

Interview with (b)(6)

(b)(6) years experience in Rad Con. He (b)(6) and (b)(6) listing of personnel (b)(6) He also (b)(6) (b)(6) a list of personnel (b)(6) (b)(6) course has a course number.

The course was built for (b)(6) - (b)(5);(b)(6) radiation/contamination. They (b)(6)

(b)(6) course has been in place for (b)(6) years. They started recording who had taken it in (b)(6) There is (b)(5) that personnel (b)(5);(b)(6) They did not formalize (b)(5) per Training, it (b)(5) the training process. They also need to be able to quickly (b)(5) they are on (b)(5);(b)(6) instructions.

(b)(5)
(b)(6) The waste handling aspect (b)(5) that is part of the job and needs to be communicated by (b)(5)

They have (b)(5) crew of workers and (b)(5) do don't have to (b)(5) (b)(5) does not get involved with (b)(6)

For the (b)(6) They used to use this at HAMMER but don't anymore. (b)(6) They used this for the (b)(6) (b)(6) They don't use this (b)(6) (b)(5)

(b)(6)
(b)(5);(b)(6) They have discussed (b)(5) to establish proficiency in upcoming (b)(5) They would have people (b)(5) then do it (b)(5) (b)(5) (b)(5) and determine if (b)(5) (b)(6) understanding is that this is specific to 324. (b)(5) has not been involved with the company level effort (b)(6)

As (b)(5) changed, they did a (b)(5);(b)(6) showed people the process. He did not know if everyone (b)(5);(b)(6)

(b)(5);(b)(6) The (b)(5);(b)(6) instructions (b)(5);(b)(6) specific. Has had (b)(5);(b)(6) the workers. (b)(5);(b)(6)

(b)(6) said that use of (b)(5) had been beneficial, and is a better way to do (b)(5);(b)(6) They can (b)(5);(b)(6) to really see actions. They should take these (b)(5);(b)(6) (b)(5);(b)(6)

(b)(5) needs to re-evaluate (b)(5);(b)(6) the (b)(5);(b)(6) recognize that it was the (b)(5);(b)(6) contamination occurred. (b)(5);(b)(6) is supposed to (b)(5);(b)(6) They just (b)(5) (b)(5)

Interview Notes from Interview with (b)(6) 324

He (b)(6) indicated that they (b)(5);(b)(6) participations in (b)(5);(b)(6). Finally, worked through it. (b)(5);(b)(6) focused on (b)(5) rather than (b)(5);(b)(6) was the primary concern. (b)(6) indicated that they were (b)(5);(b)(6) early due to (b)(5);(b)(6) requirement in Sentinel.

He indicated that (b)(6) (b)(6) and was not (b)(6) (b)(6) (b)(6) indicated that it was designed to (b)(5);(b)(6) and operates at (b)(5);(b)(6) (b)(5);(b)(6) in Rm 18 (only about a (b)(5);(b)(6)) He indicated that controls implemented were (b)(5);(b)(6) and that multiple failure points were engineered out of the system. (b)(5);(b)(6) were using a process that was (b)(5)

(b)(5);(b)(6)

(b)(6) said that (b)(5);(b)(6) but only (b)(5);(b)(6) (b)(5) (b)(5)

Planning started early enough but the plan (b)(5) They purposely (b)(5) (b)(5) so they could stay on the same page during planning.

(b)(6) made observations of (b)(5);(b)(6) They planned 60 airlock entries. (b)(5) (b)(5) Donning and Doffing training was required for new workers, (b)(5) (b)(5)

Lots of (b)(5) and they were (b)(5) In general if you had (b)(5) (b)(5) All issues from (b)(5) but some were (b)(5) (b)(5) for various reasons.

There is definitely (b)(5) (b)(5) water in the airlock sump tank dumps into B Cell.

Indicated that (b)(5) got a chance to comment on RWP and AMWs. Indicated that (b)(5);(b)(6) communicated with the craft and that the controls in the AMW were communicated and matched those in the RWP and work instructions.

Thought that (b)(5) (b)(5);(b)(6) (b)(6) Been lots of (b)(5)

Felt that (b)(5) were appropriate (b)(5) (b)(5)

Felt that (b)(5) (b)(5) He felt that (b)(5) were more associated with (b)(5)

He indicated that (b)(5);(b)(6) was in place (b)(5);(b)(6) but it was (b)(5) over time.

Mentioned a 2 stage airlock to address the Sr-90 issues and that the (b)(5) performing that work.

(b)(5) has been a good (b)(5) (b)(5) (b)(5) early on but was later removed. (b)(5) and then they were removed (not needed). (b)(5) was not an issue. No (b)(5)

Indicated that (b)(5);(b)(6) have a good appreciation for (b)(5);(b)(6) (b)(5) Rest of the facility is (b)(5) He ask (b)(5);(b)(6) (b)(5);(b)(6) and they could only find (b)(5) (b)(5) Lots of (b)(5) is kept clean.

Change of Conditions – Rm 18 (b)(6) Sr-90 (b)(6) AMW, Work Packages, ALARA Reviews, RWP and Training for the work force. When addressing the Sr-90 issue (b)(6) that it was a very (b)(5);(b)(6) Considerable (b)(5) (b)(5);(b)(6)

When asked if (b)(5) implement the program he indicated that there was (b)(5) but he made sure that they had (b)(5) that could (b)(5) (b)(5) (b)(5)

Indicated that they (b)(5) and they were (b)(5) It was not a (b)(5)

When hiring (b)(5) process. (b)(5) (b)(5) because of what is (b)(5) (b)(5)

Indicated that (b)(5) (b)(5) (b)(5) Feels there is (b)(5) Said the balance (b)(5) (b)(5) but other areas (b)(5)

Indicated that (b)(5) He indicated that (b)(5) requirement to perform (b)(5) (b)(5) some projects (b)(5) all at other facilities.

ACL extensions (b)(5)

His comment was that (b)(5)

Stated that the (b)(5)

Interview with (b)(6) and (b)(6)

(b)(5);(b)(6)

Rotation of personnel:

(b)(5);(b)(6) numbers are often created to capture briefings in (b)(5);(b)(6) The project has (b)(5) (b)(5) Response by management concluded that (b)(5) (b)(5)

There are several (b)(5);(b)(6) not treated as separate qualification. First proficiency established by (b)(5);(b)(6) (b)(6) (b)(6) schedules (b)(5);(b)(6) after completing (b)(5);(b)(6) After quals, individuals on a 2 yr re-qual. (b)(5) if coming off disability. (b)(5) (b)(5)

Interview – (b)(6)

For many of the early events (b)(6) Did not (b)(6)
(b)(6) Were involved in (b)(6) Although common factors were identified, there was
(b)(5) They were told (b)(5)
(b)(5)

There are (b)(5) contamination control performance (b)(5)
(b)(5) process. They (b)(5) Have attempted
to (b)(5);(b)(6) They have (b)(6)
management. In general there is (b)(5);(b)(6)

Actions taken (b)(5) Actions are (b)(5)
(b)(5) In some (b)(5)
(b)(5)

On the (b)(5);(b)(6) (b)(5);(b)(6)
(b)(5);(b)(6) interviewed. The interview was conducted (b)(5)
walking through. Approximately (b)(5)
(b)(5) one-on-one discussion.

(b)(6) makes determination of who will be (b)(6) Sometimes it is a (b)(5);(b)(6)
(b)(5);(b)(6)

(b)(5) (b)(5);(b)(6) but does not (b)(5)
(b)(5)

None of the (b)(5) actions. There is no
(b)(5) (b)(5)

Assignment of issues (b)(6) Bigger issues (b)(6)

They have done (b)(5) meeting, but since they (b)(5)
(b)(5) Also (b)(5)

Job Category: (b)(6)

Names (Optional): (b)(6) and (b)(6)

November 25, 2019

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Position	Years at 324	Rad experience	Other Experience	Rad Experience
(b)(6)		Yes	• (b)(6) • •	Yes
(b)(6)		Yes	• (b)(6) •	Yes

2. What can you tell me about the personnel contamination events at 324?

Knowledgeable on (b)(6)

Interviewees stated:

- Doesn't believe (b)(5) the contamination events.
- some of the contamination events in the summer of 2019 (b)(5)
(b)(5)
- Facility put in place corrective actions (b)(5)
- (b)(5) contamination events was (b)(5)
(b)(5)
- Other (b)(5)

- Contamination events (b)(5) (b)(5) contamination areas
- 324 Building personnel (b)(5)
- Sometimes 324 Building (b)(5);(b)(6)
- Schedule pressure (b)(5)
 - Example: 324 Building personnel (b)(5);(b)(6) because they were (b)(5);(b)(6) (b)(5);(b)(6)
 - (b)(5);(b)(6) believe there is (b)(5);(b)(6) (b)(5);(b)(6) 324 Building (b)(5);(b)(6) (b)(5);(b)(6)
- (b)(5) for contamination events.
- (b)(5) identifying corrective actions because (b)(5)
- (b)(5) corrective actions and (b)(5) (b)(5) 324 Building (b)(5);(b)(6)
- (b)(5);(b)(6)
- (b)(5);(b)(6)
- Direction to emphasize (b)(5);(b)(6)
- (b)(5);(b)(6) 324 Building (b)(5);(b)(6)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Interviewees stated:

- Management oversight (b)(5) (b)(5)
- (b)(5);(b)(6) need (b)(5);(b)(6) from (b)(5);(b)(6) is needed. The exception is (b)(6) who (b)(5) (b)(5)
- (b)(6) is a good problem solver (b)(5);(b)(6) (b)(5);(b)(6)
- (b)(5) provided to CHPRC. CHPRC (b)(5) (b)(5)
 - 324 Building (b)(5);(b)(6) (b)(5);(b)(6) 324 Building (b)(5);(b)(6) (b)(5);(b)(6)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5) PPE dressing / undressing process
 (b)(5) room 18 and Airlock.

Interviewees stated:

- (b)(5);(b)(6) Airlock and room 18 (b)(5);(b)(6) 324 Building (b)(5);(b)(6)
 - 1 million dpm action level in room 18 established as control for when decontamination is needed
 - Airlock doesn't have a similar action level to initiate decontamination
- (b)(5) solve issues; preference is to (b)(5)
- (b)(5)
- (b)(5)
- Example of (b)(5)
(b)(5)
- Perception that (b)(5)
(b)(5)
- Varying level (b)(5);(b)(6)

Interviewer's Comment: Project should (b)(5)

(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

See OAs and discussion for question 2.

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Not applicable

7. Describe how you personally have been involved in developing or implementing contamination controls.

Not applicable

8. What do you think could be done to improve contamination controls?

Not applicable

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Not applicable

10. Is there anyone else you would recommend we talk to?

(b)(6) (b)(6)

(b)(6)

(b)(6) 324 Building (b)(6)

(b)(6)

(b)(6) or someone in (b)(6) organization

Job Category: (b)(6)

Names (Optional): (b)(6)

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Position	Years at 324	Rad experience	Other Experience	Rad Experience
(b)(6)		Yes	• (b)(6)	Yes
		Yes - (b)(6)	•	Yes
		(b)(6)	•	

2. What can you tell me about the personnel contamination events at 324?

(b)(5) about personnel contamination events. (b)(5) and a little discussion as morning meetings.

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5) training. Additional training in response to contamination events in room 18 and Airlock.

Personnel (b)(5) get additional (b)(5) 324 Building.

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(6) not familiar with hazards.

(b)(5);(b)(6) 324 Building, (b)(5);(b)(6) Very familiar with (b)(5);(b)(6) Stated (b)(5) Knows (b)(5) PPE for this hazard. For entries into Airlock prior to 2017, personnel dressed in 3 pairs of PPE, fresh air supply, and outer PPE was plastic which was (b)(5)

Believes (b)(5) is going to (b)(5) additional (b)(5)
(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

Concerns are directed to immediate supervisor. Does receive feedback from management when concerns are raised. When asked if willing to direct stop work replied affirmative and provided example where stop work had been issued in 2017.

(b)(5);(b)(6) an issue.

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Bounce dryer sheets used for static removal introduced (b)(5)
(b)(5)

(b)(5)

(b)(5) 324 Building (b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

Have not been asked to participate in reviewing controls or reviewing work practices / videos.

8. What do you think could be done to improve contamination controls?

(b)(5) recommend improvements (b)(5)

Recommendations to improve contamination control:

- (b)(5) (b)(5)
-
-

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Concerned with (b)(5) Concerned

(b)(5)

10. Is there anyone else you would recommend we talk to?

No recommendations.

Interviewer's comments:

It appears (b)(5) and (b)(5) in other activities
(b)(5) 324 Building.

(b)(5) (b)(5)
(b)(5) 324 Building.

Job Category: (b)(6)

Names (Optional): (b)(6)

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Position	Years at 324	Rad experience	Other Experience	Rad Experience
(b)(6)		Yes (b)(6) (b)(6)	• (b)(6) •	Yes

2. What can you tell me about the personnel contamination events at 324?

(b)(5);(b)(6) contamination events. (b)(5);(b)(6)
(b)(5);(b)(6) Airlock entries and conduct (b)(5);(b)(6)
(b)(5);(b)(6) contamination events and causal reviews.

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Rad worker II training. Additional training in response to (b)(5) and (b)(5)

(b)(5) personnel are appointed by (b)(5)
(b)(5) 324 Building and radiation / contamination work. A book is maintained listing the appointed (b)(5) personnel. This is n (b)(5)

(b)(5) contamination events.
(b)(5) discussion of events, corrective actions being implemented and explanation. Personnel training in response to (b)(5)

Expressed concern that (b)(5) are also being transmitted (b)(5)
(b)(5) status of (b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5) radiation, contamination, and industrial hazards in Airlock and Room 18.

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

Concerns are directed to immediate supervisor; (b)(6) Has access to higher levels of management as well to raise issues (e.g. (b)(6)

(b)(6)

Has raised concerns in the past such as (b)(5);(b)(6)

(b)(5);(b)(6)

Also receives (b)(5);(b)(6)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

As expected (b)(6) 324 Building, individual is very knowledgeable on (b)(6) (b)(6) (b)(6) events.

7. Describe how you personally have been involved in developing or implementing contamination controls.

Have (b)(6) developing controls (b)(5) on (b)(6) controls (b)(5)

8. What do you think could be done to improve contamination controls?

- Believes a (b)(5)
- Indicated implementing (b)(5) (b)(5) additional (b)(5)
- Understands that (b)(5) however, expressed concern with (b)(5) (b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

No.

10. Is there anyone else you would recommend we talk to?

No recommendations.

Job Category: (b)(6)

Names (Optional): (b)(6)

Date: December 4, 2019

Interviewers: (b)(6) and (b)(6)

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324?
How long have you performed radiological work?
(b)(6) years of experience at the Hanford site and at 324 Building since (b)(6)
2. What can you tell me about the personnel contamination events at 324?
3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?
4. Tell me about the hazards in Room 18 and/or in performing airlock work?
5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?
6. What can you tell me about the controls that have been put in place to prevent contamination events?
7. Describe how you personally have been involved in developing or implementing contamination controls.
8. What do you think could be done to improve contamination controls?
9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?
10. Is there anyone else you would recommend we talk to?

Interviewee stated:

- Work scope (b)(5) work force.

- New (b)(5) work force.
- (b)(5) high radiation areas / high contamination areas
- There has (b)(5) contamination prevention.
- There has been prior (b)(5) but no (b)(5) (b)(5)
- Workers have been (b)(5)
- (b)(5) engineering controls (b)(5) but (b)(5) (b)(5) was (b)(5) Work proceeded (b)(5) (b)(5)
- Believes (b)(5) (b)(5) (b)(5)
- Work force is (b)(5) (b)(5)
- Pre-job meetings are typically 1 ½ hour long but (b)(6) focuses on reviewing checklist and (b)(5) workers. (b)(5) workers being (b)(5) (b)(5)
- (b)(5) assigned to each job. (b)(5) (b)(5)
- PPE (b)(5)
 - (b)(5) correctly.
 - (b)(5) which isn't occurring.
 - (b)(5) Need a (b)(5)
- Strongly believes (b)(5)

Job Category (b)(5)

Names (Optional)

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Been at 324 since (b)(6) (b)(6)
(b)(6) At that time (b)(5);(b)(6)
(b)(5);(b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5) but has heard about it. Some people
(b)(5) high contamination area. FH used a similar (b)(5) Saw
occasional (b)(5)

Use of (b)(5) Hasn't (b)(5)
(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Rad II. Some people are (b)(5) Mockup has don and doff training. When they change dress requirements, showed everyone the new process.

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5) (b)(5) RM 18 (b)(5)
(b)(5) but they (b)(5)
(b)(5) Changes the (b)(5) learned (b)(5)
(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

Not involved in r (b)(6) They have an open door policy and management is pretty responsive when issues are brought up.

6. What can you tell me about the controls that have been put in place to prevent contamination events?

(b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(5);(b)(6)

8. What do you think could be done to improve contamination controls?

Maybe specific people (b)(5) - need to be (b)(5) Helps to have a (b)(5) Possibly use a (b)(5) Not sure if (b)(5)

(b)(5)

(b)(5) was done 2001.

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Used to use (b)(5) (b)(5)

(b)(5)

Talked about (b)(5)

Talkiong like they might use (b)(5) Going to (b)(5)

(b)(5)

Don't think that (b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category__ (b)(6)

Names (Optional) __ 12/2/19 2 – 3 o'clock

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6) at Hanford w/ (b)(6) 324 (b)(6) at 324

2. What can you tell me about the personnel contamination events at 324?

These workers (b)(5) that we are looking into. They were also (b)(5)

(b)(5) skin contamination event. (b)(5)

(b)(5) contam events.

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5) training was (b)(5) (b)(5)

the field. (b)(5)

(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

Recognized hazards in the airlock related to radiation and contamination. (b)(6) in rm. 18.

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

(b)(6) bring up issues to (b)(5);(b)(6) They did not have an example nor did they describe a process that (b)(5)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

They spoke about the (b)(5) and the (b)(5) that is being used as a new control.

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(6) in the development of contam controls.

8. What do you think could be done to improve contamination controls?

(b)(5) would help. More (b)(5)

(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Each entry requires (b)(5) (b)(5) was a problem due to the (b)(5)

Some (b)(5);(b)(6)

(b)(5)

10. Is there anyone else you would recommend we talk to?

Job Category (b)(6)

Names (Optional) ___12/4/19 1030 - 1130

Interview Questions for 324 Recovery

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1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(6) (b)(5) (b)(6)

(b)(6) They are (b)(5)

This leads the (b)(5) the events

and (b)(5) They feel we (b)(5)

(b)(5) decisions". Decision are made (b)(5)

(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

It is known that (b)(5) has occurred but neither (b)(5)

(b)(5) Since the original (b)(5) 324 there have been

(b)(5) (b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5)

(b)(5) Room 18 is a small space with large equipment and many people.

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

(b)(5);(b)(6) (b)(5) regularly with (b)(5);(b)(6) at the project. It is (b)(5)

(b)(5) The project priorities (b)(5)

(b)(5)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Hair spray (b)(5)

(b)(5) The controls come from (b)(5)

(b)(5) The exception to that is the (b)(5) (b)(5) developed by

(b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(6) been involved.

8. What do you think could be done to improve contamination controls?

These crews need (b)(5) workers. We need a (b)(5) safe radiological work practices and associated hazards. We need to develop in (b)(5) that provides support from (b)(5);(b)(6) in order to reinforce the expectations of the crew.

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

To provide a lasting effect the (b)(6) The plan must be (b)(6) (b)(6) project must be included.

10. Is there anyone else you would recommend we talk to?

Job Category (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

(b)(6)
(b)(6)

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6) years – (b)(6)
(b)(6) years (b)(6)
Worked at (b)(6) 324 (b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5) meeting.
(b)(5);(b)(6) had this many contamination events and (b)(5) (b)(5) individuals. More (b)(5)
No (b)(5) Feel like its (b)(5)
(b)(5) is not feasible – no matter what we do (b)(5)
Not using (b)(5)
(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Level of (b)(5) (b)(5) training (b)(5)
are contaminated. More (b)(5)
(b)(5)
(b)(5)
(b)(5) In last event (b)(5)
(b)(5)
(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

Rm 18 – Noisy, SR-90 Contamination highly mobile – (b)(5)
(b)(5) Heat stress, beta, moving parts, slips trips and falls, tight area,
ventilation (b)(5) Airlock – high levels of rad, mobile, (b)(5) heat stress

Concern that (b)(5)
(b)(5) done with no issues,
Concern is with (b)(5)
(b)(5) doesn't help – doesn't know exactly (b)(5)
(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

(b)(5);(b)(6) – very receptive.
(b)(5);(b)(6) Used to take it to (b)(5);(b)(6)
(b)(5);(b)(6) Work control takes issues to (b)(5);(b)(6)
(b)(5);(b)(6) working.

(b)(5);(b)(6)

(b)(5);(b)(6) They are constantly (b)(5);(b)(6)
(b)(5);(b)(6)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Rm 18 – drill modifications. (b)(5) They look at (b)(5)
(b)(5)
(b)(5);(b)(6) – could be run (b)(5) could reduce (b)(5)
(b)(5) Given to (b)(6) decision was to go with (b)(5)
(b)(5) doesn't make sense (b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

Put (b)(5);(b)(6) (b)(5);(b)(6) doesn't agree with this,
(b)(5);(b)(6)
Run into (b)(5) (b)(5)

If it has to be completed, (b)(5)

(b)(5) Consequently, they have to

(b)(5)

(b)(5) People are asking for

(b)(5)

Revised RWPs 3 times in 10 months.

Keep information consistent between (b)(5)

(b)(5) would help this issue.

8. What do you think could be done to improve contamination controls?

(b)(5) Facility (b)(5)

(b)(5)

Reducing (b)(5) have been told it (b)(5)

(b)(5)

(b)(5) Changed

to (b)(5)

Construction forces (b)(5)

(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

(b)(5);(b)(6)

(b)(5);(b)(6)

(b)(5);(b)(6) Fix the (b)(5) and implement them. Conflicting direction between (b)(5);(b)(6) (b)(5)

(b)(5);(b)(6)

(b)(5);(b)(6)

(b)(5);(b)(6)

Positive (b)(5) (b)(5)

(b)(5)

Individual (b)(5);(b)(6)

(b)(5);(b)(6)

Airlock (b)(5);(b)(6)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category (b)(6)

Names (Optional)

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

- (b)(6)
- (b)(6)
1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

324 - (b)(6) years from (b)(6) years (b)(6)
(b)(6)
(b)(6) years at 324. (b)(6) years at Hanford. Did (b)(6)
supplied (b)(6) equipment.

2. What can you tell me about the personnel contamination events at 324?

(b)(5) to begin with.
Contamination is (b)(5) have to be careful. They have done training (b)(5)
(b)(5) (b)(5) Did it in (b)(5)
no recurring training with the powder.

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Thought training (b)(5) People who have already been trained doing it again.
Constantly told by (b)(5)
(b)(5) When dealing with stuff like this, (b)(5)
(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

Briefings on Room 18, and what they are going to do to fix it. (b)(5)
(b)(5) effects visibility. Really (b)(5)
(b)(5)

Need to get the (b)(5)
(b)(5) Don't know why they don't want to (b)(5) Maybe amount of
(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

They bought up (b)(5) They are good when we bring up concerns.
Goes to (b)(6)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Doffing, wiping down, PPE checklist and procedures. Donning and doffing checklists. (b)(5)
(b)(5) (b)(5) provide all direction. (b)(5) booties,
(b)(5) Doffing procedure has been pretty (b)(5)

Communicated in (b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(5) sometimes
has to be (b)(5) level of the issue.

8. What do you think could be done to improve contamination controls?

Before (b)(5) would like to be a (b)(5)

(b)(5)

More routine training – refresher training. Keeping people (b)(5)

(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

We need to be able to (b)(6)

Need to improve (b)(5)

Rigor has been (b)(5)

Need emphasis on (b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Resumption Team Assessment

(b)(6) Interview Summary 12/02/19

(b)(6)

Worked at Hanford for [redacted] years primarily (b)(6) at 324 since (b)(6) Works in (b)(6) (b)(6) or work in other areas.

PPE ensemble used in Room 18 is same as in the airlock, except no hardhats since there are no overhead hazards. (b)(5) (Sr contaminated soils) (b)(5)

(b)(5) (vacuum ring, spray ring) that has mostly (b)(5)

(b)(5) (b)(5) is biggest challenge since you (b)(5)

(b)(5)

Work history of contamination events has been very good. (b)(5)

(b)(5) follow instructions, diligent about donning and doffing, avoid touching things in the room unless necessary.

(b)(6) understands highest radiation hazards – drill components located near hole, drum containing cuttings, and used vent line (b)(5) General area contamination (b)(5)

(b)(5) (b)(5);(b)(6)

(b)(5);(b)(6) but it has not been implemented. Previous interview with (b)(5);(b)(6)

(b)(5);(b)(6)

(b)(5);(b)(6) issues resolution and controls put in place. Relationships amongst the team are good (b)(6)

Suggested follow up interview with (b)(6)

(b)(6)

Resumption Team Assessment

Interview Summary 12/02/19

(b)(6)

(b)(6) At 324 project since (b)(6) and worked at Hanford since (b)(6) has been involved with (b)(6) since coming to the project and has (b)(5);(b)(6) (b)(6) 324 since (b)(6) and at Hanford since (b)(6)

(b)(6) is very (b)(5);(b)(6)

(b)(6) was very (b)(6) contamination events and discussed them in detail. Said there (b)(5) with respect to a similar cause across the events. (b)(6) shared that he spends a lot of time thinking about the causes of the events, the contamination sources, and potential causes. Offered up that (b)(5)

(b)(5) Also, (b)(5)

(b)(5) (b)(5)

(b)(5)

Talked about the challenges of the (b)(5) (b)(5)

(b)(5) need for (b)(5) worker urgency (b)(5)

Sees the solution as (b)(5) (b)(5)

better (b)(5) as part of the solutions to the events.

(b)(5) has been challenging. (b)(5)

(b)(5) (b)(5) is also challenging as (b)(5)

(b)(5) Since the project has (b)(5)

(b)(5) this is not as problematic as it has been in the past.

Reviewing (b)(5) has raised awareness of behavior during (b)(5)

awareness of (b)(5)

Discussed the need to (b)(5)

(b)(5) was 6-7 hours. Therefore, it is necessary to (b)(5)

Resumption Team Assessment

Interview Summary 12/03/19

(b)(6)

(b)(6) Hanford experience (b)(6) The (b)(6)

(b)(6) primarily (b)(6) (b)(6) primarily (b)(6) does primarily

(b)(6) (b)(6) are currently involved in (b)(6) (b)(6) well.

Since the start of (b)(6) stated that the key to success thus far is consistency with the team and consistency with the practices. (b)(6) is able to accomplish consistency as (b)(6) In contrast, the (b)(6) and other factors.

In general, (b)(6) Room 18. (b)(5) issues arise, (b)(5) to donning and doffing (b)(5) 324 rotation to the Mockup facility because the (b)(5) (b)(5) donning, doffing, wipedown, and waste.

(b)(6) stated that (b)(6) that could be used at the airlock (b)(6) donning and doffing (b)(6) that reduces (b)(6) (b)(5) dose restrictions. This (b)(5)

Discussed (b)(6) All said that they understood that the time required for a room 18 entry would mean (b)(5)

Resumption Team Assessment

Interview Summary 12/02/19

(b)(6)

(b)(6) Worked at Hanford since (b)(6) Previously (b)(6) 324 project. (b)(6) Worked at Hanford since (b)(6) Worked on projects (b)(6) (b)(6) Involved in 324 project since (b)(6)

In general, (b)(5);(b)(6) (b)(6) are not involved in (b)(6) believes this is (b)(5)

(b)(5) There are (b)(5) identify and address (b)(5) (b)(5) conditions or discoveries.

Recommend we look at (b)(5) as an example of good radiation controls. Cited that the facility was (b)(5) and such an approach should be used in (b)(5) The best way to control contamination in (b)(5) (b)(5)

Cited several examples of opportunities to improve (b)(5) or reduce (b)(5) (b)(5) (b)(5) (b)(5)

(b)(5) Feel that suggestions made to reduce (b)(5) (b)(5) Suggestions are (b)(5);(b)(6) Believe that (b)(5);(b)(6) is listening and will take suggestions to heart. They are not using (b)(5) but have been (b)(5) Since this (b)(5) (b)(6)

Work Packages (b)(5);(b)(6) work instructions and (b)(5) (b)(5) Believes this leads to a (b)(5) (b)(5) rather than (b)(5)

There is no (b)(5) on the project which could (b)(5) (b)(5) (b)(5) and the results (b)(5) do not seem to (b)(5) (b)(5)

There is no (b)(5)

Suggest additional interviews with

(b)(6)

Resumption Team Assessment

Interview Summary 12/04/19

(b)(6)

(b)(6)

(b)(6) has been at Hanford since (b)(6) years at (b)(6) At 324 for (b)(6) years. Job history working at (b)(6) facilities.

At 324 (b)(6) (b)(6)

(b)(6) work. (b)(6)

(b)(6) activities.

Some general observations – the Project (b)(5) (b)(5)

(b)(5) work packages.

When issues arise (b)(6) to resolve.

Accountability for execution (b)(5) seems to rest on (b)(5)

No opinion on the (b)(5) program – (b)(5) (b)(5)

(b)(5)

More time is spent in the (b)(5) (b)(5) the

work, so the (b)(5) for direction. Believes this leads to (b)(5)

(b)(5) during work evolution.

The project tries to (b)(5) evolutions.

Recommends talking with (b)(5);(b)(6)

(b)(5);(b)(6)

Resumption Team Assessment

Interview Summary 12/19/19

(b)(6)

This is a follow up interview to close the loop on the process used for the (b)(5);(b)(6)
(b)(5);(b)(6)

(b)(5);(b)(6) was made by the project.

Because the (b)(5)
(b)(5). This data was considered (b)(5)
in determining what actions would be taken to (b)(5)

When the (b)(6) recognized that
the amount of (b)(6) needed to be (b)(6) Having been told that the (b)(5);(b)(6)
(b)(5);(b)(6) was initiated.

Prior to the start of (b)(5);(b)(6) conducted a (b)(5);(b)(6) and concluded that the
(b)(5) A full enclosure around the (b)(5)
been suggested but was determined (b)(5)

Once (b)(5) dust control, including (b)(5)
(b)(5)

As noted in other interviews the (b)(5)
(b)(5) had not been anticipated.

Resumption Team Assessment

Interview Summary 12/04/19

(b)(6)

(b)(6) years of experience. Former (b)(5) experience. At 324 (b)(6) years. Responsible for (b)(6) the Project – (b)(6)

(b)(6) years of experience. Former (b)(6) experience. At 324 for (b)(6) years. Involved primarily with (b)(6)

In the airlock, (b)(5);(b)(6)

The (b)(5);(b)(6) (b)(5);(b)(6) (b)(5);(b)(6)

(b)(6) events is achievable if the project did something like using (b)(6) (b)(6) (b)(5);(b)(6) in the current configuration of the facility (b)(5);(b)(6) This will likely (b)(5);(b)(6) (b)(5);(b)(6) would need to evaluate (b)(5);(b)(6) before being implemented.

The (b)(5);(b)(6) so it is difficult to (b)(5);(b)(6)

The (b)(5);(b)(6) (b)(5);(b)(6) across the site and (b)(5);(b)(6) make it difficult to definitely say what it is.

(b)(5) is planned but the location isn't definitized yet, will allow better (b)(5) (b)(5) Challenge now is the (b)(5) (b)(5) Other options have been looked at (b)(5) but have not been implemented.

(b)(5);(b)(6) suggestions for improvements.

(b)(6) contamination events and (b)(6) (b)(6)

When asked what you would change – said you could go to (b)(5) but that would (b)(5) (b)(5) It would not solve (b)(5)

Going forward there are (b)(5) (b)(5) (b)(5) (b)(5) (b)(5) Other risks include (b)(5)

Resumption Team Assessment

Interview Summary 12/11/19

(b)(6)

(b)(6)

Almost [redacted] years of experience. Has been at Hanford for [redacted] years. Joined 324 [redacted] in [redacted] Previously at 324 [redacted] Other experience includes [redacted] and [redacted] facilities.

Familiar with the events [redacted] in the contamination events. Sat in on [redacted] [redacted] Works mostly [redacted] but has worked [redacted]

Stated the [redacted] contamination. Use of [redacted] are effective. Use of [redacted] well. Has visited the [redacted] to see the [redacted] approaches used during [redacted]

When asked about [redacted] said it is [redacted] [redacted]

Previously the [redacted] and took [redacted] [redacted] but the [redacted] to be more [redacted] [redacted] [redacted] contamination.

[redacted] as these are dictated by others. Responses [redacted] seem [redacted] if/when needed.

Suggestions to improve is to [redacted] Challenge with [redacted] [redacted] because it is [redacted]

Suggests [redacted] At [redacted] was demonstrated to [redacted] and upon inspection [redacted] [redacted]

Suggests [redacted] more. There is a [redacted] [redacted] [redacted] Hanford and non-Hanford [redacted] [redacted] [redacted]

Had no issues [redacted] In fact stated that this [redacted] [redacted]

Resumption Team Assessment

Interview Summary 12/17/19

(b)(6)

(b)(6) was (b)(6) 324 from (b)(6) During this time (b)(5);(b)(6) routinely conducted, (b)(5);(b)(6) The (b)(5);(b)(6) consisted of (b)(5);(b)(6) and a (b)(5);(b)(6) with (b)(5);(b)(6) These were (b)(5);(b)(6) etc.) were reinforced (b)(5);(b)(6)

A normal (b)(5);(b)(6) although; (b)(5);(b)(6) could be (b)(5);(b)(6)

(b)(5);(b)(6) was used. (b)(5);(b)(6) were used based on the task. For example if work was being performed (b)(5);(b)(6) an additional (b)(5);(b)(6) A (b)(5);(b)(6) and scope of work.

Periodic wash downs of (b)(5);(b)(6) were done, with (b)(5);(b)(6)

In the (b)(6) years that (b)(6) there were (b)(6) personnel contaminations associated with (b)(6) operations. (b)(6) attributed this, in part, to the (b)(5) and implemented by (b)(5)

The (b)(5) started with the (b)(5) The person assisting with the (b)(5) The (b)(5) (b)(5) was emphasized to (b)(5) The (b)(5) was (b)(5) and allowed to (b)(5) (b)(5)

(b)(5) then proceeded (b)(5) for a (b)(5) The purpose of this (b)(5) was to determine if (b)(5) was needed prior to (b)(5) (b)(5) much like the (b)(5) The (b)(5) (b)(5) and (b)(5) located in the (b)(5) They then proceeded to the (b)(5)

(b)(6) could not remember there being any (b)(5);(b)(6)

He indicated that the (b)(5);(b)(6) (b)(5);(b)(6) within DOE (b)(5);(b)(6) (b)(5);(b)(6)

Interview – (b)(6)

- How are changes in conditions being evaluated and decisions documented?

(b)(5) If outside of (b)(5)
(b)(5) appropriate reviews.

- Are changes reviewed against baseline hazard documentation?

(b)(5) They had to (b)(5)
(b)(5) Had to get (b)(5) (b)(5)
as work was being performed.

The facility (b)(5) – they (b)(5)
– (b)(5) Don't know (b)(5) (b)(5)
(b)(5)

The (b)(5) are a symptom of (b)(5) (b)(5) is trying to (b)(6)
(b)(6) (b)(6) and are still
growing in terms of (b)(5)

- How are changes communicated to the workforce?

Culture is that (b)(5) (b)(6)

- Has benchmarking been performed by the project? If yes, what was the outcome?

(b)(5)

- How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

(b)(5) checklist – they are working on (b)(5) (b)(5)
(b)(5) but even the (b)(5)
(b)(5)
When people (b)(5) there is (b)(5)
(b)(5)

- We have heard from some of the interviews that there is schedule pressure. What do you think is the source of schedule pressure? What is being done to address this?

Schedule pressure (b)(5) (b)(5) is not
(b)(5) (b)(5)

- What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

They have had (b)(5) but (b)(5)
That was a (b)(5)

- What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

(b)(5) (b)(5)

- Are there adequate personnel to perform the work?

(b)(5) They tend to (b)(5)
(b)(5) (b)(5)
(b)(5)

(b)(5) has (b)(5);(b)(6) (b)(5);(b)(6) but this was focussed on specific events.

- Does management have time to address all of the actions currently in the system related to contamination controls?

(b)(5) We have to make the time to (b)(5) The (b)(5)
(b)(5) In (b)(5) (b)(5)
project – (b)(5)

- Who is in charge of correcting the problems?

They do a (b)(5) and a (b)(5)
They have (b)(5) (b)(5)
(b)(5) Not structured for (b)(5)
(b)(5) schedule and priorities. (b)(5) (b)(5)
and (b)(5)

(b)(5);(b)(6) but he feels (b)(5)
(b)(5);(b)(6)

- Have the contamination events been viewed as an acceptable risk?

(b)(5);(b)(6)

[redacted] does not believe that (b)(5) [redacted] but there is the perception that there
(b)(5) [redacted] Some people reference (b)(5) [redacted] (b)(5) [redacted]
(b)(5) [redacted]

Interview with (b)(6)

The contamination (b)(5);(b)(6) - has no (b)(5);(b)(6) and has (b)(5);(b)(6) (b)(5);(b)(6) process. This has been brought up to the management team, (b)(5) (b)(5) They started (b)(5)

How are personnel rotated between the mock-up and working in contamination areas? Is there any action to refresh proficiency following rotation?

(b)(5)

Was there (b)(5);(b)(6) provided when the Sr-90 contamination was identified? Was it hands on or briefing?

(b)(5);(b)(6) the SR-90 contamination. Would see this (b)(5) There was a (b)(5);(b)(6) recently.

Have (b)(5);(b)(6) been updated to discuss current hazards, contamination events, and lessons learned?

Changes (b)(5);(b)(6) This was not related to (b)(5);(b)(6) (b)(5);(b)(6) No change (b)(5);(b)(6)

What level (b)(5);(b)(6) process?

(b)(5);(b)(6)

When the control sets are changed, how is that communicated? Is it provided via training? Briefings? Is training updated?

(b)(5);(b) attends (b)(5);(b)(6) However, (b)(5) They used to have (b)(5) meeting between (b)(5);(b)(6) (b)(5);(b)(6)

They are (b)(5);(b)(6) for the (b)(5);(b)(6) but 324 (b)(5);(b)(6)

Job Category (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6) respectively.

2. What can you tell me about the personnel contamination events at 324?

Knowledgeable of events specific (b)(6) (b)(5)
(b)(5) encountered (b)(5) Consider issues resolved with (b)(5);(b)(6)
(b)(5);(b)(6) and use of (b)(5);(b)(6) (b)(5);(b)(6)
(b)(5);(b)(6) also considered effective. (b)(5);(b)(6) work very well.

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5) Believe current training regimen (b)(5)
(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5);(b)(6)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

Feel issues suggested are (b)(5) (Team involved in developing (b)(5);(b)(6)
(b)(5);(b)(6)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

(b)(5) (b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

Involved in (b)(5);(b)(6) (b)(5);(b)(6)
Consider current control (b)(5);(b)(6) Noted that in (b)(5);(b)(6)
(b)(5);(b)(6)

8. What do you think could be done to improve contamination controls?

(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

(b)(5) In (b)(5)
(b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category _____ (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6) years experience (b)(6) Recent (b)(6) experience (b)(6)
(b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5) Understood (b)(5) locations.
Related respect for how (b)(5) (b)(5)
Discussed (b)(5) – believed (b)(5)
(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

Believed (b)(5) Also believes (b)(5)
(b)(5) Understand (b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

Related (b)(5)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

(b)(5) and procedures. Briefings to crew provided by
Operations Management and FWS. (b)(5) Ongoing initiatives to
improve (b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(6) Have stressed the need to (b)(5);(b)(6) time to time; however, (b)(5)

8. What do you think could be done to improve contamination controls?

(b)(5) .

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Stressed greater need to (b)(5) (b)(5) and avoid (b)(5) Could not (b)(5) (b)(5) (b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Working at 324 since (b)(6)

(b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5) *of recent events. Understand that* (b)(5)

(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

Room 18 has much less air flow than airlock. Related (b)(5) *– no one*

(b)(5)

(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

(b)(6) *Believes* (b)(5) *to suggestions – usually*

(b)(5)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Understood (b)(5);(b)(6) *related past experience* (b)(5);(b)(6)

7. Describe how you personally have been involved in developing or implementing contamination controls.

Has had (b)(5);(b)(6) Also related that (b)(5);(b)(6)
(b)(5);(b)(6)

8. What do you think could be done to improve contamination controls?

Stressed need for (b)(5)
(b)(5) Related that (b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

Related how (b)(5)
(b)(5) Related that (b)(5)
(b)(5) (b)(5)
(b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category (b)(6)

Names (Optional)

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. How are changes in conditions being evaluated and decisions documented?

(b)(5);(b)(6) Discussed situation (b)(5);(b)(6) This area originally viewed as (b)(5) and believed to (b)(5) Discussed that (b)(5) as work was performed. (b)(5) and the project (b)(5) while responses (b)(5) (b)(5)

(b)(5);(b)(6) contamination. This prompted more of a (b)(5) (b)(5) (b)(5) (b)(5) Corrective actions (b)(5)

2. Are changes reviewed against baseline hazard documentation?

Indicated that (b)(5) – would have (b)(5) (b)(5) (b)(5) indicated that (b)(5) (b)(5) Opportunity to (b)(5) (b)(5) (b)(5)

3. How are changes communicated to work force?

Safety tailgate, daily meetings.

4. Has benchmarking been performed by the project? If yes, what was outcome?

Project (b)(5) Believes (b)(5)

5. How does management determine who is proficient? Any criteria for removing individual from high contamination work?

Observed (b)(5) (b)(5)
(b)(5) Such efforts are (b)(5)
(b)(5) When further queried what was (b)(5)
(b)(5) indicated (b)(5)
Further indicated that (b)(5)
(b)(5)
(b)(5) Offered that the project (b)(5)
(b)(5)

6. We've heard of schedule pressure, what do think is the source and what can be done to address?

Believes any schedule pressure is (b)(5) believes
the project team functions (b)(5) (b)(5)
(b)(5)

7. What alternatives have been explored for reduction of contamination? What was the result and how documented? What influences decision making?

Discussed above – (b)(5)
(b)(5)

8. What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

Offered that (b)(5) The
project has (b)(5)

9. Are there adequate personnel to perform the work?

Current (b)(5) Added
(b)(5) to enable
more proactive approach. There is (b)(5)
field.

10. Does management have time to address all of the actions currently in system related to contamination control?

No – see response Question 1.

11. Who is in charge of correcting problems?

(b)(5)
(b)(5) Discussion lead to (b)(5)
(b)(5)
(b)(5)

12. Have you been in the airlock or room 18? When and for what purpose?

(b)(6)

13. Have the personnel contamination events been viewed as an acceptable risk?

Related a complete understanding of (b)(5)
(b)(5) Then indicated that there are "(b)(5)
(b)(5) He uses the
(b)(5) as means to (b)(5) however, expressed that (b)(5)
(b)(5) Note that (b)(5)
(b)(5)

Discussion evolved to further related (b)(5)
(b)(5) culture. As of (b)(5)
(b)(5) With (b)(5)
(b)(5) With the incorporation of
(b)(5)
(b)(5) While there was (b)(5)
(b)(5) Perhaps too much
respect was given to (b)(5)

Job Category (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

Has been at 324 since (b)(6) Has been on Hanford site doing (b)(6) Started in (b)(6) worked (b)(6) years at (b)(6) (b)(6) Has had some jobs (b)(6) (b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5);(b)(6) talking about controls. (b)(6) (b)(6) Doesn't go (b)(6) (b)(6) (b)(6) (b)(6) Has seen (b)(5) (b)(5) Has heard (b)(5) Has heard (b)(5) (b)(5) Has seen (b)(5) (b)(5) (b)(5);(b)(6) Workers are (b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5) Pre-jobs really explain what the controls are per the RWP. The (b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

(b)(5);(b)(6) Could remember the last time
he couldn't (b)(6)

6. What can you tell me about the controls that have been put in place to prevent contamination events?

(b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(6) in developing contamination controls.

8. What do you think could be done to improve contamination controls?

Saw something (b)(5)
(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

If you do (b)(5) (b)(5)
Better (b)(5)
(b)(5)

He finds it (b)(5)
(b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Job Category (b)(6)

Names (Optional) _____

Interview Questions for 324 Recovery

Introduction: I am part of the team looking into the 324 Contamination events that have occurred over the last year. As part of the preparation to analyze causes and develop corrective actions, we wanted to talk to the folks who perform the work to better understand the issues and your thoughts on how to resolve them. Your responses are confidential.

1. Tell me a little about your background and your experience. How long have you been at 324? How long have you performed radiological work?

(b)(6) working (b)(6)
(b)(6) started with (b)(6) working for (b)(6)
(b)(6)

2. What can you tell me about the personnel contamination events at 324?

(b)(5) contamination. One event (b)(5)
(b)(5) (b)(5) contamination (b)(5) Started using
(b)(5) They have (b)(5)
(b)(5) They also created better mitigation techniques for (b)(5)
(b)(5)

3. How do you feel about the level of training/information that the workers have received on radiological work practices in 324 and the types of contamination that will be encountered?

(b)(5)

4. Tell me about the hazards in Room 18 and/or in performing airlock work?

(b)(5)
(b)(5)

5. Who do you take concerns or suggestions to for resolution? Have you presented any issues before? What was the response?

They talk daily (b)(5) Work is directed by (b)(5)
(b)(5) Good responses to concerns.

6. What can you tell me about the controls that have been put in place to prevent contamination events?

Control on (b)(5)
(b)(5)
(b)(5)

7. Describe how you personally have been involved in developing or implementing contamination controls.

(b)(6)

8. What do you think could be done to improve contamination controls?

(b)(5) make a difference. (b)(5) A lot of the controls are the same as (b)(5)
(b)(5)

9. Is there anything else you would like to share with me? Is there a question that I should be asking, but did not?

(b)(5)

Airlock contamination (b)(5)

10. Is there anyone else you would recommend we talk to?

(b)(6)

Interview Record Sheet

Date: 11/26/19

(b)(6)

Interviewed: (b)(6)

1. Experience. (b)(6) has worked on site (b)(6) years, serving (b)(6) assigned to 324 since (b)(6). Specifically (b)(6) (b)(6) Currently serving (b)(6) (b)(6) B324 for (b)(6) years, coming from (b)(6) (b)(6) since mid (b)(6) was assigned to (b)(6) B324 in (b)(6) though started at Hanford in (b)(6) and supported (b)(6) (b)(6)
2. Insights of personal contamination event. (b)(6) (b)(6) The (b)(5);(b)(6) contamination events (b)(5);(b)(6) believe (b)(5);(b)(6) minimize (b)(5);(b)(6) contamination event. (b)(5);(b)(6) that there has been no (b)(5) and believes (b)(5);(b)(6) practices. Corrective actions to date have been focused on (b)(5) (b)(5) The most recent event, (b)(5) (b)(5);(b)(6) (b)(5);(b)(6) (b)(5);(b)(6) (b)(5);(b)(6) (b)(5);(b)(6)
3. Thoughts on level of training/information provided to workers. All interviewed (b)(5) (b)(5) (b)(5) Training provided for construction workers (b)(5) (b)(5) Regarding the (b)(5) (b)(6) indicated that the (b)(5);(b)(6) (b)(5);(b)(6) The group went on to relate that there has (b)(5);(b)(6) It was specifically related that there was (b)(5) (b)(5)
4. Understanding of hazards in Rm 18 and airlock. (b)(5);(b)(6) (b)(5);(b)(6) (b)(5);(b)(6) encountered when (b)(5);(b)(6) prevailing conditions in (b)(5);(b)(6) (b)(5);(b)(6) further related that (b)(5) (b)(5) was performed.

5. Concerns or suggestions and response. All indicated (b)(5)
(b)(5) Roles and responsibilities of (b)(5)
(b)(5) As such, (b)(5)
(b)(5)
6. Controls put in place. (b)(5) considered effective, but (b)(5)
Recommended controls to (b)(5) as well as a proposed initiative to (b)(5)
(b)(5) Suggestions offered (b)(5)
(b)(5)
7. Involvement in developing/implementing contamination controls. (b)(5)
(b)(5)
(b)(5) The group mentioned that (b)(5)
(b)(5) (b)(5) work package.
8. Contamination control improvements. (b)(5)
(b)(5) The subject worker (b)(5);(b)(6)
(b)(5);(b)(6) The need for (b)(5);(b)(6)
(b)(5);(b)(6) Reduce the (b)(5);(b)(6)
(b)(5);(b)(6) Believe previous effort to
(b)(5);(b)(6) This view however was considered to be (b)(5);(b)(6)
(b)(5);(b)(6) There is reported (b)(5);(b)(6)
(b)(5);(b)(6)
9. Anything else. There is (b)(5);(b)(6)
(b)(5);(b)(6) They have heard and been witness to (b)(5);(b)(6)
(b)(5);(b)(6) Reported (b)(5);(b)(6)
(b)(5);(b)(6) (b)(5);(b)(6)
(b)(5);(b)(6) Current organization structure (b)(5);(b)(6)
(b)(5);(b)(6) On positive not, (b)(5);(b)(6)
(b)(5);(b)(6)
10. Further contacts: (b)(6)

Interview Record Sheet

Date: 11/26/19

Interviewed: (b)(6)

1. Experience. Started out (b)(6)
(b)(6)
(b)(6) Assigned to supporting B324 since (b)(6) Has (b)(6)
(b)(6)
2. Contamination event. Did not (b)(5);(b)(6)
however, related how (b)(5);(b)(6)
(b)(5);(b)(6) He has (b)(5);(b)(6)
(b)(5);(b)(6) Heard of (b)(5);(b)(6)
(b)(5);(b)(6) The individual was working (b)(5);(b)(6)
(b)(5);(b)(6) He cited (b)(5);(b)(6)
(b)(5);(b)(6)
3. Level of training. (b)(5) (b)(6)
(b)(6) communicate RWP requirements.
4. Understanding of hazards. (b)(5)
(b)(5)
5. Concerns, suggestions, response. (b)(5)
(b)(5)
6. Controls. Does not believe (b)(5)
(b)(5) Also agrees that
(b)(5) The current (b)(5) were instituted by
(b)(5)
7. Indicated he is (b)(5);(b)(6)
(b)(5);(b)(6)
8. Improvements. Suggested a (b)(5)
(b)(5)
(b)(5) Also related that (b)(5)
(b)(5) (b)(5)
(b)(5)
9. Anything else. Teams are (b)(5)
(b)(5) Also related (b)(5)
that he related as being (b)(5) last
(b)(5) This perceived as (b)(5)
(b)(5)
10. Contacts. (b)(6)

Jacobs Management Assessment of CHPRC Central Plateau Risk Management (CPRM)

Interview with (b)(6) and (b)(6) DOE-RL

Interviewers: (b)(6) (Jacobs), (b)(6) (Jacobs), (b)(6) (CHPRC)

Date: December 4, 2019

Information Applicable to 324 Building River Risk Management Project

- Management
 - Management team (b)(5)
(b)(5)
 - Need to (b)(5)
- Work Planning and Control
 - Work Packages (b)(5)
 - (b)(5)
 - CPRM (b)(5) process to (b)(5)
(b)(5)
 - DOE-RL (b)(6) viewed the (b)(5)
(b)(5)
 - (b)(5)
 - (b)(5)
 - CHPRC Central Organizations (b)(5)
- Lessons Learned
 - Experience and Lessons Learned from (b)(5)
(b)(5) CHPRC
- DOE-RL (b)(5) with CHPRC is (b)(5)
CHPRC (b)(5) Corrective actions are being implemented.
In a few cases, (b)(5)

LOI questions for (b)(6)

Interviewee: (b)(6)

Date: December 5, 2019

Interviewers: (b)(6) and (b)(6)

1. How are changes in conditions being evaluated and decisions documented?

(b)(5) STOP work condition and changes. For (b)(5) changes, (b)(5)

2. Are changes reviewed against baseline hazard documentation?

(b)(5) CHPRC is entered. However, (b)(5) (b)(5)

3. How are changes communicated to the workforce?

Changes in postings are discussed (b)(5) briefing. Pre-job briefing discusses conditions expected during work evolution.

4. Has benchmarking been performed by the project? If yes, what was the outcome?

(b)(5) to review lessons learned and discuss similar issues.

5. How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

CHPRC (b)(5) (b)(5) However, (b)(5) (b)(5)

6. We have heard from some of the interviews that there is schedule pressure. What do you think is the source of schedule pressure? What is being done to address this?

Expressed concern that (b)(5) Does not personally feel (b)(5) work scope.

7. What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

(b)(5) 324 Building since (b)(6)

8. What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

Injuries, first aid cases (b)(5) However, (b)(5) (b)(5)

9. Are there adequate personnel to perform the work?

Has an (b)(5) CHPRC (b)(5) Otherwise (b)(5) work scope.

10. Does management have time to address all of the actions currently in the system related to contamination controls?

(b)(5)

11. Who is in charge of correcting the problems?

Believes (b)(5)

(b)(5)

12. Have you been in the airlock or room 18? When and for what purpose?

(b)(5);(b)(6) (b)(5);(b)(6) 324 Building, (b)(5);(b)(6)
(b)(5);(b)(6)
(b)(5);(b)(6)

13. Have the contamination events been viewed as an acceptable risk?

(b)(5) However, expressed believe that
(b)(5)

14. How is the effectiveness of the management team?

Expressed that management team is (b)(5) (b)(5)
(b)(5)

Interview with (b)(6)

How are changes in conditions being evaluated and decisions documented?

(b)(5):(b)(6) address the condition. Documentation is via the applicable work document. Changes to work packages (b)(5) (b)(5)

Are changes reviewed against baseline hazard documentation?

(b)(5)

How are changes communicated to the workforce?

Communication (b)(5) (b)(5) believe (b)(5) (b)(5) process improvements.

Has benchmarking been performed by the project? If yes, what was the outcome?

(b)(5)

How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

We have heard from (b)(5) What do you think is the source of (b)(5) What is being done to address this?

(b)(5)
(b)(5) Need a (b)(5) Not sure (b)(5)
(b)(5)

What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

(b)(5)
(b)(5) does not (b)(5) They have (b)(5)
(b)(5) (b)(5)
(b)(5) (b)(5)

What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

(b)(5) data that tracks information specific to (b)(5)
This is (b)(5) Was routine, (b)(5) This process
would generate actions – (b)(5) was an
example.

Are there adequate personnel to perform the work?

Trying to (b)(5)

Does management have time to address all of the actions currently in the system related to
contamination controls?

(b)(5) That allows (b)(5)
There is (b)(5) (b)(5)
(b)(5) (b)(6) tries to (b)(5)

Who is in charge of correcting the problems?

(b)(5);(b)(6) implementation goes to (b)(5);(b)(6)

Have you been in the airlock or room 18? When and for what purpose?

(b)(5);(b)(6)

Have the contamination events been viewed as an acceptable risk?

Contamination relative to dose (b)(5)
contamination. Skin contaminations are caused (b)(5) Can't control
(b)(5) (b)(5)
contaminations.

The (b)(5) Workers (b)(5)
(b)(5) That can (b)(5)

LOI questions for the management team

Interviewee: (b)(6)

(b)(6)

Interviewers: (b)(6) and (b)(6)

Date: December 4, 2019

1. How are changes in conditions being evaluated and decisions documented?

(b)(5) (or other appropriate resources) are applied to evaluate change in conditions.

Work packages and rad engineering calculations (b)(5) changes.

2. Are changes reviewed against baseline hazard documentation?

Changes against HRB reviewed work packages are (b)(5) (b)(5) depending on nature of change.

3. How are changes communicated to the workforce?

(b)(5) changes to workforce. Workers are (b)(5) (b)(5) of work packages.

4. Has benchmarking been performed by the project? If yes, what was the outcome?

(b)(5) believes (b)(5) may have (b)(5) (b)(5)

Management team did conducted review of lessons learned from other projects. Aware that individuals from other CHPRC organizations have been brought in to assess and provide recommendations to mitigate contamination events.

5. How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

PPE training (b)(5) by (b)(6)

6. We have heard from some of the interviews that there is schedule pressure. What do you think is the source of schedule pressure? What is being done to address this?

(b)(5);(b)(6) project schedule.

Stated schedule pressure (b)(5) to following the schedule but (b)(5)

Also stated there is some (b)(5) schedule pressure relative to (b)(5) (b)(5)

7. What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

Engineering controls (e.g. ring, spray wash, cyclone collection system) for room 18 drilling equipment (b)(5) Changes to (b)(5) also implemented.

Airlock (b)(5) contamination controls. Washdown of Airlock (b)(5) (b)(5) (Note: 324 Building (b)(5) Airlock floor). The (b)(5) brings (b)(5) Airlock. (b)(5) the Airlock or cranes (b)(5)

Multiple layers (b)(5) and the (b)(5) (b)(5) the Airlock.

324 Building personnel evaluating using (b)(5) (b)(5) Airlock. Uncertain if intent is to (b)(5) (b)(5)

8. What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

Quarterly meetings for trending / tracking performance and safety and health.

(b)(5) that is reviewed by (b)(5);(b)(6) (b)(5);(b)(6) Evaluations and corrective actions assigned at meeting (example: placing cone behind government vehicles to ensure driver inspects behind vehicle before engaging vehicle).

(b)(5);(b)(6) has not held a recent meeting.

(b)(5);(b)(6) conduct review of assigned (b)(5);(b)(6) (b)(5);(b)(6) organization. Reviews conducted (b)(5) (b)(5);(b)(6) team (b)(5)

9. Are there adequate personnel to perform the work?

Project (b)(5) Concern that (b)(5) (b)(5) for position.

10. Does management have time to address all of the actions currently in the system related to contamination controls?

(b)(5) assigned corrective actions (b)(5) (b)(5) timely responses.

(b)(5) track and report on (b)(5)

Some (b)(5)

11. Who is in charge of correcting the problems?

Stated (b)(6) is responsible for evaluating corrective actions for contamination events. Other organizations (b)(5) from corrective actions.

Stated Operating Procedure 324-PRO-OP-54055, (31-SOP-REC-A-05) *Airlock/C-Cell Access*

(b)(5) donning / doffing checklist. (b)(5)

Section 4.7 of Operating Procedure 324-PRO-OP-54055 does contain doffing instructions but refers to the “doffing guide”.

- NOTE:**
- *Section 4.7 may be repeated and performed concurrently for each person exiting the Airlock.*
 - *Doffing assistance is required when doffing respiratory protection and outer set of PPE.*
 - *PPE removal is performed using a multiple step-off pad principal.*
 - *Doffing assistant may need to communicate each step of the doffing guide.*

4.7 Egressing Airlock

4.7.1 ENSURE personnel assigned to doffing assistance are dressed in accordance with *Airlock/C-Cell Access PPE Plan*.

4.7.2 ENSURE plastic sheeting is placed over Airlock threshold.

NOTE: *Depending on radiological conditions, doffing at the threshold or within the CHA HCA will be per FWS and RadCon Supervisor direction. Step 4.7.3 may be skipped.*

4.7.3 PERFORM the following to doff in the CHA HCA:

- a. ENSURE PPE doffing area is established and prepped to receive Airlock Entrants within the CHA HCA.
- b. DOFF outer gloves.

NOTE: *Sub-steps c and d may be repeated until contamination levels are within RWP limits, to extent practical.*

- c. WIPE DOWN outer set of PPE using amended water.
- d. PERFORM a direct survey for alpha/beta contamination on worker's outer PPE (at suspect areas based on work performed). (Ref. **AMW**)
 - 1) IF outer set of PPE contamination levels are within RWP limits, THEN COMPLETE the doffing process per the following guidance:
 - a) DOFF outer footwear.
 - b) RELOCATE Airlock entrant to PPE doffing area within the CHA HCA.
 - c) DOFF outer set of PPE per *Airlock Doffing Guide*.

4.7.4 PERFORM the following to doff at the Airlock threshold:

- a. ENSURE outer set is wiped down with amended water.
- b. COMPLETE doffing per *Airlock Doffing Guide*.

4.7.5 WHEN outer set is removed, THEN RELOCATE personnel to a low background area to receive a contamination survey. (Ref. **AMW**)

4.7.6 EXIT the lower background area directly to step-off pad in Room 123.

4.7.7 WHEN all personnel have egressed from the Airlock, THEN CLOSE Airlock lower shielding door per 3I-SOP-REC-A-04 (324-PRO-OP-53674), *Airlock Shielding Door Controls*.

12. Have you been in the airlock or room 18? When and for what purpose?

Has (b)(6) Airlock.

Has (b)(6) room 18 (b)(6)

(b)(6) (b)(6) room 18.

13. Have the contamination events been viewed as an acceptable risk?

Believes contamination (b)(5) Airlock entries based on (b)(5)
(b)(5)

Skin contamination maybe due to (b)(5)

Entries into the Contamination Areas of 324 Building have generally (b)(5)

(b)(5) This may have (b)(5)

(b)(5) contamination areas.

(b)(5) as well as and a balance between (b)(5)

(b)(5) Airlock opening (b)(5)

(b)(5) contamination control, the (b)(5)

(b)(5)

Interview with (b)(6)

How are changes in conditions being evaluated and decisions documented?

They (b)(5) but did (b)(5) (b)(5) SR-90 controls, found (b)(5) (b)(5) They typically go with (b)(5) controls.

Are changes reviewed against baseline hazard documentation?

The identification of the SR-90 (b)(5) Those (b)(5) They (b)(5) PCB- I-12 to be able to detect the contamination levels. Isotopic changes (b)(5) facility operations documents – (b)(5)

How are changes communicated to the workforce?

(b)(5) program for their techs. Flows into tasks and RWPs. They discuss changes with the whole team. They evaluate if (b)(5) or they provide (b)(5) (b)(5) (b)(5)

Has benchmarking been performed by the project? If yes, what was the outcome?

Benchmarking (b)(5) (b)(5) lessons learned from personnel (b)(5)

How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

Used to track (b)(5) 2 years ago. Doffing assistance instructions are incorporated in procedures. If you are (b)(5) (b)(5) practical again. The refresher (b)(5) There is airlock entry training with a course number. They (b)(5) just got a course number assigned

We have heard from some of the interviews that there is schedule pressure. What do you think is the source of schedule pressure? What is being done to address this?

There is (b)(5) but the (b)(5) (b)(5) (b)(5) (b)(6) focuses on making sure that they are doing the right things. When they bring in a package for review that is not ready, (b)(5) An example was the (b)(5) (b)(5) They kept it (b)(5) They plan to do a full (b)(5)

In all hands – they talk about schedule. They were working (b)(5) Intent was (b)(5) (b)(5) schedule pressure (b)(5) (b)(5)

What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

Concerned about (b)(5) (b)(5) contamination (b)(5)
They have deconned Room 18. Working on a (b)(5) contamination. Concern is that (b)(5) (b)(5) has a (b)(5) (b)(5) (b)(5)
Concerned about (b)(5) (b)(5) with it.

(b)(5) is based on (b)(5) and discussion (b)(5) there is (b)(5)

What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

They (b)(5) (b)(5)
(b)(5) real time process.

Are there adequate personnel to perform the work?

(b)(5) Collective years of experience for the current (b)(5) personnel. Has lost personnel to retirement, resignation, etc. (b)(5) years. (b)(5) (b)(5) (b)(5)

Does management have time to address all of the actions currently in the system related to contamination controls?

(b)(5) trying to address actions (b)(5) (b)(5)
(b)(5) (b)(5)

Who is in charge of correcting the problems?

Have you been in the airlock or room 18? When and for what purpose?

(b)(6) areas in the past.

Have the contamination events been viewed as an acceptable risk?

Whole body exposure is going to be about 50-60 up to 140. Level of concern (b)(5)

(b)(5)

LOI questions (b)(6)

Lines of Inquiry – 324 Contamination Events

Interviewee: (b)(6)

Date: December 9, 2019

Interviewers: (b)(6) and (b)(6)

1. How are changes in conditions being evaluated and decisions documented?

(b)(5) 324 Building (b)(5) A-Cell crane door became inoperable. (b)(5) loading B-Cell waste into waste boxes within the Airlock and transporting these waste boxes to ERDF for disposal. (b)(5)

(b)(5)

Other decisions were undertaken (b)(5)

(b)(5) review, plan of the day, plan of the week or the three week look ahead meetings. Decisions are being made (b)(5)

(b)(5) to integrate and coordinate work activities. Status / updates to (b)(5) made to reflect decisions.

The waste management plan (PRC-SRP-00189 rev. 1) was updated in September 2019 to reflect waste packaging configurations available for loading B-Cell debris for transportation to ERDF. However, waste management plan is not the decision document for loading out B-Cell debris instead of placing the debris into A-Cell.

2. Are changes reviewed against baseline hazard documentation?

Not aware of revision to (b)(5)

(b)(5)

3. How are changes communicated to the workforce?

Workforce is generally (b)(5) baseline plan. Workforce is (b)(5) plan of the week which is produced on Wednesday and communicated to the workforce. Workforce has been working weekends (b)(5)

(b)(5)

4. Has benchmarking been performed by the project? If yes, what was the outcome?

(b)(5) benchmarking exercise. (b)(5) experience at Hanford site to work being conducted at 324 Building.

5. How does management determine who is proficient? Is there any criteria for removing an individual from high contamination work?

324 Building Disposition Project – Remote Operations Training and Proficiency Plan (PRC-SRP-00180) used to ensure personnel meet training and proficiency requirements for operating equipment associated with remotely removing the B-Cell floor and excavating soil from beneath B-Cell.

Construction work is based on (b)(5)

6. We have heard from some of the interviews that there is schedule pressure. What do you think is the source of schedule pressure? What is being done to address this?

Apollo contract is cost plus incentives (b)(5)

(b)(5);(b)(6) (b)(5) (b)(5);(b)(6)
(b)(5)

7. What alternatives for reduction of contamination have been explored? What was the result and how was it documented? What influences the decision-making process?

Believes there has been emphasis (b)(5) and updating associate checklist.

Not aware of alternatives evaluated and (b)(5) alternatives to (b)(5)

Expressed opinion that (b)(5)
(b)(5)

8. What metrics or leading indicators are monitored to detect potential issues or effectiveness of actions?

Metrics are not being used.

9. Are there adequate personnel to perform the work?

Project is (b)(5) if (b)(5)
(b)(5)

10. Does management have time to address all of the actions currently in the system related to contamination controls?

(b)(5) contamination events (b)(5);(b)(6)
(b)(5);(b)(6)

11. Who is in charge of correcting the problems?

(b)(5);(b)(6) is in charge of resolving contamination issues.

12. Have you been in the airlock or room 18? When and for what purpose?

Has (b)(6)
(b)(6)

13. Have the contamination events been viewed as an acceptable risk?

Contamination events have been viewed as (b)(5)
(b)(5)

Work package recognized potential for contamination events. Location of pilot-holes selected to evaluate extent of lateral migration of contaminated soil beneath room 18 floor. The rationale for (b)(5)

(b)(5) [redacted] which communicated (b)(5) [redacted]

(b)(5) [redacted]