 154:5 155:22 correction 157:19 corrections 5:13 corrective 32:24 34:2 35:1 36:14

correspond 24:23 25:6

correspondence 41:19

cosmetic 100:19

cosmetically

101:2

cosmetics 100:21

cost 78:23 81:4

cosv 22:4

could've 166:6.7

council 4:3,21 5:19 7:25 8:9 11:3

16:3 22:7,12 23:3 30:3 53:21 68:20 82:16 101:12,15 104:12 178:15 179:8 180:2,13

councils 38:9

counseling 12:23

count 31:22 152:14

counter 84:7

counterpart 22:21

counting 107:12 111:22

country 140:14

county 131:14

couple 9:4 29:1 41:4 47:1 48:1 53:9 59:15 64:10, 12 70:24 80:21 136:13 138:24 142:15 146:24 148:11

court 55:3

covered 92:19

covers 148:4

cow 114:14

COW 114.14

CPT 66:22

CR 62:15.19

Crane-amores

7:3,4 **crank** 131:23

CRCPD 29:5,25 30:8 101:24 103:8

create 11:4 51:22 52:1 115:24 147:22

created 23:2 24:9 118:7

creating 108:23

168:18 credential 146:12

credit 110:19

crime 26:22,25 48:10,16,23 49:16

crimes 51:14

criminal 36:4 42:18 48:15 49:6 54:21 65:9 139:15

criteria 167:4

cross-sectional 154:24 155:4

CSU 22:16 37:9, 17,18 63:4 65:3, 20 77:2

CT 145:24 146:6, 22 147:9,13,15, 16,17,22 148:2 149:16,19,23,25 151:4,6 153:11 154:2,3,18,22,24 155:2,15 156:8,14 157:19 164:19 166:2,6 175:1

CT's 157:21

cubicles 14:2

cumulative 165:18,19

curative 160:6

cure 161:1

curious 73:7 80:17 158:4

current 11:14 13:2 14:1 40:12, 18 41:2 94:18 135:10 137:19 162:19 170:22 175:13

curriculum

155:12

Curry 6:10 15:22 19:13

custody 42:8

cut 76:6 111:2 128:19 154:13

cute 114:14

CYNTHIA 6:7

8:7,10 60:6,13,18, 20 61:1 102:14,25 103:5 120:19

D

damage 25:18 31:7 159:4,13,23 160:2 161:15 167:5,9,10 168:22

Danger 25:14

dangerous 81:10 129:14

Dash 138:4,21,23

data 70:5 75:5 77:17 102:9 104:3

databank 47:13

database 37:12 39:17

databases 49:21

date 16:24 25:16 33:5 97:6 170:18 180:25

dates 41:10 181:6,7

daughter 116:1,

day 14:9 18:17 19:23 20:5 24:15 32:12 35:14 153:9 181:2 182:3

days 16:3 27:23 32:21 34:19,20,22 42:22 65:15,23 66:3,4,5,11 80:13 97:12 131:11 164:14,15 180:1

deal 14:16 21:13, 14 125:9 176:17

dealing 53:19,23 70:15 76:20 175:24

debuted 105:24

decades 150:17

decide 46:22

decided 13:10 18:20 67:22 77:23 131:22 137:3 147:21

Index: correct..dentists

decides 98:9

deciding 53:24

decision 34:15 100:13 162:3

decisions 179:20

declare 43:8

default 40:13

defeats 78:22

deficient 40:17

define 89:19

defined 82:9 84:3 85:2 89:2,6 90:1,9 91:22 92:7 168:10

definite 85:14

definition 31:2 56:12 68:14 69:14 85:1 86:18 87:2, 25 91:20 92:22,23 93:8,25 100:8,9, 17 145:11 149:20 150:8,9 159:22 162:7 166:16,17 169:21 170:5

definitions 30:25 84:25 92:10 137:17 145:10,11

degree 12:23 125:7 134:6

delay 47:21 149:14

delivered 31:24 41:12

density 76:16 85:16

dental 171:24 174:18,19,20,22

dentist 92:4,5

dentistry 90:14, 15,17

dentists 85:7

deny 35:12 disease 68:1,18 double 114:17 115:5 125:12 129:21 151:24 129:7 85:14,22,23 161:1 122:2 department 6:8, differences diseases 76:21 doubts 116:2 25 12:11,17,20 detectors 37:17 13:1 17:7 21:14 114:19,25 115:1,2 disks 114:21 differently **Doug** 8:18 25:2,4,20 26:1 117:13,15,21 129:25 147:6 27:10,12,15,22 127:23 128:10 dismissed 52:12 Douglass 5:14 32:11 38:3 41:17, differs 30:11.13. 104:19 determination dispersal 133:22 20 42:3 43:12 15 31:13.17.24 26:4 162:9 draft 34:21 66:11, 44:14 46:20 50:20 displacement difficult 51:13 17 78:15,16 54:7,20 61:14 determine 37:21 162:8,24 64:16,22 108:20 42:5 95:15 113:5 drafted 163:12 diuranate 115:13 136:4 137:2,6 175:24 difficulty 113:18 driver's 108:17 149:12 154:8,9 diversionary determined 31:9 digestive 76:21 48:25 drop 48:22 department's 73:21 159:24 diligence 176:23 28:3 160:3 **division** 8:14,16 **Drotar** 6:23 7:21 diligent 19:15 37:5,15 15:19,21,24 depend 10:21 determining 16:11.22 19:1 14:9 25:13 84:21 direct 17:19.21 doc 5:1 38:18 54:4 56:23 50:25 54:23 dependable developing 9:21 **doctor** 63:11 57:15,24 58:5 14:14 directly 19:1 68:10,25 69:3,17 59:11 87:3,11 development 26:23 50:6 73:4 71:19 72:25 73:4 88:3,6,11 97:21, dependent 95:14 12:24 141:3 79:8 84:21 86:24 25 100:13,16 163:24 148:20,21 director 4:9 6:19 95:3 96:11 98:25 104:7 140:19,24 8:15,18 12:6,10, depends 54:20 device 80:15 86:4 151:1,3,21 152:20 100:20 165:2,6 18,19 169:20 174:13 128:6 153:23 154:14,20 doctor's 62:15 Directors 29:5 155:1,7 156:16 deposit 116:1 device-specific 79:10,12,15,19,20 158:11 168:8 128:12 135:2 disassemble 86:1 87:12 182:1 129:13 depression 42:7 **devices** 11:14.15 Doctorate 12:24 drug 26:8 27:19, 135:4 174:25 disbursable deputies 42:6 doctors 70:16 20 40:19 43:6,7, 116:22 133:24 **Devil's** 85:21 160:16 22 44:9 **deputy** 13:24 disciplinary 131:17,19 drugs 27:8 40:19 **Dewar** 112:1 document 35:22 24:24 25:7,19,25 48:24 135:17,21,22,24 describe 84:5 **Dexa** 3:10 70:21 39:10 46:12 53:22 dual 82:4 157:8 145:3 71:15,20 73:3 63:15 documentation 81:11 34:9 73:19 77:14 describina due 42:18 176:22 discipline 3:8 99:19 124:11 Dexascan 69:6 22:19 24:2,3 **DUI** 40:19 57:2 71:14 81:19 91:3 documents 26:3 25:14 26:14 36:18 description dust 111:18,21 46:10,16 59:17 38:1 32:23 diagnose 161:2 61:3,13 dose 29:23 30:11, **duties** 14:24 designated 87:7 diagnosis 68:18 discuss 9:8 12,13,14 31:13, 69:21 85:13 designed 83:23 67:16 83:7 14,15,16,18,24,25 Ε diagnostic 68:8 32:1,6 81:2 98:9 desk 58:18 discussed 94:7 79:11,15 81:1 103:12,18 160:9, 95:13 151:23 **e-mail** 177:14 **detail** 111:16 85:6 103:15,17 11,17,19 162:16, 178:22 179:11 180:16 174:16 157:21 160:8 21 163:4,8,9 166:15 168:14,21 discussing 95:1 164:7,11 165:18, **e-mailed** 19:1,2,5 detailed 174:14 19 169:25 die 42:4 81:6 176:1 discussion e-mails 65:4 doses 50:14 98:7 62:12 83:4 85:20 **detect** 116:4 died 133:8 **Eagle** 132:10 104:6,7,8,11 159:16 165:3 detector 110:22 difference 23:14 127:16 134:21 earlier 80:12 dosimetrists 111:23 112:3 113:17,20,22 95:13 139:13 34:5

Index: deny..earlier

earth 129:10 easier 163:17 **easily** 116:22 168:10 **EBAY** 107:7,13 108:11 112:5 125:1 127:13 130:25 173:15,17 **edition** 139:22 140:19,21,25 143:14 144:2,3,6, education 5:22 23:6 41:17,21 155:5,8 educational 24:10 140:2 153:19 **effect** 94:24 161:5,7,17 162:4 166:3 167:25 169:2,18 effective 137:4 effects 167:23 efficient 133:1 effort 57:22 effortlessly 17:8 efforts 25:22 136:25 148:5 **EFSTRATIOS** 64:25 eggs 78:14 egregious 64:14

57:21 66:10,13,19 67:8,12 69:3,8,12, 17,22 70:2,7,10, 22 71:18 73:9,12, 16 74:3,6,9,14,18, 25 75:6,12 76:2,5, 10,15 78:6 79:9, 20,24 80:16,24 81:12,16,21 82:2, 5,10,18,22 85:20, 24 86:3,9,19,23 employ 61:5 87:10,17 88:4,9,

Eldredge 5:6

11:11 56:15,19

12,18,21,24 89:6, 12,18,22 90:4,8, 13,15 91:5,10,19 92:5,9,15,17,23 93:3,7 94:7,11,21 95:5,20 97:10,15 98:8,14,22,25 99:8,11,20 100:4, 11 101:10 102:2, 8,20 104:9,17 144:14 158:15,21, 23 159:1 161:11 162:12,14 163:6, 11,14 164:4 165:1 166:17 167:1,6, 10,14,17,19,24 168:4 169:1,13 170:1,8 172:17, 19,24 173:4,12, 16,23 174:5,8,15, 24 175:6.16.22 176:13,16 177:1, 6,14,19,23

electronic 30:24 31:2,19 74:1 97:2 123:15 125:3

electronically 73:3

electronics 124:20 125:10

electronvolt 113:20

element 106:20

elementary 132:14

elements 106:21 107:6,8 108:6,7, 11 119:7

emergency 8:17 38:13 39:5.13 50:21 60:25

Emery 4:24

emission 145:24 146:7

emit 129:6

emitters 133:16

emitting 129:6

employee 43:6

employer 24:25 61:7

employerrequired 27:20

employing 27:16 43:16 61:19 62:6

employment 45:4

employs 61:15

empty 112:20,22, 23

EMT 6:14

EMTS 19:19

enables 153:24

enabling 93:1

enact 146:2

encompasses 89:21.22

encore 106:4

encouraged 135:16

end 15:3 37:14 38:24 46:16 49:4 59:24 61:2 62:9 63:3,11,19 77:20 125:14 154:15 158:2 169:24 176:1 178:24 179:7,9,22

ended 98:14 127:8 136:4 137:2

ending 177:10

endorsement 23:19

energies 123:6

energy 81:1 82:4 113:14,16,20 116:5

enforcement 3:9 5:9,11 22:9,14,16, 21 26:11 28:10 33:17,18 35:10,22 36:20 52:2

engaging 27:3 41:7

English 75:16 enriched 113:9,

enrichment 122:18

15

enrolled 141:19

entertaining 114:15

enthusiasm 132:21

enthusiastic 118:5 124:15

entire 17:17 136:23

entrance 33:23

entrepreneur 107:6

entrepreneurshi

p 140:12

environment 29:11 152:18 153:7

environmental 4:12 9:12

envisioning 93:13

equipment 23:8 28:15 30:17 107:12,16 111:18, 22 112:6 123:15 124:24 150:14

equivalent 24:11 143:7

eradiated 160:19

erroneously 136:22

error 30:17

errors 29:10 30:5

erythema 164:10

essentially 24:11 63:9

establish 23:5 87:18

establishes 88:13

estimate 112:21, 24

ethic 39:2

ethics 57:5

evaluate 87:18 88:14

evaluates 28:21

evaluating 70:18 87:23

evaluation 26:9

evaluations 26:2

event 28:8,9 29:19 30:7 31:7 32:24 34:24 36:1, 13 37:2 41:9,12 56:12 59:21 64:2 65:13,14 97:23 159:2,5 166:1,22 168:23

events 3:9 5:12 22:20 28:14,22,25 30:3,20 32:4,9 40:10 45:18 46:21 59:18 64:1 168:19,21

eventually 11:1 63:12 96:5 99:6 132:17

everybody's 146:18

everyone's 104:19

evidence 38:2 50:7 51:2 80:5

exact 135:23

exam 20:10 88:7 139:6,25 143:4 153:16,17,21

examination 23:7,19,20 26:8 139:10 141:13

	454.00 155.55	1 P 1 1		
examinations 139:20	151:20 153:20 154:24	Facebook 46:3	fault 165:15	147:18,20
		facilities 29:4,9,	favor 7:24 104:10	fined 40:7
examples 22:23 26:13 40:9 41:4	experiences 47:14	13 40:1 43:5 79:25 80:9	faxed 74:6	fines 28:10 33:13
		102:16,17 165:9	FDA 135:3	35:13 36:4,8,9,15
exams 140:14 156:12	experimenter 107:3	facility 11:3	federal 55:2,3	finish 155:25
		28:11 33:13 40:3	,	finished 144:19
exceed 35:13	expert 38:13,17, 19 54:1,7 56:1	43:1,10,15 45:4	fee 23:21 173:23	149:24
exceeds 163:4	·	53:24 55:4 61:6,	feedback 85:15	fire 46:23 108:8,
excellent 21:10,	expertise 22:11 38:16	17 62:6,17 68:7 73:4 75:8,25	feel 19:9 26:4	10
11	experts 53:17	79:11,13,16,19	52:17 54:12 61:3	firm 61:15
exceptions	55:1	164:17 165:13,23	68:15 101:1,15 178:15	first-time 56:25
110:19,23	expired 39:9	173:6	feels 10:1	fiscal 40:22,25
excuse 91:14	42:11	facility's 34:1		41:1,2 47:1
148:12 166:21	explain 80:5	35:1 43:14,18	fewer 31:12 176:3	fit 148:16
executive 4:9 6:19 12:6,10,18,	145:7	fact 11:13 14:22 35:18 44:3 78:24	field 10:1 39:7 54:15 106:15	fitted 111:19,20
19	explaining 50:24	79:12 81:5,21	112:16 114:9	
exemption 62:22	explicitly 92:3	85:12 87:19 94:1	154:21	fitting 86:17
80:24	expose 78:21	113:10 116:3 123:11 129:9	Fiestaware	fix 15:12,13
exhaust 111:3,11	99:14	171:6 179:13	130:17,23 131:1,2	fixing 121:2
exhausts 111:3	exposed 72:15	factor 49:6	figure 166:18	136:21 170:25
exhibits 35:4	102:7 108:9,10	factors 18:13	176:12 178:4,11	flag 86:15
	exposing 68:8	25:13 35:15	figured 55:24	flight 5:1
exist 137:12	89:7	164:24	file 76:24 97:2,3,8	flipping 76:19
existed 107:2	exposure 67:24	facts 62:4 87:16	filing 27:1	Florida 4:9,10,15,
112:20 155:4	68:11,13 161:21	failing 27:10,22	fill 9:3,20 62:2	18 6:5 7:2,7,11,15
existence 131:15 136:4 137:11	exposures 81:1	28:2	74:4 171:11	19:19 24:9 25:4
150:4 157:11	extensive 108:4	failure 29:24	175:16	28:16,17,18,19,25 30:9,20 35:11
existing 34:9	extent 150:4,5	30:17	filled 8:25 119:4	41:17 54:6 55:1
148:13	ŕ	fair 47:6 77:6	final 38:24 66:4	61:21 70:11,16
exists 23:3 103:2	extra 24:9 54:8 78:20 118:18	142:10	finally 55:19	71:9 84:4 90:2,22 98:8 101:25
176:11	175:19	fairly 123:7 166:2	136:3,25 141:9	106:9,19 108:20
exit 34:12 49:1	extractants	fall 103:24	financial 12:15	126:18 135:7
exited 105:14	121:21	falls 93:22	73:5	136:11,23 137:13 138:6,14 146:3
expect 114:18	extraction	false 27:1,3	find 9:12 10:12	147:5,14,23
160:24 169:10	107:24	familiar 70:14	31:1 35:20,24	150:7,22 151:9
expected 113:4	extras 118:17	107:18,23 158:6	62:1 77:9 103:5 112:4 114:18	152:1 157:6 173:17
117:24 159:25	extremely 9:15	fast 25:12	127:4 132:20	fly 161:10,11
160:4 161:6	149:4	fasteners 117:18	137:24 139:14	172:15
162:21 163:4 167:13,18 169:5			143:18 169:10,11 171:23 178:9	focused 14:13
expecting 164:5	F	faster 17:5	fine 33:12 34:14	45:18
EAPECING 104.5		fat 69:5 75:21		
	face 10:3		86:20 89:23	foil 117:25
experience 21:12 23:6 54:23	face 10:3	95:13 97:12	86:20 89:23 116:21,25 131:25	129:10,11

Index: examinations..foil

folks 47:12 51:11 generally 36:8 free-standing 147:21 92:6,11,16,25 53:25 54:14.17 109:3 93:5 105:5,9 157:10 159:7 goal 17:25 34:22 55:16 61:25 85:4 119:12 120:6,9,25 frequency 76:9 generate 66:4 66:7 179:23 140:13 156:7 121:2 122:13,15 fresh 54:18 124:18,21 128:5, generating **goals** 30:4 follow 95:25 9.17 129:17 69:20,22,23 99:23 139:19 **Friday** 17:17 **gold** 175:18 133:11 130:19 131:12 140:1 145:4 friendly 16:8 132:23 133:4,13 **good** 4:1,3 6:18 gentleman 50:4, **food** 67:11 134:14,20,24 7:3 8:7,9,12 12:5 friends 95:9 8 106:18 113:10 104:20 121:2 137:8 138:8,10, 13:4,5 18:21 21:8 frightening 13,16,19 139:2 geometric 29:22 22:5,7 23:25 foot 91:4 140:21,25 141:5, 45:24,25 46:5 125:5 geometry 123:12 Force 4:25 6:22 8,10,17,22,24 47:3 52:1 58:19 **front** 18:14,15 12:14,15,16 142:4,7,16,23 germanium 66:21 112:24 46:16 61:2 77:20 143:6,8,17,19,23 127:17 177:17,23 110:21 111:23 forever 61:22 82:25 113:25 144:4,9,13,18,25 180:23,24 181:1, 112:2,15 113:9,16 114:2 158:5 155:4 148:24 149:1 125:12 20 151:2,8 152:23 forget 151:11 fruition 65:8 Gotcha 63:5 **get all** 51:7 154:6,10 156:6 Forgive 90:25 fulfill 64:15,16,19 158:4,13,20,22,25 government **Ginni** 5:11 9:2 **forgot** 56:16 full 13:15 106:9 22:20 23:12 28:6. 90:10 future 144:10 163:12 12,13 43:1 59:19, 142:13,23 145:1 governor 8:19 147:16 150:18 22,25 60:8 65:23 forgotten 146:25 G 154:3 66:2,17 67:11 governs 139:10 69:10,20 70:6 form 23:22 24:21 **full-time** 152:2 grad 16:12 62:2 74:2 97:7 Gail 6:10 15:21 71:17 72:3,7,16 grads 16:5 19:3 111:20 123:3 fun 50:16 75:20,22 79:22 16:1 17:15,22 103:7,17 167:21 171:1,11 18:6,9 19:1,5,11, function 77:18 graduate 57:8 175:15,17 13 23:23 girl 73:6 59:7 functional 31:7 **formal** 101:20 Gail's 146:15 give 9:17 11:17 graduation 58:8 159:4,13,15,23 format 23:22 Gainesville 4:18 12:12 13:12 20:22 142:3 160:2,8 161:14 32:18,20 33:2 167:5,9 forms 130:5 **gamma** 112:3,5,7 grant 59:6 41:4 45:16 55:1 167:22 functions 140:2 113:13 116:3,11 58:13 67:7 71:20 granted 57:11,16 123:6,12 77:7 80:24 81:3 forward 17:2 furnace 123:24 58:15 91:2 99:9 114:22 51:25 83:14 garage 109:3,6 Fusion 5:4 **grants** 61:13 140:25 115:7 132:15 121:7,8,10 172:8,21 175:17, Futch 5:20 10:18 gray 162:3 forwarded 36:25 **gas** 115:20 120:9, 23 177:17 11:22 18:4 19:9 37:9.12 13,15 124:5 great 9:7 18:2 21:9 22:1 43:21, giving 8:5 69:21 54:16 83:13 found 26:22,25 25 44:17 45:12,14 **gather** 101:11 113:18 125:9 glad 9:2 19:14 28:1 32:8 48:21 46:5 48:7,13 150:2 182:3 gave 115:5 49:11 63:7 98:20 49:11,17,23 50:4 glitches 178:5 132:16 146:1 51:18 52:6,24 greater 30:12,13, fraction 30:14,16 169:25 **glove** 110:25 54:5 55:21 56:9, 15 31:13,15,17,24 31:25 41:11 111:1,3,12 116:20 14 57:20 58:9 **GE** 80:16 175:11 111:16 120:5 fractionated 59:24 60:4 61:9 176:8 green 130:4,18 31:11 32:1 62:16 63:6,23 **gloves** 110:12 geared 112:5 ground 39:20 64:5,9 65:9,16,18 fractions 31:12 glow-in-the-dark 66:16,24 71:5,8, 54:17 general 29:16 113:10 frame 16:7 47:21 15 72:6 74:12,16 35:20 90:3 145:22 grounds 24:2 76:24 79:7 80:14, 146:21 150:3 glued 114:20 fraud 26:15 40:20 25:25 26:14 17 81:18 82:13,21 **General's** 179:25 go-between free 14:10 90:23 91:18,20 group 12:6 13:19

Index: folks..group

16:16 18:5,7,10, **gyms** 97:11,15 **harm** 30:19 51:16 **high** 50:24 51:10 hope 120:16 16 19:14 20:2 83:16 159:1,8,10, 112:15 134:1 121:4 156:6 159:16 44:17 90:19 12,18,21,22 161:3 Н hoping 105:19 166:20 167:3 146:16 156:18 high-resolution 180:4 hose 111:2,3,13 harmful 32:17 112:3 H-38 30:4 **grouped** 115:11 hospital 6:1,5 higher 36:2 134:3 **harmless** 131:23 half 19:23 78:19 61:21 96:19 **Groupon** 73:10. 161:18 149:20 150:20 hate 8:24 156:13 157:6 11,12 98:20 157:25 163:5 **highly** 53:10 164:13 165:13 **hazard** 108:9,10 **groups** 21:16 113:9,15 hall 95:10 129:8,12 131:24 **hot** 120:21,22 156:13 157:18 hill 109:5 121:6 Hamilton 60:22 hazardous 67:21 hour 20:5 157:25 guardian 32:13 108:7 133:22 hint 77:7 hand 22:20 65:25 hours 32:14 guess 49:23 82:24 head 42:7 81:17 hire 132:23 133:4 151:20 152:17 51:17 52:19 66:18 156:21 153:7,14 156:12 handed 66:7 78:8 101:11 healing 30:3 102:21 110:2,7 hired 71:18 house 109:4.12 69:11,14 79:2,17 handle 10:4,5 111:1 112:4 125:2 80:7 82:6,8 83:16 132:18 128:10,12 130:23 14:7 22:13 30:22 131:10 134:6 84:3,5,16,17 85:1, 85:5 **hiring** 14:7 15:3 **houses** 115:3 147:22 158:17 12 87:2 88:1 17:17 handled 63:9 169:20 89:19 93:1,8,9,11, **HR** 44:16 66:6 92:20 142:8 16,24 100:5,14, historically guidance 11:3, HTC 156:1 23,25 158:23 154:23 handles 63:17 18 76:16,22 human 12:24 health 5:20 6:8 history 24:21 handling 5:12 **guide** 58:16 59:2 44:17 67:24 7:8 12:21 13:1 40:12,18 42:21 18:7 110:9 143:13 176:3 139:15 25:5 37:3 38:8 **humans** 79:4 hands 47:18 62:3 quidelines 24:24 43:12 51:1 54:7, 99:14 hit 10:3 105:24 66:14 149:8,9 25:3.8 39:2 20 68:12 72:23 106:3 hundred 152:6 73:22 79:16 84:22 hang 93:6 guiding 20:12 105:24 106:8 **hobby** 106:20 hundreds 146:24 happen 45:9 63:6 quilt 49:13 108:20 118:11 125:17 hurricane 24:7 165:22 guilty 26:22,25 hear 10:11 53:4,6 hold 23:11,16 hurt 67:21 happened 44:19 101:11 28:1 48:21 49:11 48:20 45:5 50:8 62:18 **hydride** 115:17 **heard** 50:21 gun 42:8 holder 25:1 27:2, 63:24 64:14 124:13 103:3 139:12 11 137:22 guy 67:1 73:6 179:9 hydrogen 115:20 98:10 103:22 holding 139:16, happening 36:13 120:11,12 124:8, hearing 56:5 125:4 132:19 22 63:1 87:15 176:5 guys 10:1 23:10, home 6:13 128:6, **happy** 16:22 hypnosis 84:12, **heat** 115:20 11 24:6 25:12 7 101:20 146:18 13 124:1,10 28:7 42:20.25 147:18 178:23 homemade 44:1,11 51:25 **heavy** 15:6 107:6 110:4 harassing 42:2 55:11 65:12 66:2, ı 115:18 held 49:22 113:24 3 72:25 81:5 **hard** 51:6,7,22 91:20 96:25 128:9 117:19 **honest** 42:24 52:1,14 53:4 **I.D.** 116:7 131:13 132:8 46:2 52:17 103:17 54:15 86:16 87:14 helping 53:20 **I.d.'s** 110:22 157:5 158:5 175:3 176:7 103:9 123:4,9 176:2 181:10 helps 54:25 126:6 140:8 145:4 idea 13:15 83:13 honestly 62:18 152:3 162:8,25 87:1 102:23 gym 72:7 75:19 **Henry** 174:18 72:18 154:13 170:5,6 120:14 127:8.17 76:1,3 98:11,24 **HEU** 114:3 **Honor** 55:19 177:17 178:6 harder 53:7 gymnasium 78:1 hey 136:14 hoops 51:10 ideas 13:18 15:9

Index: grouped..ideas

identification inappropriate inquiries 17:22 63:15 71:23 74:3, 101:18 134:10 113:2,13 114:1 87:24 10 81:7 48:19 interests 107:5 identifications incident 3:12 individual's 31:8 inquiry 42:4 interface 22:15 110:11 112:14 29:2 112:9 42:17 43:13 inside 21:13,17 114:9 **interim** 8:14,18 individualized 65:10 116:24 incidents 9:13 15:3 29:14 identified 113:8 38:21 126:16 135:24 114:3 115:12 internal 9:24 inclined 53:10 individuals inspection 9:5 29:14 34:2 66:20 identify 9:23 33:5 40:2 74:20 80:4 14:25 15:5 36:18 **include** 32:22 35:8 39:25 40:3,6 60:3 internationally 33:4 35:2,4 37:7 inspections 92:2 108:16 **II** 36:9 113:11 38:13 56:16 91:25 26:2,9 35:25 163:12 industrial 4:9 **internet** 131:11 **III** 36:10.15 inspector 26:10 115:2,4 117:15 included 35:7 33:20 60:14 interpreting 128:7,14 **illegal** 127:18 179:18 180:12 75:4,8 131:15 173:16 inspectors 40:1 inert 120:15 includes 34:24 46:20 55:10 61:24 interrupt 60:15 illness 27:7 inflammation 38:22 39:24 91:23 64:18 74:18 157:24 164:19 **image** 77:16 106:22 153:18 install 175:20 intervention 159:23 170:24 influx 24:8 imagine 50:16 31:20 180:13 installers 175:3 imaging 6:2 **inform** 16:2 interventional including 40:18 **installs** 170:23 140:10 145:19 50:9 53:16 165:10 42:3 110:4 111:23 information Institute 4:10 166:5 168:19 150:12 168:14 16:12 24:22 33:4, impaired 28:3 169:4 7 36:25 37:7,10 instruction 44:5 77:18 incoming 46:9 38:11 42:16 48:18 interview 33:23 143:12 impairment 27:9 incorporated 65:19 67:25 77:25 34:7,8,12,25 40:18 41:23 instructors 135:17,21 156:2 78:1,23 87:13 interviews 34:4. 43:23,24 44:2,7 143:21 114:5.10 174:9 incorporates 47:17 6 38:1 175:8 instrument 91:6 impairments 112:16 intraoral 174:23 **informed** 131:12 159:15 incorporating instrument's introduce 83:5 156:7 informing 32:16 importance 114:12 105:9,11 increase 160:20 infractions 37:3 133:15 introduced instrumentation 176:5 inhalation important 11:16 114:4 137:15 106:18 increased 147:2 129:12 insurance 84:7 introduction 159:16 162:23 **inhaling** 129:14 importantly 52:24 163:8 intact 115:6 23:25 initial 21:5 36:8 Introductions increases 160:10 intake 37:19 imported 135:4 37:19 3:4 increasing 104:1 integrate 14:21 Initially 70:6 investigate 40:6 impose 25:2 independently 36:18 intend 164:10 **initials** 146:14 investigated 28:14 39:4 imposed 36:8 intended 159:24, 39:22 initiated 40:5 index 69:5 25 160:4 163:9 impression investigating initiative 58:4 167:13 168:3 136:22 137:20 indicating 95:10 123:13 initiatives 29:16 intending 164:8 improper 55:6 investigation individual 14:8 injectors 50:12 **intent** 94:3 3:12 33:24 34:1,2 improve 30:5 15:1 27:16 31:9 37:25 39:4,12 injuries 165:9 intention 15:7 improved 16:19 32:2,13,14 33:8, 64:3 77:11 126:7 166:13 13 34:6,25 36:17 inmates 103:19 investigations impurities 130:9, 41:18 42:14 43:20 interesting 4:5 14 input 101:8 26:2,11 28:9 35:3 61:5,7,15 62:25 9:9,13,15 10:8,12

Index: identification..investigations

Index: Investigative..leaving language 83:6 89:9 101:10 135:23 138:24 141:6,24,25 143:8 149:1,2,3 158:5 163:7,11 170:22 171:8 large 125:7 146:19 largely 134:21 laser 7:7 134:22, 23 135:1,6,11,18 136:11,15,23,24 137:15 138:3,6 lasers 100:19 138:12 late 119:9 laterality 29:21 latest 94:19 Laughter 6:16 52:23 65:1 66:15 law 44:5 46:7 54:18,21,22 65:10 114:23 117:11 127:21 146:1 147:11.23 laws 151:9 lawyer 44:23 50:23 136:18 lawyers 54:16 labels 110:6 61:10 62:10 65:21 94:1,6 148:3 lead 33:7 **LEADS** 37:11 39:17 leaned 45:24 55:20 leap 51:11 learned 30:4 114:8 **learning** 29:3,10

leave 15:1 72:13

leaving 136:22

128:17

160:7

Investigative 37:13

investigators 33:11,14

invite 82:15

involved 21:2 34:5 38:25 47:23 59:25 63:1 106:12 144:5 176:14

involves 37:2 64:2

involving 48:23

ionizing 71:15 88:22 89:8,11 92:12 94:13

isocenter 159:10 163:7

isotope 10:6

issue 59:12 80:1 83:16 84:2 97:22 99:5 115:10 130:2 145:17 147:15 149:6

issued 19:4 39:6, 14 59:13 79:13

issues 14:16 18:14 19:8,10 20:25 57:14,16 60:6 65:11 102:17 125:8 146:16 178:3

issuing 149:19

ISU 22:16 37:12. 17,24 39:21 65:20 77:10

items 118:5

J

Jacksonville

7:14 50:5.9

jail 81:6

jails 71:3 80:22

James 5:18,20 10:18 11:22 18:4 19:9 20:9,12 21:9 22:1,8,13 37:2 43:17,21,25 44:17 45:12,14 46:5 48:7,13 49:11,17, 23 50:4 51:18

52:6,24 54:5 56:9, 14 57:20 58:9 59:24 60:4 61:9

62:16 63:6,23 64:5,9 65:2,9,16, 18 66:16,24 71:5,

8,15 72:6 74:12, 16 76:24 79:7 80:14,17 81:18

82:13,21 90:23 91:18,20 92:6,11, 16,25 93:5 105:5,

9 119:12 120:6,9, 25 121:2 122:13,

15 124:18,21 128:5.9.17 129:17 130:19 131:12

132:23 133:4,13 134:12,14,20,24 137:8 138:8,10,

13,16,19 139:2 140:21,25 141:5, 8,10,14,17,22,24

142:4,7,16,23 143:6,8,17,19,23

144:4,9,13,18,25 148:24 149:1

151:2,8 152:23 154:6,10 156:6

158:4,13,20,22,25

James' 66:14 January 141:4

jar 123:12 128:18

iaw 85:8

jealous 118:20

Jim 52:15

iob 19:3 154:25 156:21

jobs 12:19 13:22 19:3 156:19

John 9:16 122:22

joy 119:2

judge 55:19

judgment 49:8

July 109:13 179:9

jump 51:10 144:23

June 148:17 179:24

justice 65:10

justification 32:18 33:3

K

Kathy 6:23 7:21 15:19,21,24 16:11,22 18:22 19:1 38:18 54:2,4 56:23 57:15,24 58:5 59:11 87:3, 11 88:3,6,11 97:21,25 100:13, 16 104:7 139:13 140:19,24 151:1, 3,21 152:20 153:23 154:14,20 155:1,7 156:16 158:11 168:8 182:1

keeping 10:19

Keiser 7:1 58:23

Kelly 20:13 24:12 73:21 106:15 112:10 113:8 131:20

kev 113:14,15

key 148:10

kickback 73:5 76:14

kid 132:10

kidding 144:13

kilo 113:19

kilogram 122:22

kind 10:22 19:9, 10 22:23 29:18 30:8 31:21 34:16, 17 35:22 45:6,18, 19 47:18 53:4 54:22 55:20 65:23 67:17 68:13 70:25

73:5,19 76:14 77:6 78:7,21,22 83:24 92:16 97:12 100:16 103:25 106:24 123:22 125:4 126:5 130:13 135:15 138:1 140:8 145:4 147:9 157:4 162:3 163:14 165:10 172:10 175:8

kinds 58:20 130:20 145:19,25 146:2

176:3

kitchen 111:4 120:20,25 121:2

knowing 33:7 107:14

knowledge 64:18 125:9 150:12

L

lab 9:11,12 109:2, 7 111:10 132:24 164:6

label 116:9 117:3, 5,7,9

labeled 115:17

Labor 181:2

laboratory 6:12 109:6,12 112:19 120:20

laborious 138:2

labs 116:18

Lacey 122:22

Lagoutaris 7:12, 13 64:25 68:25 90:24 91:9,17 125:15,21 181:8

laid-back 13:7

landfills 126:18

landing 136:5

All Good Reporters, LLC 321-285-2324 www.AllGoodReporters.com

left 13:24 56:21 licensed 48:12 **listing** 172:5 48:23 52:18 54:23 170:23,24,25 110:11 137:20 51:15 62:24,25 83:25 89:21,22 171:16,17,24 listings 136:8 142:9 63:10,15,16 64:23 95:12 96:16 173:7 175:20 lists 18:24 85:3 69:19 70:10 85:2, 109:15,21 112:4 legal 38:7 48:20 made 20:4 26:5 25 86:5 88:15 122:6,7,25 124:22 49:1 59:3 118:1 **literally** 47:9,15 42:4 119:14,16 89:25 90:16,20 125:9 131:9 127:13 171:12 157:20 132:10 148:19,21 91:6,21 93:15 133:12 135:16 149:14 172:20 94:10 147:7 live 7:14 160:24 137:4 157:8 167:3,21 169:4,12 magic 78:12 legally 37:22 licensee 55:4 lived 110:17 63:7,13 77:9 178:10,16 mail 65:4 171:5 **licenses** 16:5.6 liver 161:16 lots 46:21 51:1 23:15 53:20 58:22 **mailed** 80:12 legislative 90:10 lives 68:4 88:5 99:17 lovely 21:12 93:10 main 129:8 145:18,19 147:3,5 living 106:19 loves 105:16 157:22 178:20 legit 72:19 125:16 152:3 licensing 13:21 low 52:17 103:18 majority 39:22 length 25:16,17 load 22:24 174:4 123:7 126:21 licensure 23:1, 65:21 lengthy 38:22 10,11,18 51:24 loaded 174:10 low-dose 166:2 make 7:21 15:5 58:3.20 61:25 40:23 loan 41:16 47:6 18:20 22:1 26:1,4 71:13 139:15 lower 129:7 **Leo** 61:21,23 47:8 48:19 51:9 loaned 108:25 life 68:1 152:3 lunch 67:9.13.14 58:6.7 67:18 69:4 lesser 150:5 161:6 101:6 104:18,21 80:19 87:20 90:25 loans 40:13,17 105:5 **lesson** 114:7 99:10 100:13 light 137:15,16 local 29:6 30:1 109:9 124:24 lessons 30:4 lungs 133:25 42:9 lights 21:22 67:1 126:6 130:16 114:7 105:6 Lynne 5:9 20:13 131:14 132:25 locally 45:4 letter 80:3 179:18 133:5 138:2 162:9 21:25 22:5,6,8 126:18 likes 130:24 36:19,22 43:4,17, 163:13 172:11 **letters** 18:24 180:1 location 99:14 23 45:21 50:22 173:12 176:12,13, 79:12 179:22 limit 94:3 160:13, 51:20 52:8 56:8 19 179:19 logic 127:24 letting 20:19 16,22 59:23,24 60:9 168:18 175:11 **makes** 54:11 63:3 65:2,22 77:1 **limited** 91:8,15 128:23 149:6 leucite 111:1 long 41:21 48:4 142:13,15 163:16 168:11 94:2 108:2 65:7 76:17 level 8:15 26:16 139:12,20 143:13 105:13,15 127:14 **making** 13:16 39:1.20 94:21 144:20 145:21 M 140:24 141:1,10 14:19 19:15 27:1 109:7.17 129:7 144:5 147:9 150:7 limiting 167:7 34:15 36:12 42:2 147:4 150:17 161:7 170:18 **machine** 5:7,12 130:10 133:3 limits 81:2 160:19 levels 36:2,6,9 176:21 179:5 9:1 10:5 22:22 **mammo** 84:23 28:6 30:23,25 **Lindsey** 33:16 liability 44:22 long-time 61:23 146:23 149:23 31:4 35:21,24 54:11 61:4 166:10 **lines** 10:18 21:9 36:23 59:1 60:1 mammography 76:25 116:5 liable 61:7 longer 108:12,13 61:24 69:1,4 145:24 146:6 113:25 136:24 71:19 75:10,12 **liquid** 107:24 library 108:4 manage 12:7 137:20 169:15,17 82:4 99:12,13 111:24,25 123:1,3 121:13,14 100:1 139:11 managed 107:4 looked 145:6 license 19:4 **list** 41:22 76:17, 140:4 147:16 management 20 90:18 91:14 23:17 26:20 35:12 Los 111:7 154:6 171:25 5:17 12:23 33:25 92:19 97:13 42:2,11,15,18 174:20,22 176:8 lose 78:12 34:13 45:7 48:6 57:7,11,17 151:19 170:16 machine-based 59:13 66:23 172:12,16,17 **lot** 10:11 11:13 manager 12:15 59:18 174:24 175:25 102:16 108:17 13:9,12 14:12,15 manages 51:4 177:2 180:12 140:4 147:13,15 machines 33:17 17:5,9 22:13 24:9 154:1,4 156:14 53:19 79:4 82:20 26:6 30:8 35:15 listed 143:12 managing 12:21 83:19 88:16 40:1,6 46:16,18 171:7,9

Index: left..managing

mandate 174:5 mechanism mind 131:19 131:8,21 132:2 member 3:15 56:24 6:24 81:24 178:22 141:14 mandatory 28:24 materials 27:8 mechanisms members 4:3 minds 59:7 53:20 55:4 59:19, manually 24:12 20,22 60:7,8,18, 46:22 7:25 8:9 22:7 mine 158:15 manufactured 21 84:6 106:14 104:12 178:15 med 53:12 146:22 110:25 135:4 109:22 110:20 179:8 180:3,13 **mineral** 118:22 151:4 156:10 122:1 127:11 157:12.15 membrane 111:2 minute 124:10 manufacturer 139:2 80:15 82:16 148:1 mediate 41:19 mention 11:6 **Matt** 4:17 109:18 manufacturing minutes 3:5 7:19, medical 3:7,9 110:13 118:19 mentioned 6:20 108:21 22 56:16 132:1 4:14 5:5,12 6:6 17:6 66:22 March 134:24 12:2 15:1 22:20 misconduct **matter** 63:15 merged 147:10 40:20 42:19 135:9 148:23,25 26:7 28:8,9,13,22, 100:16 118:14 25 30:3,7,20 31:6 merit 132:15 178:24 179:7 133:19 181:10,11 **mishap** 30:18 32:4,9,18 33:2 mark 6:3 56:10, mess 31:21 matters 4:12 35:4 36:1,13 37:6 **mislead** 112:17 18 59:15 60:2,11, 40:10 41:8,12 messed 160:9 **MATTHEW** 4:17 missed 163:7 16,23,24 61:2 42:10 45:17 46:21 70:19,23 71:22 62:11 63:5,20,25 met 21:9 52:4 56:11 59:18,21 misses 29:14 72:2,23 73:11,17, 64:7 65:6,12,17 63:10,23,25 64:1, metabolic 76:21 66:1,9,12,14,21 23 96:24 97:6 mission 29:9 3,11 65:13,14 98:20,24 99:2 81:23 88:15 **metal** 114:20 67:25 68:9 70:8 Mm-hmm 56:8 125:24 89:20,25 90:6,12, 115:19 116:2 73:2,19 80:11,23 60:4 63:23 89:5 14 94:9 96:13,16, 118:3 122:10 **maybes** 24:18 85:4,15 86:6 87:7 21 100:18 117:10 124:7,15 128:13, **MMPM** 6:6 88:2 90:21 91:13 **mayhem** 82:13 157:8 161:9,12,25 95:7 96:25 97:2,9, **mobile** 52:21 162:2,13,19 Mcfadden 4:13 22 99:6 100:18,23 meter 129:5 163:2,10,13,16, modalities 9:25 142:11 159:2,3,5, 43:3,5,20,22,24 19,23 164:18,22 method 107:25 20,21 160:14 44:16,25 45:13 modality 29:21 165:8,14,19,22 166:1.21.22 167:4 46:3 48:5,9 49:10, Miami 6:1 7:11 30:11 166:10,13,25 168:19,20,23 14,18,25 51:12 9:5 167:2,8 168:9,13, Mode 31:10 170:2 171:17 52:16,22 57:18 17 169:6,19,24 Michigan 132:12 60:15,19,23 69:2 model 176:9 medication 42:6 175:2,12 176:11, 71:1,7 121:5,9 microbar 126:12 19 177:22 modified 83:23 medications 127:2,10 141:14, microbars **market** 107:1 84:6 166:10 18,23 142:2,5,19, **modify** 35:11 126:14,15,19 122:13,15 25 143:16,20,25 148:13 medicine 4:24 microcurie masks 111:18,19, **MD** 77:3 79:21 5:4 6:12 53:11 moment 8:24 116:12 117:14 55:14,23 58:24 21 means 83:17 **moments** 61:10 63:12,13 95:22 microcuries mass 76:20 78:7. 117:22 135:22 145:22 147:8,17 115:4 128:5,11,12 **Monday** 181:2 10 103:23 146:11 150:11 148:3,6,13 150:1, 169:18 Micror 109:20 money 17:12 **Massachusetts** 6,18 151:25 57:21 152:12 154:8 138:17 meant 166:24 microscope 155:10,15 166:7 111:14 120:24 monitoring 49:3 Master's 12:23 measured 95:14 97:17,19 meeting 4:6 7:19 109:10 mid 181:15 matched 146:3 9:17 15:8,9 70:19 **monitors** 126:19 measurements middle 11:23 97:25 105:25 material 10:6 75:2 121:11 month 56:20 106:8 179:6 77:6 83:22 107:1 80:12 110:2 180:10 181:24 109:15 112:9 measuring 69:5 military 113:11 182:3 148:21,22 180:1, 113:6,25 114:6 mechanical million 61:22 24 181:15 118:10,23 122:19, meetings 17:7 29:24 96:14 20,23 128:3,4 **months** 16:17 70:24 80:21

Index: mandate..months

41:13 58:7 59:12 96:1 109:17 126:23 139:7 144:18 165:20 180:18 **Moody** 9:10 52:25 98:5,10 103:9,16,21 105:12,17,22 106:3 109:2 119:14,22 120:8, 10,20 121:1,4,7, 10 122:11,14,16 124:3,6,19,22 125:19,22 126:1, 13,22 127:7,11,21 128:1,4,7,16,20, 25 129:18,22 130:1,7 131:1,16 132:19,25 133:10, 17 moot 46:8 moral 24:1 45:24, 25 46:5 morale 13:4 morning 3:3 4:1, 3 6:18 7:3 8:7,9 12:5 14:6 22:5.7 141:8 morphine 50:11, 12,14,18 mother-in-law 121:9 motion 7:20,21 181:24 motivated 101:19

motivated 101:19 motive 107:5 mouthful 6:17 move 13:10 82:14 134:8 135:16 149:5 174:2 moved 14:5 137:22 181:25 moving 13:25 158:8,18 Mqa 6:21 9:8 21:17 22:14 24:10 26:12 37:6,8,15 39:16,18 40:5,10 41:6 51:23 63:4, 21 64:20 multi-fraction

30:16 **multiple** 63:2 112:12 151:24 157:4 164:19

Munroe 4:14 **muscle** 103:23

Ν

names 33:5 97:6 106:18

narcotics 27:8 national 25:20 26:16 27:25 39:1 47:11,13 139:19 141:13 142:9 145:18 146:4,12 147:4,13,19 149:7,17 150:17

natural 118:1 122:20,23 123:6

158:7

nature 50:6 naturopaths 90:19

Navy 7:13 132:17

neatly 110:6 117:2,4,7

necessarily 91:4 95:24 102:10

needed 16:13 110:10

neighborhood 132:11

Neil 55:10

neptunium 116:10,11,16

Nesmith 20:13 net 112:21.24 neuroscientist 125:22

neutron 108:22 128:24 129:5

neutrons 108:23 129:3,4,6

news 50:20

newspaper 50:10

nice 22:3 46:7 132:20

Nicholas 4:21,22 69:6 78:2 86:11, 21 94:14,19 100:25 101:4 103:13 119:18,21 132:5,17 133:7 139:1 153:2,13,17 154:3,7 155:16,24 156:24 157:13,15

night 8:11 nitrogen 111:24 112:1

NMTCB 47:12 147:19,21 148:6, 11 149:1 151:3,20 152:16 156:4

nol-prossed 49:5

nominees 179:16

non-punitive 29:11

normal 29:23 65:14

note 109:9 114:14

notes 101:23

nothing's 68:9

notice 33:12 141:3 149:11

noticed 80:4

32:10

notified 39:2

notify 32:12

November 109:14 127:9,12 132:2 180:18

nuclear 4:24 5:4

NRC 108:20 126:9 131:12

53:11,12 55:13,22 58:24 96:17 132:18 145:22 146:22 147:7,17 148:2,6,12 150:1, 5,18 151:4,25 152:12 154:8 155:10,14,19 157:11,15 166:7

Nuclears 155:3

nuclide 112:14 113:5

nuclides 110:20 134:4

nuke 156:10

number 23:15 25:15 37:10 40:24 52:9,10,15,16 53:14 60:24,25 86:14 118:5 123:1,5 139:6,18, 24 142:10 143:10 146:22,23,25 152:16 153:7,14 163:5 168:10,12 170:6

numbers 23:9 86:15 146:19 162:19 163:3

numerical 102:9

nurse 4:19 62:14, 22 91:25 94:14

nursing 6:13 nutritionist 71:23

0

obesity 85:23 observing 154:16 obtain 147:13 obtained 35:3

Index: Moody..online

Obtaining 26:14 Ocala 4:15 55:12

occasionally 46:17

occurred 12:9 32:24

occurrence 30:18

odd 53:14 92:16 offenders 36:11

offense 24:23 28:1 48:25

offenses 24:1 25:15

offer 22:22 38:19 72:9 86:4 101:20 175:7

office 9:16 13:3, 4,7,21,25 14:4,14, 20 15:11 17:12,25 20:21 54:19 62:15 79:10,12,15,19,21 83:2 96:1 97:3 131:13 180:1

officer 6:4 7:8 offices 71:3

96:17 official 38:3

officially 174:19

older 121:14

omitted 29:20

on-the-job 153:2

oncologist 34:7,

Oncology 29:2

one's 114:19 one-time 98:19

ongoing 162:6

online 16:7 21:14 23:22 37:11 39:8 131:10

participates open 17:1 39:18 168:15 package 75:9 payments 84:9 40:10 41:6,14 76:10 38:18 organization peculiarity 48:18 82:22 98:14 25:20 27:25 packaged 110:5 particle 30:23 129:22 109:8 116:19 31:1,5 83:20 penalties 25:3 137:4 organizations packages 105:21 180:11,12 partner 96:13 36:5,17 open-ended 98:12 organs 31:8 **packet** 139:2 parts 83:3 99:11 pending 39:15 145:14 opened 116:22, **PACS** 4:14 originally 20:3 Pentek 117:21 24 179:15 83:23 105:2 113:8 **PAS** 4:19 people 7:17 9:19 pages 76:17 opening 110:9 originated 64:17 140:9 172:1 13:7 15:6 19:5 pass 43:6,16 112:18 126:20 24:8 45:22 48:11 Orlando 9:11 paint 119:19 51:14 54:17,24,25 operating 62:14 passed 147:11 Ortec 110:21 **painted** 130:17 62:25 67:21 68:8 71:14 99:14 112:14 113:3,9, passes 8:4 81:3,5 84:19,22 palliative 160:7,8 24,25 129:4 operation 150:13 88:5 89:23 90:4, Passing 124:5 paper 16:4 23:22 20 92:18 99:12,22 operations 5:17 orthopedics 106:10 118:11,14 87:8 175:18 passwords 6:11 137:14 4:20 131:7 138:3 178:7 paperwork 59:5 operator 58:14 osicenter 147:2,7 155:10, 99:22 past 18:8 25:24 59:1 74:21,25 14,17,18 156:18 162:11,15 45:17 47:1 62:13 157:4 170:16 75:4,6,7 139:11 paragraph 76:19 osteopath 85:4 64:10 148:11 140:4 141:15 171:18,21 172:8, 139:9 168:20 21 175:4,23 osteopaths **opinion** 51:17 paragraphs 176:3,6,16,18 90:18 patching 17:13 101:20 168:7 178:12,13 179:13 outcome 159:25 pathways 23:18 opportunity paramedic 6:14 peoples 106:9 160:4 170:2 148:16 179:15 paramedics peoples' 51:1 outcomes 51:1 patient 29:16,20 opposed 8:1 19:19 68:4 103:7 30:5,10,19 31:20, 87:7 97:23 102:24 outline 83:4 parameters 98:4 21 32:6,16,19 percent 28:23 104:13 153:9 33:1,5 41:10 oven 123:22 30:12.14.15 **options** 56:13 44:20 51:16 31:14,15,17,25 overcharged parenthetical 70:13,18 72:12, optometry 6:13 32:1 39:19,21 109:9 162:17 13,24 73:9,14 40:24,25 41:1,2 orange 115:15 part 4:10 16:15 overdose 160:23 74:2,3 75:24 46:25 48:17 129:21 130:18 86:10 91:3 96:22 18:6 23:1 24:10 65:20,22 78:17,19 overview 33:24 97:1 98:9 157:22 27:14 29:23 45:23 152:6 160:10 order 20:10 34:13 46:9 61:3 63:4 159:1,7,9,18,21, 161:18 162:20 38:13,14,24 39:5, 64:22 65:16,17 22 160:3 161:3,6 owner 55:4 163:4.9 14 51:5,6 85:5 75:8 77:8 82:14 163:23 165:12 86:2 91:3 95:23 owns 100:20 percentage 47:6 166:3 170:3 89:14,15 92:12 97:20 143:3 78:20 151:12,13 oxide 116:21 95:12 97:17,19 156:15,25 patient's 103:11 160:12 99:12 127:8 133:16 ordered 74:10,17 patients 27:7 141:23 143:1 percentages oxygen 124:2 85:25 87:5 88:7 50:7,25 83:17 148:2,7 152:22,24 69:25 101:1 102:6 164:3 153:5,10 154:19 oxymoron 117:4 ordering 71:11 percolated 136:3 159:19 160:19.25 167:21 72:20 74:13.15 162:24 163:7 perform 155:9 86:13 87:4 93:20 Ρ pay 17:11 104:21 165:1 166:23 100:2 154:13 157:3 performance 170:1,14,21 p.m. 104:24,25 106:4 150:11 orders 38:3 95:18 173:25 174:12 paying 73:8,9,15 182:5 103:10 175:7 178:1 180:9 performed payment 41:20 **PA** 85:4 165:24 partial 29:22 organ 163:25

Index: open..performed

period 72:11	ph 17:19 122:22	31:8	Playing 85:21	possibly 48:1
periodic 106:22	Pharmacy 12:10	pick 22:22 103:7	plenty 170:16	49:7 60:9 62:9
119:3	philosophy	158:16	plugs 111:12	posted 126:3,8 149:11
periodically 135:8	135:14	picking 110:15	Plutonium 134:3	postings 137:14
	phone 19:21,23, 24 20:1,4,5 52:21	picture 18:5 45:15,19 46:18	podiatrist 7:14	potential 36:4
permanent 16:6, 14 31:7 159:3,13,	129:2 173:9	129:1	64:24 91:2	37:3 128:24
23 161:14 167:5,9 permitted 99:13	phones 14:11,15 53:1	pictures 83:20 110:8 111:16	point 17:24 37:23 38:4 47:8,23 52:14 70:1,16	potentially 51:15 58:2 159:19 172:8
178:2	Phosphate 4:10	piece 128:13	73:25 74:9 78:7,8	pounds 78:12
person 14:14	phosphorus	175:18	79:7 82:5,21,23	powder 116:21,
15:4 21:5 25:1 27:1,10 44:3,4,7,8	108:8,9	pieces 19:12 114:20	86:23 100:6 113:21 118:16	25 117:23,25 129:12 133:16
47:19 48:21 49:21	photographed		133:18 135:25	134:2
60:16 61:8 62:8, 18,19,24 64:23	112:10	pike 10:23	144:9 146:4,8 147:12 149:12,19	power 82:21,23
68:10 69:19 70:11	photographs 112:11	pills 70:15	169:14	129:11
71:20 73:1 74:1 75:7 86:25 96:17	photos 111:17	Pines 4:23 5:2	pointed 136:11	practical 78:8
97:1 106:15	118:18,19,20	pipeline 63:3	points 53:2 55:17	practice 7:13
118:13 131:18 137:1 148:8	phrase 84:5,17	place 16:6 18:1 30:2 55:8 64:6,7	poisoning 133:9	10:25 26:23,24 27:5,17 61:9,11,
151:5,9 159:13	89:3 93:1	72:1,5 109:20,22	policies 34:11	19 62:7 85:1,8,25
160:25 179:4	physical 30:19	136:16 157:17	policy 35:21	86:5,6 88:1 90:16
person's 25:15	94:9	places 55:24	Polytechnic 4:11	91:6,8,16 92:19 93:17,18,19,22
106:13 165:6	physician 5:2 31:9 32:15,16	137:16 157:20	pop 114:1	94:3 95:6,8,16,17
personal 30:17 51:16 72:8 75:23	64:2,12 70:10	plain 133:16	popped 138:22	97:9,22 127:15 141:13 144:21
personnel 6:13	71:11 72:10,19	plan 41:20 98:2		145:12 146:17
19:8	74:13,15,20 76:25 77:11 78:11 79:1	180:9	portable 112:15	147:4 148:1,14 149:21,22,23,25
persons 53:20	85:4 87:6 91:11, 12,24,25 93:14,19	planned 162:21 planning 92:21	portion 153:19, 20	150:7,9,10,16
perspective	95:18 97:16 98:8		portrayed 75:22	152:12 158:6 170:2
21:15	100:2 103:10	plans 35:6	ports 111:1	
pertain 63:8	159:25 160:3	plastic 122:3	position 9:4	practiced 25:18
pertains 63:10	physician's 32:22,23 88:7	plate 120:21,22 131:2	17:23	practices 29:16 70:15
pertinent 114:11	96:1 98:16	plates 130:16	positioning	practicing 147:2
PET 55:22 145:24	physicians	Plaxton 4:21,22	150:13	practitioner 28:4
146:6,23 150:1 153:8 154:4	94:16 95:23	69:6 78:2 86:11,	positions 9:20	37:4 44:5 47:13
157:21	physicist 5:20 6:4 7:9 162:8	21 94:14,19 100:25 101:4	positive 27:19 40:19 51:23	84:14,15 85:2,25 86:5 88:15 91:21
PET/CT 55:13	physicists 6:6	103:13 119:18,21	positively 116:4,	92:1 93:15 99:7
147:10,16 152:22 153:8,25 154:6	34:4 63:23,25	132:5,17 133:7 139:1 153:2,13,17	7	practitioners
156:15,25 157:18	64:11	154:3,7 155:16,24	positron 145:24	4:20 89:19,25 90:5,21 91:13
PET/CT's 157:10	physics 5:4,5 105:24 106:8	156:24 157:13,15	146:6	94:10,15
petition 80:22		178:22 180:13	possibility 56:23	PRC 45:10
	physiological	played 120:11		

Index: period..PRC

pre-application providing 88:2 115:1 116:11 50:17 160:1,8,12, 28:4 29:5 44:9 57:4 126:21 131:21 18 164:8,9,13,16 57:9,10,19 58:8, 89:24 178:2 165:5 166:7 15,23,24 59:8 pre-approval proving 175:9 169:2,7,15 60:8,9 140:2 56:24 prevent 29:10 141:19,20 142:9, provision 27:14 30:5 32:25 58:2 procedures pre-employment 20 143:1 151:7,10 68:1 95:3 157:3 10:20,21 13:14 PSU 22:16,24 152:16 153:6 27:20 34:10,11 39:3 37:14.17 38:5.6. prevention 68:18 155:25 156:3 **prefer** 83:11 100:23 160:15 10,20,23 39:23 85:13,22 164:23 165:10,24 programs 19:16 52:2 65:22 preference preventive 68:5 166:5,15 168:14, 29:2 57:1 82:20 180:21 181:13 **public** 14:17 142:11.14 155:15 21 previous 25:19 25:8,15 81:25 preliminary 42:4 156:7,10 35:17 40:12 **proceed** 101:16 171:23 48:19 134:21 145:6 progress 78:5 proceedings published 141:3, 97:13 prep 120:20 104:24,25 182:5 previously 166:4 6 143:11 prohibited 147:8 prepare 38:2 pride 119:2 process 14:3 publishers promoted 12:19 16:4 19:7,17 20:6, prepared 104:20 139:17 Primarily 36:3 10 24:20 33:24 promulgating Puerto 24:7.14 **Preparedness** 34:14 37:25 38:19 **prime** 101:15 141:10 8:17 39:3,21 40:24 106:11 **pull** 172:12 44:14 47:7 48:3 prerogative promulgation **pulled** 55:11 **print** 75:11 49:1 50:1 57:4 146:5 149:10,11 90:11 printed 110:6 59:14 60:2,12 150:21 pulling 93:18 prescribed 66:20 139:6 141:2 117:2,5,7 proper 18:1 purchase 141:21 30:12,14 31:14, 144:5 149:10 printer 83:1 99:19 121:23 16.18.25 79:1 143:3 179:14 93:14 160:13 **propose** 84:24 printouts 82:24 purchased processes 14:18 prescribing 107:10,11 118:9 15:11 proposed 139:3. **prints** 75:13 32:23 97:1 4 145:2 **pure** 116:12 processing prior 12:14 25:22 prescription 133:2 19:25 180:7 43:8 58:7 79:25 prosecuted 49:5 35:6 68:11 73:18 54:16 purification 179:2 processors 77:15 79:8 84:10 133:11 14:10 19:18,20,22 Prosecution 99:2 private 7:13 20:6 37:15 **purity** 112:15 prescriptive PRN 25:23 26:8 130:2 produced 140:6 86:4 protactinium 28:4 44:5 45:12. 115:25 116:4.7 13 47:17,24 48:1 purpose 23:5 profession 14:24 present 87:21 57:10 70:7 78:23 80:23 22:12,19 25:6 protection 45:10 115:21 85:13 87:25 88:6 45:22.23 53:10 **PRN's** 47:20 54:9 150:14 presentation 93:14,21 113:13 professional 9:10,18 12:13 pro-active 51:23 protocol 87:11 114:17 170:21 12:17 70:8 152:25 153:10 56:17 59:16 69:13 probable 38:12 purposes 68:9 80:20 104:18 professionals **proud** 111:6 79:2 82:7 93:15 44:12 105:20 139:3 51:15 91:13 100:5 160:7 158:1 provide 29:9 problem 84:1 professions 87:20.21 93:7 74:19 102:9 142:3 pursue 68:7,21 presentations 47:4 53:11 90:7,8 147:14 172:2 115:16 147:24 3:8 10:11 11:12 pursuing 68:19 147:6 164:12 169:3 provided 41:25 presented 56:13 **push** 152:7,13 **profit** 107:5 68:12 160:11 problems 13:20 preserve 68:3 166:21 pushing 17:11 15:25 20:8 178:5, profitable 133:6 156:14 157:6 pretty 13:6 46:7 provider 44:5 **program** 5:7 6:10 175:1 64:13 89:20 108:5 procedure 9:1 17:16 18:24 providers 175:3 110:24 111:5 29:20,21 35:21 put 17:25 21:19 20:17 22:22 24:5

Index: pre-application..put

Index: putting..recommend

34:16 37:11 48:19 49:19 51:15 56:21 59:4 67:14 70:12, 13 76:2 83:6 88:25 89:10 90:12 100:17 114:2 122:9,25 126:24 128:18,21 135:21 140:17 160:13 161:14,17 162:6 165:5 167:3 172:16 174:16 178:8

putting 50:11 146:4 166:16,17

Q

quaint 46:6

qualifications

139:5 175:9 176:23

qualified 152:1 175:5 176:7

qualify 146:10 163:1

qualitative

110:10,22 113:2

quality 3:7 9:24 12:2 37:6 115:9, 16 130:8

quantify 161:12 162:25 163:17

quantities 122:23

quantity 118:1

question 24:19
43:3 48:4 51:4,21
56:10,23 57:12
67:17 78:8 85:11
90:24 98:5 100:6
101:12,22 117:10
141:15 151:1
155:16 171:15

questionnaire 74:4 86:13 97:7

questions 10:13 15:9,17 17:21 18:3 24:16 42:25

50:2 51:19 59:15 67:4 82:17 118:16 129:16,19 134:8 138:5 150:23 158:2 171:23 176:2 180:8

quick 56:23 114:2 179:24

quicker 14:12

quickly 8:25

quiet 53:5

quote 100:19 103:10 111:12

quotes 72:13

R

Rabey 17:19

rack 123:15

rad 6:21 13:11 14:1 18:7 19:19 53:19 61:18,19 91:22 94:11,23

radar 125:25 126:1

radiation 5:7,8, 15,22 6:4,8 7:7 22:21 23:8 28:6, 15,16 29:5 30:3 31:4 35:21 36:22 41:11 53:12,13,18 64:16 67:20 68:2, 8,12,24 71:2,16 76:12 78:13,21,24 79:4 80:22 81:2,8, 14 88:19,22 89:8, 11,24 90:1 92:12 94:13 97:23 98:2, 4 108:21 109:7, 17,19 133:8 145:23 150:4.13. 14,19 159:14,17 160:14 161:7 173:7

radiationemitting 23:8

radioactive 10:6 60:21 106:23 107:7 109:21 118:23,24 131:8 132:7 133:7,12

radiochemistry 108:5 121:15

radiograph 83:21

radiographer 59:8 139:15

radiographers 53:15 146:21 150:3

radiography 58:23 139:12,21 145:22 150:17,18

radiologic 4:16 5:10 6:14,24,25 7:2 22:9 24:5 26:23 27:5,17 36:20 37:1,4 39:24 62:7 145:12

radiologist 5:25 7:4,11 55:5 62:20 179:4

149:21 150:9,10

radiology 7:5 29:2 142:24,25 143:1 154:7

radionuclide

radionuclides 108:1

radiotherapy 103:11

radium 113:12, 14,21 114:1 119:20,21,23,24 133:16

radon 110:13,18 122:6,7

raining 8:12

Randy 4:1,4 5:24 7:16,23 8:1,3 10:16 11:9,20 12:1 18:2 21:23 45:24 57:23 67:3 68:23 69:7 71:25 73:14 75:18,24 76:4 85:18 89:15 94:25 95:17 101:5 103:15 104:4,10, 13,15 105:1,7 122:9 129:20,24 134:7,12 140:20 144:1,7 150:24 157:24 158:10,12, 14 161:23 163:18 167:20 168:2,5 169:9 173:20 177:3,8,16,20,24 180:20 181:5,9, 12,18,21,23 182:2

range 102:20

ranged 102:21

rare 65:21 110:19

rate 106:5

reach 10:14 153:13

reached 45:6

reaching 52:25

reacting 124:7

reactions 166:12

reactor 132:10

read 23:3,10 24:17 82:25 96:4, 20 116:11 117:19 129:3 132:7 141:25 163:21

reading 75:15 87:8 96:13 126:25

readings 109:19

reads 96:2.17

ready 57:8 101:6,

real 10:9 81:23 88:6 116:20 170:14

realistically 161:13

realized 56:15

reappoint 179:13

reappointed 179:1,3,10 reappointment 179:11 180:14

reappointments 178:21 180:5

reason 23:2 27:7 36:13 45:1,3 93:12 110:7 120:16 164:9

reasonable 27:6

reasons 18:19

REBECCA 4:13 43:3,5,20,22,24 44:16,25 45:13 46:3 48:5,9 49:10, 14,18,25 51:12 52:16,22 57:18 60:15,19,23 69:2 71:1,7 121:5,9 127:2,10 141:14, 18,23 142:2,5,19, 25 143:16,20,25

recalibrated 148:19

recall 134:20

receive 29:12 38:15 42:12

received 37:8 41:9,11,25 42:15, 16 98:7 112:8

receives 28:21 29:15 73:1

recent 154:22

recently 12:9 18:7

receptionist 14:7

recessed 104:24

recognize 112:2 123:23 146:11 147:23 149:22

recognized 85:5 148:15 151:3

recognizing 80:1

recommend

38:11 173:4,5

recommendatio ns 28:3	registrant 170:14	51:23 52:1	5,6,17 69:20,22, 24 71:23 96:4	100:4 108:17 135:3 170:10
	registration	relative 32:13	159:5	
recommended	35:12 79:14 83:17	relevant 37:7	reported 32:4	requiring 150:12
25:3 34:9 127:15	170:10,13,20 171:14,19 173:22	relieves 20:6	35:18 41:13 48:14	research 4:10
recommending	·		52:19	83:11
173:3	registrations	relying 176:6		researched
record 27:2 96:25	99:17	remember 24:6	Reporter 3:17	162:4
97:2 165:6	registries 47:11	40:22 42:20 64:12	reporting 28:8,24	
	145:18 146:4	109:21 115:10	29:1 30:1 32:7	reserve 7:13
recorded 72:20	registry 25:20	116:14 126:2,22	42:20 43:11	residence 109:5
records 34:12	146:12 147:13,19,	130:7 132:8	49:14,15 60:25	residency 4:24
35:3,5	20,22 149:7,17	138:20 142:13	166:14 167:5	_
red 115:15 129:21		144:4 146:20,25	reports 28:21	resides 131:14
	registry's 139:19	148:8 151:23	32:9 38:2 44:18	135:24
redacted 35:5	regs 102:3 122:21	158:22	47:12 159:2,6	resins 107:22
reddening 164:2,	138:3 149:22	remind 172:11	166:22	121:21
14,16 166:9	regular 95:22	reminds 132:6	represent 23:13	resolution
redoing 176:4	regulate 38:8	removed 117:13	174:21	113:18
reduce 176:1	102:23 138:12		representing	resolutions
Reducing 103:23	regulated 137:13	rendered 46:7	6:5,6	22:25
		renew 42:1 49:16	repurpose	resource 12:24
refer 93:9 139:12	regulating 28:15	renewal 50:1	114:24 127:22	172:3
reference	regulation 12:18	51:24	repurposed	resources 44:17
135:18,22 136:1	71:8 135:7,25	renewals 3:15	114:19 115:7	
referred 84:4	137:19,23,24	22:15 49:17	117:12	respirators
	139:7,23 140:17 162:7	ronowing 26:14	request 38:17	111:20
referring 32:15,		renewing 26:14	172:24	respond 171:1
16,22 92:8,9 141:15	regulations 11:5	reoccurrence		responded
	28:24 134:22	32:25	requested 80:2	140:12
refers 137:18	135:1,17,20	reorganize 149:5	requesting	
reflect 102:4	136:15,17,24 138:7 145:15	repair 107:15	79:13,14	response 8:2 42:1 104:14 112:9
		-	require 23:7	177:5
refusal 25:10	regulatory 28:8	repay 173:22	26:1,3,7 152:18	
reg 128:2	135:15	repeal 136:14		responsibilities
regard 58:11,13	rehab 25:23	_	required 23:20 24:22 103:11	28:20
102:6	rehabilitation	repealed 136:9, 10,20 137:18,21	141:21 142:2	responsibility
region 10:24 11:2	25:22 43:9		151:14	43:13,14 64:17,19
		repeat 36:11		responsible
Regional 4:14	reimbursed 84:7	repeatedly 89:3	requirement 42:20 43:10,25	28:14,16 32:13
register 102:16	reiterate 20:18	replacing 159:19	47:25 71:13 79:3	37:19,24 38:7
104:21 129:25	relate 28:10		98:6 175:14	rest 44:10 46:15
170:10,11,23		reply 80:13	requirements	48:24 49:4 53:16
173:24 174:10	related 43:1,2 47:17 68:12 76:13	report 27:1,10,22	3:8 22:19 28:24	59:3,8 136:9,19
registered 39:1	79:11 145:13	29:4,7 32:20,21	29:18 30:2 32:7,	150:22 158:17
79:25 80:2,3		33:9,10 34:17,21,	10 43:20 44:9	162:16
99:18,20 100:1	relates 26:23	24 35:2,7 36:24	47:18 57:11 98:1	restrict 108:18
170:18,19 171:7,9	relating 42:19	42:22,23 43:13	135:3,5 137:19	restriction 95:12
173:7,9 175:17	relationship	44:8 46:22 47:9, 13 64:3,5,8 66:3,	requires 84:9	1690110001 95:12
179:4	Tolationship	10 04.0,0,0 00.0,		
İ.	İ	İ	İ	İ

resubmit 171:10	rings 20:1 52:21		94:25 95:17 101:5	17 6:21 13:11
result 62:4,5	risk 68:2 78:24	S	103:15 104:4,10,	14:2,3 21:3 22:9
93:22 96:11	81:7 102:6 134:1		13,15 105:1,7	28:6,11 30:23
168:22	159:16 160:10,20,	sad 47:3	122:9 129:20,24	35:11 36:23,25
#001110 04.5 04.4	22 161:8 162:23	safe 137:14	134:7,12 140:20	37:1 60:21 61:13
results 31:5 34:1 74:12 95:19,24	163:18,19,23	150:13	144:1,7 150:24 157:24 158:10,12,	90:17 94:12,23 95:1 139:7,10,23
96:2 97:5 159:3,	169:16		14 161:23 163:18	145:9,12 146:7
20,21	risks 161:20	safety 6:4 7:7	167:20 168:2,5	·
		27:6 29:16 30:6 98:2 111:18 118:9	169:9 173:20	sections 84:13
resumed 104:25	road 105:23	122:2 124:16	177:3,8,16,20,24	85:3 89:1,16,18
resurrect 19:11	106:5	133:14 135:6,11	180:20 181:5,9,	92:24 101:11 145:8
retained 117:16,	Rogers 18:20	136:11 159:14	12,18,21,23 182:2	
22	ROILS 29:3,8	sales 81:22	school 18:24	secure 29:11
### #### 474.0		108:18 110:1	54:18 132:13,14	security 71:6
rethought 171:3	rolling 65:24		152:2,4,15 153:5	102:18
retired 5:25 12:15	room 11:23 50:13	saline 50:11,17	154:18 155:1	Seddon 6:3
54:14 125:16,17	51:3 53:4	sample 112:12	156:5	56:10,18 59:15
132:21 144:10	rooms 121:12	samples 109:8,	schooling	60:2,11,24 61:2
retiree 106:19	roughly 50.40	11 112:9 117:17	152:19	62:11 63:5,20,25
110:3	roughly 53:13	131:3	schools 155:19	64:7 65:6,12,17
return 109:24	routed 66:19	sanction 40:12		66:1,9,12,21
132:2	routine 39:16	42:15,21	schoolteacher 125:17	81:23 88:15
returned 109:14	RTS 157:9	·		89:20,25 90:6,12, 14 94:9 96:13,16,
117:21 118:3	KIS 157:9	sanctioned	scope 89:7	21 100:18 157:8
127:11	rubber 111:2	25:21	139:12,20 143:13	161:9,12,25
	rule 3:13 24:24	save 68:1	144:21 145:21 148:14 152:11	162:2,13,19
returning 109:10	25:6 27:14 83:15	scan 3:10 70:21		163:2,10,13,16,
review 24:9 25:5	88:25 89:2 134:25	73:3,8 76:6 81:11	Scout 132:10	19,23 164:18,22
37:1 38:10,13,17,	136:6,18 137:10	82:1,2 97:1 152:6	scrape 128:18	165:8,14,19,22
19 56:1 57:5,6	141:3,6 145:2,8,	166:2	-	166:10,13,25 167:2,8 168:9,13,
58:16 59:13	10 146:2,5,8,9	scanners 71:6	screen 22:2 40:19 125:25	17 169:6,19,24
66:18,20 86:15 95:19 142:6 180:2	148:20,21 149:10, 11 150:20 170:22	102:18	126:1	175:2,12 176:11,
		scanning		19 177:22
reviewed 24:13	rule's 144:14	152:20,21	screening 26:8	self-attest 58:16
52:4 59:2 69:19	rules 9:21 27:12	,	27:21 43:22	59:2
142:17 143:3	84:3 89:1,4,12	scans 81:14	screenings 43:7	
reviewing 24:14	99:23 135:2,18,19	155:9 164:19	screws 117:19	self-certify 142:17
86:4,6	136:9 139:4 141:10	scary 106:24	screwtop 110:5	self-referral
reviews 25:14		scavenging	•	84:18,23
75:1	run 19:16 40:3 71:19 143:23	125:2	script 69:18 71:19 73:3 74:16,	·
revising 9:21	156:15,25 157:16	scenario 3:10	21 98:18,19	self-report 44:4
revoke 35:12	169:17	68:19	scripts 70:9,17	self-reporting
revoked 26:17	running 11:12	Schenkman 4:1,	search 84:2	44:3
rewarding 10:7	17:25 18:1 20:10 62:19 157:9	4 5:24 7:16,23 8:1,3 10:16 11:9,	93:11	self-reports 44:4
Rico 24:8,14	runs 17:16	20 12:1 18:2	seated 104:22	sell 108:12,13,16 126:5 172:5
rights 153:1	14113 17.10	21:23 57:23 67:3 68:23 69:7 71:25	secondary 162:4	173:8,17
		73:14 75:18,24	section 5:10,12,	selling 50:15
ring 114:17		76:4 85:18 89:15	36611011 0.10,12,	30.13

Index: resubmit..selling

107:6 108:6,14 118:14 127:12 133:2 171:16 sells 108:6 110:1, 4 174:18 send 9:6 77:10 177:13 180:16 **sending** 179:21 senior 54:24 **sense** 90:25 149:6 163:13.16 168:11 sensitive 128:15 sensitivity 166:11 separate 72:22 108:1 135:19 157:21 separation 107:19 108:2 121:23 separations 107:22 108:2 116:15 121:23 September 24:6 180:17,23,25 181:4,17,19 **septum** 110:7 serve 38:2 46:11 service 38:20 49:3 170:24 171:19 172:5 174:12.20 175:3 **services** 37:9,13, 15 39:19 68:8 171:24 172:2,9 174:18

servicing 170:24 171:16 SESSION 3:3,11 sessions 151:24 set 25:2 33:10 50:13 62:4 76:9 126:19 146:6,7 152:25 153:10 170:18 setting 164:2 severe 50:6

severity 35:9,16 36:2,5,6,9,10

sexual 40:19 42:19

share 38:18

shared 29:10 30:4

Shaw 5:11 22:21 28:6,13 59:22 65:23 66:2,17 67:11 69:10,20 70:6 71:17 72:3,7, 16 75:20,22 79:22 103:7.17

she'll 17:23

shelf 118:22

sheriff's 42:6 71:3 131:13

shifting 19:22

Shine 174:18

shocked 111:23

shoot 164:9

shopping 131:9

short 18:10 58:10 105:14 110:17

shortages 18:15

shorter 16:6

show 33:6 34:9, 11 77:15 111:4 112:17 137:16 161:7

shown 94:5,8

shows 77:19,21 137:15

shut 127:5

side 4:23 16:20, 25 20:19 28:11 36:21,23 43:19 48:16 49:6 53:3, 11,12,19,22,23 55:16 60:1,7,18 65:24,25 66:7 121:12,13 135:11 149:25 167:22,25 169:2 174:3,16

sideways 47:18

sign 167:21

significant 30:19 52:10 110:11 154:13

significantly 160:20

signing 72:14

silly 57:12

similar 28:2 30:9 100:22 143:11

simple 107:17 174:15

single 30:15 31:25

Sinison 109:18 132:1

sit 53:21 81:4 104:21 134:14 156:4

site 29:20 30:11 31:11 32:3 33:10, 14 34:15,20 41:12 56:11 72:4,16 131:5

sites 32:5

sits 71:20 109:5

sitting 19:24 58:18 83:1 109:23 156:11

situation 10:4 44:25 48:10,11 57:18 86:12 87:23 163:15

size 112:23

skill 27:6

skills 150:12

skin 164:2,14,25 165:9 166:9,11 168:22

skip 67:5

slack 15:4

sleep 67:15

slide 118:25 119:11 120:1,4 121:16,24 123:14, 19 146:20 174:1

slides 67:17 107:12 113:6

slip 19:10

slits 111:2

slot 119:22,23,25

slow 19:7

small 81:21,23 110:5 112:12

smaller 116:24

smoke 114:19,25 115:1,2 117:13,14 127:22 128:10

smuggle 81:7

snared 55:7

snuff 141:12

soaked 8:10

societies 179:15,

society 7:2 105:24 148:6,12 150:1 179:21

sodium 108:8

software 75:9,10, 12

sold 108:24

solution 123:4,8

somebody's 97:3 125:1

someone's

sort 25:23 26:7 29:10 30:4,6 35:25 36:19 44:12,19 46:23 77:17 79:16 101:18 114:7 120:15 172:8 **sounds** 70:14 81:10 132:9 177:23

Index: sells..sponsored

source 128:24

sources 108:22, 23,24 117:22 126:3 129:3

south 7:6 70:15

speak 53:7

speaking 11:22 17:15 102:22

spec 112:6 155:4

special 63:17 80:22 127:20 150:12

specialty 6:1 26:18 145:9 150:2

specific 76:21 87:12 113:4 134:3 150:15 151:19 176:17

specifically 11:18 70:20 172:3,6

specimens 118:23 119:7

spectroscopy 112:5 116:3

speculated 109:3

speed 17:23 135:10

spend 17:12 57:20,21

Spent 12:14

Spivey 6:18,19 12:3,4,5 15:20 16:10,21 17:4 18:6,8 19:11,15 20:3,16 21:4 146:15

Spivey's 18:19 23:23

splash 50:19

sponsored 29:8

St 58:25	state's 136:5 149:12 172:15	stopped 79:22	136:8 140:1 143:12	supplemental
stable 14:15 107:6 108:6,7	state-of-the-art	stops 44:8 storage 121:17	subject's 42:5	suppliers 107:9
staff 10:11 13:25	112:16	stories 118:4	subjects 137:12	supply 54:7
14:1,21,22 18:14, 15 21:18,19 45:1	stated 42:5 95:2 statement 35:20	story 41:24 118:6	submission 26:3 38:23	111:25 120:14 Support 8:17
55:5	61:4 91:1 95:3	132:6,7	submissions	supported 171:5
standalone 153:11	159:8 167:3 176:22	stove 111:4,11,12 120:19,20	180:6	supposed 84:19
standard 71:10	statements 26:3	straighten 16:23	submit 33:10 175:14	94:2 103:25 115:13 137:25
87:18,22 88:13 90:19 135:6,11	34:25 42:2 80:6 166:20	Strangely 141:5	submitted 37:5	170:23 177:9
148:1 150:7 162:1,2 166:23	states 28:23 30:1	Stratis 7:12 68:25 90:24 91:9,17	64:10,20 99:19	supposedly 131:3
178:8	47:13 101:23 102:1,2,15 103:1	125:15,21 181:8	submitting 24:21 subpoenaed	surface 110:16
standardization 9:24	138:9,11,15 139:25	streamline 178:4	55:9	Surgeon 179:25
standards 5:21	States/nrc 9:17	stress 13:8 96:17 strictly 61:18	subpoenas 38:2	surgery 50:17
23:6 24:3 61:24 84:8 91:8,15	statute 23:1,4	94:24	substance 136:7	surplus 107:14 125:1
92:19 93:18,19,23 94:4 95:6,8,16,18	25:2 28:2 35:11 41:16 46:9,10	strip 116:2	substantial 143:11	surprising 51:13
139:10 141:1,2	49:12 61:18 89:2, 3 90:2,9 92:7,13,	strips 128:21	substantive	surprisingly
144:20 146:17 149:23,24 150:1,	25 93:1,5,8,12 145:17 147:24	strongly 123:7	149:13 subtracting	31:10 surrounding
16 158:6,7 170:15 standing 21:21	170:9 172:21 173:24 176:20	122:21	112:22	162:22
start 4:6,7 37:18	statutes 25:5	student 40:13,17 47:6 141:18	successful 178:6	survey 131:18
65:3,4 67:8,13 77:2 82:11 134:16	28:18 46:16 77:3 84:2,4 91:22 93:9	154:22	successfully	surveys 137:14
144:11 152:13	170:15	students 16:16 18:23,24 56:25	24:4	suspend 35:12 suspended
158:24 169:7 180:24	statutory 58:12 92:10	57:24 155:11	suddenly 125:16 168:17	26:18 42:17
started 12:16	stay 20:22 163:2	studies 107:20	sufficient 25:10	suspension 42:16 50:21 51:6
13:5 45:4,21 101:25 102:19	stays 127:14	study 58:16 59:2 95:19 140:15	37:22 63:7,13 77:9	swap 50:14
121:25 144:5 state 8:15 10:25	stealing 50:12	142:5 143:13	suggestions	swipes 110:14
11:2 19:18 26:16,	stem 135:5	stuff 35:7 44:2 56:1 58:21 59:3	17:2 101:16 suite 121:9	switch 156:22
19,21 28:14,15 29:6 33:11,14	step 45:19	84:8 102:11 109:11,25 110:23	summary 96:8	switched 156:10
42:18 49:20 54:6, 19 55:1 57:6	stepped 20:3 stirrer 120:22,23	111:23 112:7,19 116:22 122:7,8,25	summer 106:13	switching 50:11 synopsis 34:24
70:11 71:12 79:1 90:21 131:19	stochastic	123:16 124:21,22,	supervise 21:19	system 6:5 16:9
135:1 136:23	161:17	23 125:7,13 126:24 127:9,13	supervision 18:12,16 92:2	21:13,14 29:3 31:8 48:20 49:1
137:2,6,13 142:14 153:22 165:4	stoichiometry 113:3	129:9 130:10,24 133:2,22 149:5	supervisor	65:10 168:16
170:11 171:21 174:4 176:2	stop 47:24 48:2 79:7 173:18 174:1	subject 41:25 42:5,8 45:16	17:18,20 21:3,4, 11,18	178:7,12 179:12 systems 17:10

Index: St..systems

				1
83:22 113:19	49:23 53:10	178:24 179:5,6	22:3 29:11 30:6	tide 13:6
	152:5,7 157:1	terminate 43:8	34:17 35:25 48:20	tie 92:4 165:25
Т	techniques	terminate 45.0	55:12,14,18 56:6	
<u> </u>	150:13	terms 40:21	58:19 61:12 64:1	tied 47:18 92:11
tab 39:10		44:22 49:2 60:25	67:16 68:21 69:13	ties 45:20 46:10,
tab 39.10	technologies	114:8 115:11,16	70:25 73:22 76:17	15
table 106:22	10:20 147:10	131:24 179:8	78:6,10,18 87:17	
119:3 158:17	technologist	terribly 16:8	91:6,18 96:10,24	time 4:25 8:13,21
161:23,25	4:16 5:4 6:24	-	97:12 98:12,19	10:14 15:18 16:6,
tagged 112:8	38:25 39:6,8,11	terrorism 125:6	102:24 122:19 123:23 127:6	16 17:13 18:10,12
	100:1 153:8	terrorists 125:5	130:2 133:10,18,	20:22 22:3,11 23:24 24:25 25:9,
takes 42:6 61:10	155:19	test 43:6 44:13	23,24 137:21	16,17 28:5 38:19,
71:23 169:12	technologists	95:23 96:18 100:3	148:10 157:4	20 47:21 48:4,17,
taking 36:14	6:15 7:2 23:15,16	131:5 155:24	158:4 159:4 164:9	23 52:14 56:12
40:4,14 50:14	37:4 39:25 40:16	161:5	172:7 174:2	57:23 65:7 66:25
83:20 85:8 86:13	47:5 53:23 54:14		178:20 180:11	95:23 98:21
110:13 140:14	63:8,21 71:17,18	testified 55:2	4h:man 40:40	101:16 102:22
talk 9:9,14,22	145:9 150:3,6,22	testify 55:12 56:4	things 10:19	105:13,14,15,20
11:12,13,17 22:18	152:10	-	11:13,19 13:9,13, 22 15:14,16 17:6,	109:9,23 135:13
50:22 51:18 58:17	toobnology, 5:40	testimony 77:14,	8 18:11 20:11	141:10 146:5,8
69:9 70:24 82:16	technology 5:10, 21 7:1 11:14,22,	20	22:13 28:7,11	147:9 149:18
83:5 105:19	23 17:5,9 22:9	testing 27:19	29:15 35:19,23	150:7 158:17
106:8,16 132:2	24:5 26:24 27:6,	44:10,14	36:21 44:19 50:6	160:9,22 169:12,
133:14 148:8	17 33:18 36:20	tests 26:2 85:6	52:18 53:9 55:6	13 171:10 178:2,
177:10 178:2,14,	37:1 43:2,19	140:16	72:8,22 83:8 84:9	10,11,19 179:25
20	60:10 62:7 78:20		92:6 94:16,20	180:23
talked 45:17	83:24 140:10	Texas 138:16	98:3 99:22 101:13	timeframe 38:21,
62:23 63:3 70:19	145:12 149:21	text 143:9,18	106:10 107:14	22
71:5 80:14 133:17	150:9,11	145:2	112:4 114:4 126:5	timalina 45.45
134:16 147:11	toobs 10.7 10.10		127:17 129:14	timeline 45:15
	techs 18:7 19:19 53:13 146:22	textbook 139:16,	134:5 137:14	times 17:9 26:6
talking 10:19	147:8 151:25	17 140:5,8 142:18	138:2 145:13,23,	40:1,7 46:17
45:21 58:21 59:17	152:12 154:17	143:24	25 146:10,18	64:12 109:8
70:20 77:1 78:9	156:14 157:15	texts 121:15	151:23 158:16,18	127:17 128:11
83:25 95:11 110:17 126:2		thankfully 140:4	159:14 167:15	151:13 157:9
142:23 146:19	teeth 85:9	tilalikitiliy 140.4	169:10 178:18	167:3 169:4
155:17 164:1	telephone 32:11	theme 11:11	thinking 10:9	178:16
	65:4	theoretically	11:7 86:25	tin 114:20
talks 36:19	telling 16:1	135:3	103:21,22 154:15	tips 29:12,15
Tallahassee 7:5	151:17		160:5	tips 29.12,13
34:16 59:20		therapeutic	thorium 107:8,10	tissue 29:24
tomb. 400:00	temperature	30:23,25 31:4	108:14 118:2,3	161:21 162:22
tank 120:6,9	124:12,14	103:25	130:22	tissues 162:17,
tanks 78:15	temporarily	therapists 34:5	thought 07.44	18
tea 114:19	106:14	35:1 94:9 150:5	thought 67:11 106:25 116:23	
tea 114.19	10mm 0 m 0 m 1 4 5 1 4	therapy 6:24	100.25 110.25	titles 146:14
team 24:11 159:8	temporary 15:4	53:12,13 83:18,	thousand 147:1	today 8:11 15:8
tech 6:21 13:11	19:4 159:15	19,20 103:13,14	three-year	22:10 175:17
14:1 50:9 61:18,	160:2,7 164:18 168:22	145:20,23 150:19	178:24	179:2
19 91:22 94:11	100.22	160:6 166:21		told 33:1 108:12
152:3 157:12	ten 161:16		throw 125:2	115:18 118:4
	term 91:12	thing 7:18 11:16	167:2	156:20 174:19
technically 48:5	131111 01.12	12:20 21:1,11		100.20 174.10

Index: tab..told

tool 67:21	91:4		unmodified	vacancy 9:3
tools 29:12,15	treatment 30:10,	U	150:8	vague 166:23
107:19 111:15 175:23	11,16 31:10,11, 12,22 32:2 35:6	U.S. 107:10 135:4	unprofessional 27:4 40:11 41:8	vaguely 70:14
top 81:16 111:10	41:11 68:17 74:10	ugly 83:3	unquote 103:10	valid 171:4,8
136:7 137:22,23	76:22 77:16 80:11 85:13,14 87:5,7,	ultimately 37:14	111:12	values 162:20
145:1	10 95:8 160:1	ultrasound	unusual 30:18	variable 115:14
topics 83:5	162:5,11 170:3	88:20	upcoming 70:25	variation 63:20
total 23:15 29:22 30:13,14 31:13,	trends 9:25 30:5	unable 27:5	180:10	varicose 101:3
14,16,17,24,25	trinitite 131:3	unanimously	update 3:6,13 8:6,14 56:11	varied 124:11
40:15,24 52:6,9, 15,16 81:2	Trinity's 131:5	8:4	144:16 170:20	vast 65:20
totally 176:7	troubled 45:6	underground 19:10	171:11	veins 100:19
177:1	true 41:24 73:25 74:24 81:9 134:3,	underneath 92:1	updated 94:21, 22,23 135:8,9	101:3
touch 60:16	4 154:20	151:10	136:1 141:1	vendor 83:17
173:6	truthfully 50:3	understand	180:12	172:6
toxic 108:11	tumor 29:23	58:10 81:11 126:6	updating 141:2	vendors 170:9, 11,19 172:16
117:23 129:12	turn 21:22 95:5	understanding 19:7 41:18 67:20	upload 16:13	174:2
track 29:13 39:16 98:6 103:11 158:8	105:6 144:25	understands	uranium 107:8	ventilation
165:3,4	153:21 177:25 178:1	125:11	108:14 113:14,15, 21 115:17,19	120:17
tracking 41:5	turnaround	understood	116:1,21 118:2	verbiage 163:10
165:8,9	179:25	115:22	122:13,15 123:2,6 124:7,13,15	verification 142:3
train 151:5	turned 11:24	unexpected 168:3	130:6,12,17 134:6	verified 177:2
trained 154:25 175:10	114:21 124:13	unfunded 174:5	uranium's 123:6	verses 81:7
trainer 70:2 72:2	turning 67:1	uniforms 113:11	uranyl 130:11	version 135:10
75:23	turns 75:1	unintended 31:7	usage 11:14	145:6 150:8
trainers 72:8	two-year 24:4 58:15 142:20	159:3	103:25	versus 43:19
76:1 97:16	152:4	unique 101:24	user 16:8 135:11	76:6 78:20,24 83:21 94:1 130:10
training 4:23 23:6 33:19 34:10	type 11:15 13:19	unit 37:9,13,15	user-specific 135:5	161:6 166:20
54:17 153:3	76:17 78:9 80:9 81:1 84:8 85:15	39:19 53:3	users 23:8	vetted 179:23
transform 16:14	100:22 102:24	units 115:3 128:6,7,14	136:23	vetting 179:14
transition 8:21	162:4,23 164:22 166:14 168:22	universities	usual 65:11	vials 110:5,7,9
28:5 38:4	172:7 174:22	107:13	utilized 71:2	112:12,18,20,22, 23
translate 143:22	types 11:18 29:14	university 4:11,	utilizing 71:4	vice-president
transported 42:9	35:23 84:6 145:18	18 6:25 7:1,6		7:1
transuranic 128:3,4	typical 115:3	unknown 117:3,	V	vicinity 140:7
travel 178:3	typically 33:21, 25 48:17 113:19	5,8	VA 4:23	video 51:2
treat 68:1 77:18		unlicensed 27:18 39:25 40:4,	vacancies 8:23,	view 119:1 120:5
treating 73:17		11 62:8,19 63:18	25 9:4,5	124:19 133:18
	I	I	I	1

Index: tool..view

viewpoints weighed 112:17 53:9 55:3,13 78:2 80:10 101:17 159:7,9 160:19 135:15 67:16 111:8 110:14 111:16 weight 112:21,22 wrote 117:9 122:23 174:14 120:2 124:23,24 Violating 27:14 **weights** 110:10 178:2,20 125:12 132:24 Χ violation 5:13 112:24 154:7 168:12,13 War 113:11 170:8 174:4 25:17,19 26:5 weird 117:24 waste 133:12 175:11,19 176:5,8 27:11 33:12 x-ray 5:12 9:1 **weirdly** 117:18 35:14.16.17 36:6. 30:23,25 31:4 watch 15:8 worked 5:25 12 41:23,24 46:12 33:17 60:8 69:11 21:16 111:7 116:2 welfare 42:5 58:2 95:16 watching 13:14 79:18 84:20 88:16 whatsoever working 9:21 93:20 99:17 violations 25:10 water 78:15 108:9 12:16 13:2 17:1,2 80:23 139:11 140:3 35:8,17,23,24 123:8 19:18 20:9 51:25 142:11 154:17 36:1,9 whichever 58:19 ways 9:23 11:15 52:11,13 54:10 155:1 157:12 violence 131:24 62:1 69:14 84:14, Whoo 52:22 46:19 71:2 96:15 174:20 175:20 15 86:9 92:1 visibility 50:24 Weaver 7:6 75:4, wide 168:15 x-rays 40:4 72:15 95:15,21 100:1 14 76:8 79:18 83:21 85:8 173:14 visit 33:11,14 119:6 137:3 widely 27:13 81:19 82:1,3,19 155:18 34:15,20 88:16,20,23 89:5, wife 109:4 130:24 Υ works 47:20 visited 119:10 9,14 92:21 94:5, wild 42:2 123:17 179:12 13 96:4,8 101:22 vital 11:3 **Yay** 9:2 102:5,13 103:4,19 WILLIAM 7:10 world 113:11 volumetric 104:3,8 106:2 73:7 75:10,15 149:25 168:20 year 40:22,25 162:16 109:1 123:24 76:13 80:19 81:9 41:1,3 47:1 49:2,6 worried 154:14 124:5 126:21 99:5,9 103:14 76:10 81:15 98:19 voluntary 29:1 155:7 128:3,14,19,23 127:19,24 181:25 135:6 170:13 135:9 142:21 130:5,16,20 worry 83:10 143:2 wind 126:9 vote 83:13 132:15 134:19,23 160:25 years 4:20 5:1 138:6,9,11,14,18 windows 122:4 worst 36:7 12:11,14 13:1 143:5,7,18 162:25 W wise 155:5 18:8,9 23:24 47:2, 163:25 164:12,21, 133:23,24 24 165:3,12,16,21 9,15 48:1 55:3 withheld 49:13, **wow** 49:10 wait 48:17,20,21 166:6.12.16 57:20 59:7 61:22 140:13 147:25 178:10,19 168:12,15 169:11 102:19 133:8 witnesses 54:1.7 170:6 172:14,18, wrap 61:10 139:18,24 145:16 waiting 21:22 22 173:11,14,19 148:9,11,15 women's 6:1 144:23 148:10 write 73:2 82:19 156:19 160:24 174:12,22 175:1, 99:2 140:8,15 walk 73:15,16 wondered 45:8 20 176:6 177:2, 171:9 172:11 144:15 104:20 109:18 173:21 176:4 12.15 wonderful 93:10 173:6,8 writes 79:8 webinars 29:12 **yellow** 115:15 wondering 49:25 walk-in 99:4 129:21 130:11,13, writing 56:4 102:15 155:8 website 25:4 18 172:1 69:17 70:9,17 walked 14:4 160:4 177:12 42:1 55:8 60:19, 73:18 77:15 98:11 yellowish 123:1, 20 72:4 75:19 Woodliffe 8:18 walking 131:8 93:11 136:16 2 written 32:20 Walser 4:17 word 29:22 69:9 149:12 172:22 35:2 56:20 68:10 yes-or-no 24:18 84:12 113:1 70:19,23 71:22 69:24 71:19 week 52:4 103:6, 114:12 135:22 72:2,23 73:11,17, yesterday 13:25 74:16,21 89:16 8 179:22,23,24 14:5 16:12 141:5 23 96:24 97:6 97:20 128:2 work 4:17,22 5:18 180:7,8 98:20,24 99:2 139:19 151:9 7:14 13:8 14:11, York 138:16 125:24 weekly 30:11 17 15:5 16:23 wrong 29:20,21, 31:14.16 76:5.8 **younger** 118:15 20:25 22:8,15 wanted 11:6 23 30:10 31:9,10, 160:25 39:6,14 44:13 13:18 18:4 42:3,7 weeks 45:3 11 32:2,5,6 41:12 51:22,25 52:3,14 45:16,18 51:20 56:11 119:8 127:3 Youtube 126:3,6, 54:18,19 59:3

Index: viewpoints.. Youtube

5/15/2018	Index: Z136zzz
8	
Z	
Z136 135:6	
zzz 65:4	