

**From:** [Randy Erickson](#)  
**To:** [Jennifer Fisher](#)  
**Subject:** Re: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)  
**Date:** Wednesday, July 3, 2024 3:36:11 PM

---

Just letting you know I spoke with Santiago Rodriguez the RCPD for New Mexico and let him know the request came in and that NRC is evaluating it to see if the dose assessment can be made public and released.

Santiago told me they had received the same request from Pete Hernandez.

Randy

Get [Outlook for iOS](#)

---

**From:** Jennifer Fisher <Jennifer.Fisher@nrc.gov>  
**Sent:** Wednesday, July 3, 2024 2:33:00 PM  
**To:** Ken Brenneman <ken.brenneman@nrc.gov>  
**Cc:** Christian Einberg <Christian.Einberg@nrc.gov>; Randy Erickson <Randy.Erickson@nrc.gov>; Jackie Cook <Jackie.Cook@nrc.gov>; Daniel Dimarco <Daniel.Dimarco@nrc.gov>; Katherine Tapp <Katherine.Tapp@nrc.gov>; Todd Smith <Todd.Smith@nrc.gov>  
**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Dear Ken,

As the new NMSS Events Coordinator, Daniel, Katie, and I want to make sure that this is on your radar. A licensee has contacted us to request a document connected to this event. It came to our attention that the INES rating is still marked as provisional. You may be interested in determining if it's ready to be marked as final.

Cheers,  
Jenny

**From:** Jennifer Fisher  
**Sent:** Thursday, June 20, 2024 11:28 AM  
**To:** Todd Smith [Todd.Smith@nrc.gov](mailto:Todd.Smith@nrc.gov); Gretchen Rivera-Capella [Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)  
**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

I'll let Gretchen provide the status on that. I see in the RC Tracked Events database this update—

Followed up with Region IV on 6/7/2022. Update from Region on 6/13/2022: At the end of March the State was awaiting a new dose assessment/reconstruction evaluation conducted by the licensee that will be provided to the State, and then NM will share it with the Region.

—but I don't know anything else about it.

Jenny

**From:** Todd Smith <[Todd.Smith@nrc.gov](mailto:Todd.Smith@nrc.gov)>

**Sent:** Thursday, June 20, 2024 10:53 AM

**To:** Jennifer Fisher <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>; Gretchen Rivera-Capella <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>

**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Thanks, Jenny. The NMED Report is helpful. I note it states, "As of 9/21/2022, RCP had not closed this event and were still investigating the incident."

The INES rating was provisional, pending further discussions between the state and contractor. So, do we have any further updates?

Todd

---

**From:** Jennifer Fisher

**Sent:** Thursday, June 20, 2024 10:31 AM

**To:** Gretchen Rivera-Capella <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Todd Smith <[Todd.Smith@nrc.gov](mailto:Todd.Smith@nrc.gov)>

**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Hi Gretchen and Todd,

I remember having the discussion on whether this report (ML21354A314) was entered into ADAMS as public or non-public. I believe it was entered as non-public because it was a medical consultant report.... Something having to do with the contract. It looks like Vered was managing this contact at this time.

I also have email traffic that records a request to the HOO to have them remove the name of the contractor and the ADAMS accession number from the EN. As you know, the ENs become public on the NRC website. The HOO were able to do this for us.

I'm adding the NMED Report, in case that's helpful in any of this.

Jenny

---

**From:** Kennedy, Erin <[Erin.Kennedy@nrc.gov](mailto:Erin.Kennedy@nrc.gov)>

**Sent:** Thursday, December 23, 2021 10:06 AM

**To:** Fisher, Jennifer <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>; Alexander, Ryan <[Ryan.Alexander@nrc.gov](mailto:Ryan.Alexander@nrc.gov)>

**Cc:** Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>; Shaffer, Vered <[Vered.Shaffer@nrc.gov](mailto:Vered.Shaffer@nrc.gov)>; Tapp, Katherine <[Katherine.Tapp@nrc.gov](mailto:Katherine.Tapp@nrc.gov)>

**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Good Morning Jennifer,

Vered Shaffer is the COR for the contract with the dose assessment contractor, so any meetings will need to be coordinated through her.

Thank you,  
Erin Kennedy

---

**From:** Fisher, Jennifer <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>  
**Sent:** Thursday, December 23, 2021 8:31 AM  
**To:** Kennedy, Erin <[Erin.Kennedy@nrc.gov](mailto:Erin.Kennedy@nrc.gov)>; Alexander, Ryan <[Ryan.Alexander@nrc.gov](mailto:Ryan.Alexander@nrc.gov)>  
**Cc:** Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>  
**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Dear Erin and Ryan,

Thank you for tying me in on your Potential AO discussion. Gretchen and I had observed that this incident had been included in the 2020 AO report Appendix B as "Other Items of Interest." Since it's already on Congress's radar, we had decided not to send our normal "Notification of a Potential AO." This is how it's been handled in the past. We can still change direction on this. We are waiting until Anita Gray returns to see how she would like to handle this. She is our NMSS AO Coordinator.

We processed the INES Level 2 yesterday as provisional. The Agreement State wants to meet with the dose assessment contractor. Once NM issues an inspection report, we will re-submit the INES as final. They might not use the doses included in the dose assessment report. The doses that they use in enforcement should be clearly described in their inspection report.

Yesterday afternoon, I sent a round-up email. It's been challenging to work this with the holiday coming up. See below.

Jenny

---

**From:** Fisher, Jennifer  
**Sent:** Wednesday, December 22, 2021 3:03 PM  
**To:** Lubinski, John <[John.Lubinski@nrc.gov](mailto:John.Lubinski@nrc.gov)>; Lewis, Robert <[Robert.Lewis@nrc.gov](mailto:Robert.Lewis@nrc.gov)>  
**Cc:** Williams, Kevin <[Kevin.Williams@nrc.gov](mailto:Kevin.Williams@nrc.gov)>; Clark, Theresa <[Theresa.Clark@nrc.gov](mailto:Theresa.Clark@nrc.gov)>; Einberg, Christian <[Christian.Einberg@nrc.gov](mailto:Christian.Einberg@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Sun, Robert <[Robert.Sun@nrc.gov](mailto:Robert.Sun@nrc.gov)>; Burgess, Michele <[Michele.Burgess@nrc.gov](mailto:Michele.Burgess@nrc.gov)>; Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Tapp, Katherine <[Katherine.Tapp@nrc.gov](mailto:Katherine.Tapp@nrc.gov)>; Valentin-Rodriguez, Celimar <[Celimar.Valentin-Rodriguez@nrc.gov](mailto:Celimar.Valentin-Rodriguez@nrc.gov)>  
**Subject:** Front office awareness - EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Dear John and Rob,



Please be aware that EN55665 is getting attention from the EDO's office. Our friends in RIV let us know. We have not received any questions or tasks, but I wanted to keep you informed.

**INES Level 2** – Issued today (Wednesday, Dec. 22<sup>nd</sup>).

**Abnormal Occurrence review** – The event meets the AO criteria, however it was already included in the 2020 AO report Appendix B as “Other Items of Interest.” RIV provided the attached PowerPoint to the EDO's office today. See slides 22, 23, and 24. It was not reported to the HOO as an event until Monday, December 20<sup>th</sup>. \*\*\* This is what the EDO's office is interested in.

**Agreement State** – This is in the jurisdiction of New Mexico. They wanted to make sure it was reported to the HOO in a timely fashion. It was reported 1 business day after they received the RCD Radiation Protection Associates report. The RIV RSAO sent the report to NM on Friday, December 17<sup>th</sup>. NM asked us to treat the dose estimates as provisional for now. We submitted the INES report as provisional, per our procedure and discussions with NM. After the holidays, NM would like to consider the contents of the dose assessment report—when they are fully staffed.

The following description was included in Monday's Regional Coordination Summary.

**EN55665 (R4) NEW MEXICO RADIATION CONTROL PROGRAM (Spectratek) -  
AGREEMENT STATE REPORT OF A CONTAMINATED WORKER**

On October 22, 2019, a worker was manually drilling a container with 1080 millicuries of iridium-192 in ceramic tracer beads. The worker was not wearing eye or face shields and a puff of dust from the drilling struck the worker's face and eyes. Immediately after, the worker repeatedly washed their face and eyes. On the next day, a survey of the worker's face/eye area showed 200 mR/hr. Subsequent surveys over the next 103 days showed steadily decreasing amounts, down to 10 mR/hr at 103 days.

On June 23, 2020, the NMRCB reached out to the NRC seeking assistance in determining the individual's dose. Staff from the Office of Nuclear Material Safety and Safeguards (NMSS) and Region IV Division of Nuclear Materials Safety (DNMS) held a call with NMRCB, providing options on how to proceed, including encouraging the individual submit to a full body count. A whole body radiobioassay was performed on July 17, 2020, 272 days after the exposure. The result on the first run was 4.12 nCi and 4.34 nCi on the second run. NMRCB used RCD Radiation Protection Associates, an NRC contractor, to develop a dose assessment of the exposure event.

In a report dated November 18, 2021 ([ML21354A314](#)), RCD Radiation Protection Associates presented results indicating a committed effective dose equivalent (CEDE) to the worker of 1.48 milli-rem, a shallow dose equivalent (SDE) estimated to be 663 rem, a lens dose equivalent (LDE) estimated to be 11.5 rem, and an effective dose equivalent (EDE) of 3.6 milli-rem.

Thanks,  
Jenny Fisher  
Acting Events Coordinator  
NMSS/MSST/MSEB

**From:** [Jennifer Fisher](#)  
**To:** [Ken Brenneman](#)  
**Cc:** [Christian Einberg](#); [Randy Erickson](#); [Jackie Cook](#); [Daniel Dimarco](#); [Katherine Tapp](#); [Todd Smith](#)  
**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)  
**Date:** Wednesday, July 3, 2024 3:33:06 PM  
**Attachments:** NMED Item Number 220010 - Spectratek Services.pdf

---

Dear Ken,

As the new NMSS Events Coordinator, Daniel, Katie, and I want to make sure that this is on your radar. A licensee has contacted us to request a document connected to this event. It came to our attention that the INES rating is still marked as provisional. You may be interested in determining if it's ready to be marked as final.

Cheers,  
Jenny

**From:** Jennifer Fisher  
**Sent:** Thursday, June 20, 2024 11:28 AM  
**To:** Todd Smith [Todd.Smith@nrc.gov](mailto:Todd.Smith@nrc.gov); Gretchen Rivera-Capella [Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)  
**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

I'll let Gretchen provide the status on that. I see in the RC Tracked Events database this update—

Followed up with Region IV on 6/7/2022. Update from Region on 6/13/2022: At the end of March the State was awaiting a new dose assessment/reconstruction evaluation conducted by the licensee that will be provided to the State, and then NM will share it with the Region.

—but I don't know anything else about it.

Jenny

**From:** Todd Smith <[Todd.Smith@nrc.gov](mailto:Todd.Smith@nrc.gov)>  
**Sent:** Thursday, June 20, 2024 10:53 AM  
**To:** Jennifer Fisher <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>; Gretchen Rivera-Capella <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>  
**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Thanks, Jenny. The NMED Report is helpful. I note it states, "As of 9/21/2022, RCP had not closed this event and were still investigating the incident."

The INES rating was provisional, pending further discussions between the state and contractor. So, do we have any further updates?

Todd

---

**From:** Jennifer Fisher  
**Sent:** Thursday, June 20, 2024 10:31 AM  
**To:** Gretchen Rivera-Capella <Gretchen.Rivera-Capella@nrc.gov>; Todd Smith <Todd.Smith@nrc.gov>  
**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Hi Gretchen and Todd,

I remember having the discussion on whether this report (ML21354A314) was entered into ADAMS as public or non-public. I believe it was entered as non-public because it was a medical consultant report.... Something having to do with the contract. It looks like Vered was managing this contact at this time.

I also have email traffic that records a request to the HOO to have them remove the name of the contractor and the ADAMS accession number from the EN. As you know, the ENs become public on the NRC website. The HOO were able to do this for us.

I'm adding the NMED Report, in case that's helpful in any of this.

Jenny

---

**From:** Kennedy, Erin <[Erin.Kennedy@nrc.gov](mailto:Erin.Kennedy@nrc.gov)>  
**Sent:** Thursday, December 23, 2021 10:06 AM  
**To:** Fisher, Jennifer <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>; Alexander, Ryan <[Ryan.Alexander@nrc.gov](mailto:Ryan.Alexander@nrc.gov)>  
**Cc:** Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>; Shaffer, Vered <[Vered.Shaffer@nrc.gov](mailto:Vered.Shaffer@nrc.gov)>; Tapp, Katherine <[Katherine.Tapp@nrc.gov](mailto:Katherine.Tapp@nrc.gov)>  
**Subject:** RE: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Good Morning Jennifer,

Vered Shaffer is the COR for the contract with the dose assessment contractor, so any meetings will need to be coordinated through her.

Thank you,  
Erin Kennedy

---

**From:** Fisher, Jennifer <[Jennifer.Fisher@nrc.gov](mailto:Jennifer.Fisher@nrc.gov)>  
**Sent:** Thursday, December 23, 2021 8:31 AM  
**To:** Kennedy, Erin <[Erin.Kennedy@nrc.gov](mailto:Erin.Kennedy@nrc.gov)>; Alexander, Ryan <[Ryan.Alexander@nrc.gov](mailto:Ryan.Alexander@nrc.gov)>  
**Cc:** Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>  
**Subject:** FW: EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Dear Erin and Ryan,



Thank you for tying me in on your Potential AO discussion. Gretchen and I had observed that this incident had been included in the 2020 AO report Appendix B as "Other Items of Interest." Since it's already on Congress's radar, we had decided not to send our normal "Notification of a Potential AO."

This is how it's been handled in the past. We can still change direction on this. We are waiting until Anita Gray returns to see how she would like to handle this. She is our NMSS AO Coordinator.

We processed the INES Level 2 yesterday as provisional. The Agreement State wants to meet with the dose assessment contractor. Once NM issues an inspection report, we will re-submit the INES as final. They might not use the doses included in the dose assessment report. The doses that they use in enforcement should be clearly described in their inspection report.

Yesterday afternoon, I sent a round-up email. It's been challenging to work this with the holiday coming up. See below.

Jenny

---

**From:** Fisher, Jennifer

**Sent:** Wednesday, December 22, 2021 3:03 PM

**To:** Lubinski, John <[John.Lubinski@nrc.gov](mailto:John.Lubinski@nrc.gov)>; Lewis, Robert <[Robert.Lewis@nrc.gov](mailto:Robert.Lewis@nrc.gov)>

**Cc:** Williams, Kevin <[Kevin.Williams@nrc.gov](mailto:Kevin.Williams@nrc.gov)>; Clark, Theresa <[Theresa.Clark@nrc.gov](mailto:Theresa.Clark@nrc.gov)>; Einberg, Christian <[Christian.Einberg@nrc.gov](mailto:Christian.Einberg@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Sun, Robert <[Robert.Sun@nrc.gov](mailto:Robert.Sun@nrc.gov)>; Burgess, Michele <[Michele.Burgess@nrc.gov](mailto:Michele.Burgess@nrc.gov)>; Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; Tapp, Katherine <[Katherine.Tapp@nrc.gov](mailto:Katherine.Tapp@nrc.gov)>; Valentin-Rodriguez, Celimar <[Celimar.Valentin-Rodriguez@nrc.gov](mailto:Celimar.Valentin-Rodriguez@nrc.gov)>

**Subject:** Front office awareness - EN55665 - Spectratek Contaminated Worker (New Mexico Agreement State)

Dear John and Rob,

Please be aware that EN55665 is getting attention from the EDO's office. Our friends in RIV let us know. We have not received any questions or tasks, but I wanted to keep you informed.

**INES Level 2** – Issued today (Wednesday, Dec. 22<sup>nd</sup>).

**Abnormal Occurrence review** – The event meets the AO criteria, however it was already included in the 2020 AO report Appendix B as "Other Items of Interest." RIV provided the attached PowerPoint to the EDO's office today. See slides 22, 23, and 24. It was not reported to the HOO as an event until Monday, December 20<sup>th</sup>. \*\*\* This is what the EDO's office is interested in.

**Agreement State** – This is in the jurisdiction of New Mexico. They wanted to make sure it was reported to the HOO in a timely fashion. It was reported 1 business day after they received the RCD Radiation Protection Associates report. The RIV RSAO sent the report to NM on Friday, December 17<sup>th</sup>. NM asked us to treat the dose estimates as provisional for now. We submitted the INES report as provisional, per our procedure and discussions with NM. After the holidays, NM would like to consider the contents of the dose assessment report—when they are fully staffed.

The following description was included in Monday's Regional Coordination Summary.

**EN55665 (R4) NEW MEXICO RADIATION CONTROL PROGRAM (Spectratek) -**

#### **AGREEMENT STATE REPORT OF A CONTAMINATED WORKER**

On October 22, 2019, a worker was manually drilling a container with 1080 millicuries of iridium-192 in ceramic tracer beads. The worker was not wearing eye or face shields and a puff of dust from the drilling struck the worker's face and eyes. Immediately after, the worker repeatedly washed their face and eyes. On the next day, a survey of the worker's face/eye area showed 200 mR/hr. Subsequent surveys over the next 103 days showed steadily decreasing amounts, down to 10 mR/hr at 103 days.

On June 23, 2020, the NMRCB reached out to the NRC seeking assistance in determining the individual's dose. Staff from the Office of Nuclear Material Safety and Safeguards (NMSS) and Region IV Division of Nuclear Materials Safety (DNMS) held a call with NMRCB, providing options on how to proceed, including encouraging the individual submit to a full body count. A whole body radiobioassay was performed on July 17, 2020, 272 days after the exposure. The result on the first run was 4.12 nCi and 4.34 nCi on the second run. NMRCB used RCD Radiation Protection Associates, an NRC contractor, to develop a dose assessment of the exposure event.

In a report dated November 18, 2021 ([ML21354A314](#)), RCD Radiation Protection Associates presented results indicating a committed effective dose equivalent (CEDE) to the worker of 1.48 milli-rem, a shallow dose equivalent (SDE) estimated to be 663 rem, a lens dose equivalent (LDE) estimated to be 11.5 rem, and an effective dose equivalent (EDE) of 3.6 milli-rem.

Thanks,  
Jenny Fisher  
Acting Events Coordinator  
NMSS/MSST/MSEB



**Single Event Report****NMED Item Number: 220010****Narrative:****Last Updated:** 09/29/2022

Spectratek Services reported an incident that occurred on 10/22/2019 involving a radioactively contaminated worker. The worker was manually drilling a container with 39.96 GBq (1.08 Ci) of Ir-192 ceramic tracer beads. The worker was not wearing eye or face shields and a puff of dust from the drilling struck the worker's face and eyes. Spectratek Services had a dedicated ventilation system and was separate from the rest of the facility. This type of work would normally be performed in a lead-lined hot laboratory with a manipulator arm, but the manipulator arm was out of service. Areas of the building were contaminated by the incident. The areas were decontaminated and radiation surveys performed on 10/23/2019 were below background. Immediately after the incident, the worker repeatedly washed their face and eyes. On the next day, a radiation survey of the worker's face and eyes revealed 200 mR/hour. Subsequent radiation surveys over the next 103 days showed steadily decreasing rates, down to 10 mR/hour on day 103. The New Mexico Radiation Control Program (RCP) reached out to NRC on 6/23/2020 seeking assistance in determining the worker's dose. NRC provided options on how to proceed, including encouraging the worker submit to a full body count. A whole body radiobioassay was performed on 7/17/2020, which was 272 days after the exposure. The results of the first count revealed 152.44 Bq (4.12 nCi) and the result of the second count revealed 160.58 Bq (4.34 nCi). RCP used an NRC contractor (RCD Radiation Protection Associates) to develop a dose assessment of the worker. RCD Radiation Protection Associates presented results indicating a CEDE of 0.0148 mSv (1.48 mrem), a SDE of 663 cSv (rem), an LDE of 11.5 cSv (rem), and an EDE of 0.036 mSv (3.6 mrem). As of 9/21/2022, RCP had not closed this event and were still investigating the incident. As of 12/21/2021, this incident had a provisional INES Rating Level of 2. INL has requested additional information for this event.

Event Date: 10/22/2019 Date Reported to Agreement State: 06/23/2020

Discovery Date: 10/22/2019 Date Reported to NRC: 12/20/2021

**Licensee/Reporting Party Information:**

Regulated By:	AGREEMENT STATE	Reciprocity:	NONE
License Number:	NM-TA-172-25	Name:	SPECTRATEK SERVICES
NRC Docket Number:	NA	City:	ALBUQUERQUE
NRC Program Code:	NA	State:	NEW MEXICO
NRC Region:	4		

**Site of Event:**

Site Name: ALBUQUERQUE State: NEW MEXICO

**Additional Involved Party:**

License Number:	NA	Name:	NA
NRC Docket Number:	NA	City:	NA
NRC Program Code:	NA	State:	NA
NRC Region:	NA		

**Other Information:**

NRC Reportable Event:	Y	Abnormal Occurrence:	P
Agreement State Reportable Event:	Y	Investigation:	N
Atomic Energy Act Material:	Y	Record Complete:	R
Consultant Hired:	Y	Event Closed by Region/State:	N

**Event Type:**

EXP - OVEREXPOSURE

RLM - RADIOACTIVE MATERIAL REL.

**Event Cause:**

EXP

Cause: EQUIPMENT FAILURE / MECHANICAL IMPACT  
RLM  
Cause: EQUIPMENT FAILURE / MECHANICAL IMPACT

**Event IAEA Aggregate Category:**

EXP  
IAEA Aggregate Category: 4  
RLM  
IAEA Aggregate Category: 4

**Corrective Actions Information:**

Event Type: Number: Action:  
EXP 1 NOT REPORTED  
RLM 1 NOT REPORTED

**Release of Material/Contamination Information:**

Type of Release/Contamination: Activity: Radionuclide:  
PERSON NR Ci IR-192  
SURFACE NR Ci IR-192

**Overexposure Information:**

Person ID: Exposure Dose: Type of Dose:  
1 663 rem (6.63 Sv) SKIN, OCCUPATIONAL

**Source/Radioactive Material Information:**

EXP  
Source Number: 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide: IR-192  
Manufacturer: NR Activity: 1.08 Ci (39.96 GBq)  
Model Number: NA IAEA Category: 4  
Serial Number: NA  
RLM  
Source Number: 1  
Source/Material: UNSEALED SOURCE OTHER Radionuclide: IR-192  
Manufacturer: NR Activity: 1.08 Ci (39.96 GBq)  
Model Number: NA IAEA Category: 4  
Serial Number: NA

**Reporting Requirement Information:**

Event Type: Requirement:  
EXP 20.2202(a)(1)(iii) - An individual received a shallow-dose equivalent to the skin or extremities of 250 rad (2.5 Gy) or more.  
RLM 20.2202(a)(2) - Release of radioactive material, inside or outside of a restricted area, so that had an individual been present for 24 hours, the individual could have received an intake 5 times the ALI.

**Keywords:**

Event Type: Keyword:  
EXP RC TRACKING  
RLM RC TRACKING

**Reference Documents:**

Reference Document Number:	Entry Date: Retraction Date:	Type of Report:
EN55665	01/07/2022	EVENT NOTIFICATION REPORTED FROM AN AGREEMENT STATE
LTR211222	01/07/2022	INES REPORT
ML21361A237	01/13/2022	INES REPORT
LTR220921	09/29/2022	AGREEMENT STATE LETTER



**From:** [Erickson, Randy](#)  
**To:** [Howell, Linda](#)  
**Subject:** FW: Potential Event in New Mexico  
**Date:** Tuesday, November 3, 2020 1:57:00 PM

---

---

**From:** VonEhr, Jason <Jason.VonEhr@nrc.gov>  
**Sent:** Wednesday, October 28, 2020 4:01 PM  
**To:** Erickson, Randy <Randy.Erickson@nrc.gov>  
**Cc:** Cook, Jackie <Jackie.Cook@nrc.gov>  
**Subject:** RE: Potential Event in New Mexico

That's what I thought – it's a sister company to ProTechnics, our favorite well logger/tracer company. Spectratek manufactures the ZeroWash tracer materials, including the Ir-192 included, that ProTechnics then uses under their NRC (and other Agreement State) license(s).

---

**From:** Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>  
**Sent:** Wednesday, October 28, 2020 3:53 PM  
**To:** VonEhr, Jason <[Jason.VonEhr@nrc.gov](mailto:Jason.VonEhr@nrc.gov)>  
**Cc:** Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>  
**Subject:** FW: Potential Event in New Mexico

Spectratek is the company per New Mexico.

---

**From:** Erickson, Randy  
**Sent:** Wednesday, June 24, 2020 10:28 AM  
**To:** Silva, Patricia <[Patricia.Silva@nrc.gov](mailto:Patricia.Silva@nrc.gov)>; Ayoade, Maryann <[maryann.ayoade@nrc.gov](mailto:maryann.ayoade@nrc.gov)>; Howell, Linda <[Linda.Howell@nrc.gov](mailto:Linda.Howell@nrc.gov)>  
**Cc:** Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Bill Maier <[Bill.Maier@nrc.gov](mailto:Bill.Maier@nrc.gov)>; Rivera-Capella, Gretchen <[Gretchen.Rivera-Capella@nrc.gov](mailto:Gretchen.Rivera-Capella@nrc.gov)>; Gray, Anita <[Anita.Gray@nrc.gov](mailto:Anita.Gray@nrc.gov)>; White, Duncan <[Duncan.White@nrc.gov](mailto:Duncan.White@nrc.gov)>  
**Subject:** Potential Event in New Mexico

Just to bring you up to speed.

Yesterday afternoon I received a call from Carl Sullivan in the New Mexico program describing a situation that occurred on October 22, 2019. One of their licensees (a tracer company) for unknown reasons, the licensee had one of their technicians drill into what was described as a paint can style of container which held just over one curie of iridium-192 spheres (approximately 200-400 microns each) to be used for downhole tracer work.

When the technician drilled into the container, the container had some sort of pressure on it, as there was spray back that struck his upper body and face. The

licensee removed the individual's clothing and placed them (which also had his whole body OSL badge on it) into waste, and the badge was lost. He did have a ring badge on which was generally consistent in dose to previous months work. The licensee stated that they had accounted in their clean up of the facility and the individual for all but 78 millicuries of the material.

The individual or the company did not seek medical help and did not notify New Mexico. Then on or about May 17, 2020, the individual was feeling sick, went to the hospital, and claimed that he believed he had "radiation poisoning". At this point, the New Mexico program was notified by the licensee and began to investigate.

When they reached the point of not knowing what else to do, they reached out to NRC for assistance. This was the first time that New Mexico (who had the details of this for approximately a month) reached out to us.

I held a call with New Mexico, Jackie Cook and Duncan White. New Mexico was represented by Carl Sullivan and Michael Ortiz. It was not an easy call as New Mexico had limited information, even after a month of investigating. They did acknowledge that they discussed this with the licensee, but have not spoken with the individual. The licensee described cleaning the individual up, but did no other bioassay work on the individual. They did not send the individual for medical treatment and did not notify the state. We recommended that they immediately reach out to the individual and interview him, and to do a whole body scan on him to determine what if anything, may still be in his lungs, as that will allow them to back calculate to a reasonable assumption of dose. New Mexico said they would set that up.

As for now, that's all we have. This information is not in NMED and we told New Mexico that it needed to go into NMED. Then we told them to review SA-300 to determine if any reporting thresholds were reached and to make the report to the HOO if so. We added that if during their investigation they determine that the dose to the individual exceeded reporting thresholds, that they needed to report that to the HOO within the prescribed timeframe once they determine the threshold has been reached.

I will continue to follow up with them. I've asked for a copy of the documentation that the licensee provided to them, but haven't heard back from them at this point.

Duncan or Jackie....if you have anything to add, please do so.

Randy



**U.S.NRC**  
UNITED STATES NUCLEAR REGULATORY COMMISSION  
*Protecting People and the Environment*

***Randy Erickson***

***State Agreements Officer***

***NRC Region IV***

***Phone: (817) 200-1143***

***Cell:*** (b)(6)

***Email:*** [randy.erickson@nrc.gov](mailto:randy.erickson@nrc.gov)



**From:** [Shaffer, Vered](#)  
**To:** [Tomon, John](#)  
**Cc:** [Hooker, Timothy](#); [Bush-Goddard, Stephanie](#)  
**Subject:** Path forward for New Mexico  
**Date:** Tuesday, January 5, 2021 5:35:03 PM  
**Attachments:** image001.gif

---

John,

I have an idea for a path forward on this. Can I set up a call between us? I don't see any discussion below on transferring of money, and so I am going to assume that Mike is providing that.

Vered

---

**From:** Erickson, Randy <Randy.Erickson@nrc.gov>  
**Sent:** Tuesday, January 05, 2021 3:44 PM  
**To:** Williams, Kevin <Kevin.Williams@nrc.gov>; Shaffer, Vered <Vered.Shaffer@nrc.gov>; Tomon, John <John.Tomon@nrc.gov>; Tapp, Katherine <Katherine.Tapp@nrc.gov>  
**Cc:** Clark, Theresa <Theresa.Clark@nrc.gov>; Cook, Jackie <Jackie.Cook@nrc.gov>; Holahan, Vincent <Vincent.Holahan@nrc.gov>; Case, Michael <Michael.Case@nrc.gov>; Webber, Kimberly <Kimberly.Webber@nrc.gov>; Brock, Terry <Terry.Brock@nrc.gov>; Hooker, Timothy <Timothy.Hooker@nrc.gov>; Ford, Monica <Monica.Ford@nrc.gov>; Howell, Linda <Linda.Howell@nrc.gov>; Bradley, Dan <Dan.Bradley@nrc.gov>  
**Subject:** Call with New Mexico

Kevin et al,

I just spoke with Michael Ortiz from New Mexico. Michael is the Program Manager and the one who has been performing the investigation into the iridium-192 contamination of the individual. I explained what we would need from him and he said he will start putting the information together. He's also going to provide the WIPP contractor's counting report and any other data that he has after redacting any PII from the documents.

That should be coming within a short period of time and he's ready then for any questions that arise as a result of what he initially provides.

More to come.

Randy



**Randy Erickson**  
**State Agreements Officer**  
**NRC Region IV**  
**Phone: (817) 200-1143**

(b)(6)

**Email: [randy.erickson@nrc.gov](mailto:randy.erickson@nrc.gov)**

**From:** [Webber, Kimberly](#)  
**To:** [Tomon, John](#)  
**Subject:** RE: Call with New Mexico  
**Date:** Tuesday, January 5, 2021 4:58:31 PM  
**Attachments:** image001.gif

---

What was the outcome of the meeting? Theresa and I were IMing so I don't think I heard the next steps.

---

**From:** Williams, Kevin <Kevin.Williams@nrc.gov>  
**Sent:** Tuesday, January 05, 2021 4:51 PM  
**To:** Erickson, Randy <Randy.Erickson@nrc.gov>; Shaffer, Vered <Vered.Shaffer@nrc.gov>; Tomon, John <John.Tomon@nrc.gov>; Tapp, Katherine <Katherine.Tapp@nrc.gov>  
**Cc:** Clark, Theresa <Theresa.Clark@nrc.gov>; Cook, Jackie <Jackie.Cook@nrc.gov>; Holahan, Vincent <Vincent.Holahan@nrc.gov>; Case, Michael <Michael.Case@nrc.gov>; Webber, Kimberly <Kimberly.Webber@nrc.gov>; Brock, Terry <Terry.Brock@nrc.gov>; Hooker, Timothy <Timothy.Hooker@nrc.gov>; Ford, Monica <Monica.Ford@nrc.gov>; Howell, Linda <Linda.Howell@nrc.gov>; Bradley, Dan <Dan.Bradley@nrc.gov>  
**Subject:** RE: Call with New Mexico

Thanks Randy and thanks to all for participating in the call today.

Kevin

---

**From:** Erickson, Randy <[Randy.Erickson@nrc.gov](mailto:Randy.Erickson@nrc.gov)>  
**Sent:** Tuesday, January 05, 2021 4:44 PM  
**To:** Williams, Kevin <[Kevin.Williams@nrc.gov](mailto:Kevin.Williams@nrc.gov)>; Shaffer, Vered <[Vered.Shaffer@nrc.gov](mailto:Vered.Shaffer@nrc.gov)>; Tomon, John <[John.Tomon@nrc.gov](mailto:John.Tomon@nrc.gov)>; Tapp, Katherine <[Katherine.Tapp@nrc.gov](mailto:Katherine.Tapp@nrc.gov)>  
**Cc:** Clark, Theresa <[Theresa.Clark@nrc.gov](mailto:Theresa.Clark@nrc.gov)>; Cook, Jackie <[Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov)>; Holahan, Vincent <[Vincent.Holahan@nrc.gov](mailto:Vincent.Holahan@nrc.gov)>; Case, Michael <[Michael.Case@nrc.gov](mailto:Michael.Case@nrc.gov)>; Webber, Kimberly <[Kimberly.Webber@nrc.gov](mailto:Kimberly.Webber@nrc.gov)>; Brock, Terry <[Terry.Brock@nrc.gov](mailto:Terry.Brock@nrc.gov)>; Hooker, Timothy <[Timothy.Hooker@nrc.gov](mailto:Timothy.Hooker@nrc.gov)>; Ford, Monica <[Monica.Ford@nrc.gov](mailto:Monica.Ford@nrc.gov)>; Howell, Linda <[Linda.Howell@nrc.gov](mailto:Linda.Howell@nrc.gov)>; Bradley, Dan <[Dan.Bradley@nrc.gov](mailto:Dan.Bradley@nrc.gov)>  
**Subject:** Call with New Mexico

Kevin et al,

I just spoke with Michael Ortiz from New Mexico. Michael is the Program Manager and the one who has been performing the investigation into the iridium-192 contamination of the individual. I explained what we would need from him and he said he will start putting the information together. He's also going to provide the WIPP contractor's counting report and any other data that he has after redacting any PII from the documents.

That should be coming within a short period of time and he's ready then for any questions that arise as a result of what he initially provides.

More to come.



Randy



***Randy Erickson***  
***State Agreements Officer***  
***NRC Region IV***  
***Phone: (817) 200-1143***

(b)(6)

***Email: [randy.erickson@nrc.gov](mailto:randy.erickson@nrc.gov)***

**From:** [Christian Einberg](#)  
**To:** [Howe, Donna-Beth](#)  
**Subject:** FW: JMB vote on AO report (SECY-21-0023)  
**Date:** Friday, March 12, 2021 12:50:00 PM  
**Attachments:** JMB-SECY-21-0023.pdf

Note to requester: the draft SECY document attachment is withheld under Exemption (B)(5), however, the final version of this document is publicly available on ADAMS via Accession Number ML21081A205 (<https://adams.nrc.gov/wba/>).

FYI

**From:** Clark, Theresa <Theresa.Clark@nrc.gov>

**Sent:** Friday, March 12, 2021 12:49 PM

**To:** Einberg, Christian <Christian.Einberg@nrc.gov>; Gray, Anita <Anita.Gray@nrc.gov>; Smith, George <George.Smith@nrc.gov>

**Cc:** Williams, Kevin <Kevin.Williams@nrc.gov>; Valentin-Rodriguez, Celimar <Celimar.Valentin-Rodriguez@nrc.gov>

**Subject:** FYI: JMB vote on AO report (SECY-21-0023)

FYI – Commissioner Baran’s vote on the AO report. Some edits to the text of the events but no major changes like deletion.

**From:** [adamsp8\\_icm\\_service@nrc.gov](mailto:adamsp8_icm_service@nrc.gov) <[adamsp8\\_icm\\_service@nrc.gov](mailto:adamsp8_icm_service@nrc.gov)>

**Sent:** Friday, March 12, 2021 12:10 PM

**To:** ICM\_STARS\_CTH2 <[ICM\\_STARS\\_CTH2@nrc.gov](mailto:ICM_STARS_CTH2@nrc.gov)>; ICM\_STARS\_JMB <[ICM\\_STARS\\_JMB@nrc.gov](mailto:ICM_STARS_JMB@nrc.gov)>; ICM\_STARS\_AXC <[ICM\\_STARS\\_AXC@nrc.gov](mailto:ICM_STARS_AXC@nrc.gov)>; ICM\_STARS\_DAW <[ICM\\_STARS\\_DAW@nrc.gov](mailto:ICM_STARS_DAW@nrc.gov)>; Caputo, Annie <[Annie.Caputo@nrc.gov](mailto:Annie.Caputo@nrc.gov)>; ACM Support <[ACMSupport@nrc.gov](mailto:ACMSupport@nrc.gov)>; ICM\_STARS\_SECYVoting <[ICM\\_STARS\\_SECYVoting@nrc.gov](mailto:ICM_STARS_SECYVoting@nrc.gov)>

**Subject:** Vote Registered (JMB, SECY-21-0023, Report to Congress on Abnormal Occurrences: Fiscal Year 2020)

On 03/12/2021 JMB Vote Record was updated by Chen, Qiao-Lin (qxc1). The Vote Record information can be found below



## Vote Record Info

Document Number	SECY-21-0023
Subject	Report to Congress on Abnormal Occurrences: Fiscal Year 2020
Originating Organization	Executive Director for Operations
Due Date	03/15/2021
Vote	Approved
Vote Date	03/12/2021
Edits?	Yes
Comments?	Yes
Vote Comments	Commissioner Baran's vote with comments and edits attached.
Assignee	JRJ