

No. 17-8151

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IN THE  
**Supreme Court of the United States**

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RUSSELL BUCKLEW,

*Petitioner,*

v.

ANNE PRECYTHE, *et al.*,

*Respondents.*

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**On Writ of Certiorari to the United States  
Court of Appeals for the Eighth Circuit**

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**JOINT APPENDIX—VOLUME II OF II**

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PETITION FOR CERTIORARI FILED MARCH 15, 2018  
CERTIORARI GRANTED APRIL 30, 2018

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[1] U.S. DISTRICT COURT  
WESTERN DISTRICT OF MISSOURI  
(KANSAS CITY)

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CIVIL DOCKET FOR CASE #: 4-14-cv-08000-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

vs.

GEORGE LOMBARDI, *et al.*,

*Defendants.*

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DEPOSITION OF MATTHEW BRIESACHER

Taken on behalf of the Plaintiff

January 25, 2017

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\* \* \*

[28] Q. Who did you consult in revising the open protocol?

A. I'm not sure that I consulted with anyone. Consult is a difficult word. Can you be more specific?

Q. When revising the open protocol did you work with other people?

A. I created a draft and then I talked to some people about that draft but prior to creating that draft I didn't have specific conversations about what to put in it.

Q. What sources of information did you take into consideration when revising the open protocol?

MS. COULTER: I'm going to object to this line of questioning. It exceeds the scope of discovery. The court specifically disallowed questions regarding development adaptation of current protocol.

Q. (BY MR. FOGEL) Matt, if you could look at paragraph A of the open protocol, it says execution team members.

A. I see that paragraph.

Q. Did you draft that paragraph?

A. Yes.

[29] Q. And you see the first sentence, the execution team consists of department employees and contracted medical personnel including a physician, nurse and pharmacist?

A. I see that sentence.

Q. Why did you include contracted medical personnel including a physician, nurse and pharmacist?

A. I believe that language was carried over from the previous protocol.

Q. In your opinion why was it important to keep that in the execution protocol?

A. To provide clarity on who could be considered a member of the execution team.

Q. And why was it important to have medical personnel as part of the execution team?

A. I believe we were under a court order to – I don't know if it was explicitly a court order but I know there had been guidance from the courts that Missouri executions needed to have medical personnel present.

Q. Do you think it's important for medical personnel to be present in an execution?

A. I do.

Q. Why is it important to have medical [30] personnel present at an execution?

A. To make sure that the execution runs smoothly and properly.

Q. When you say smoothly and properly, what do you mean?

A. That the – I don't know how to expand upon that really. I think it speaks for itself.

Q. Smoothly and I believe the word you used smoothly and properly?

A. Uh-huh.

Q. That there are no unexpected occurrences. Would that fall within your definition of smoothly and properly?

A. Yes. And I guess I can try and explain a little bit more.

Q. Sure.

A. Some of the events that are necessary to carry out an execution by lethal injection such as inserting an intravenous line, I think it would be the best practice to have somebody with training and experience in doing something like that. Drawing syringes, medications, that would be something that somebody with medical training and experience would be better suited at than a lay [31] person. So just out of an abundance of caution it's probably best to have somebody there with that kind of experience.

Q. Did you attend medical school?

A. No, I did not.

Q. Do you have any formal medical education?

A. No, I do not.

Q. Did you consult with any medical professionals in drafting the execution protocol?

MS. COULTER: Objection, goes to the development of the protocol which is excluded by the court's discovery order.

Q. (BY MR. FOGEL) If you look at section B, preparation of chemicals, and it says in number 1, syringes one and two five grams of pentobarbital.

Do you understand what pentobarbital is?

A. Yes.

Q. What is pentobarbital?

A. It's a medication. I think its primary purpose is anti-seizure medication.

Q. And is that the chemical that's used, the sole chemical that is used during an execution?

[32] A. Yes.

Q. And that is the chemical that very succinctly causes death?

A. Yes.

Q. When I say very succinctly in causing death, that's what I mean, paraphrasing that, in that experience.

A. That's what we use it for.

Q. Why does the current protocol use five grams of pentobarbital?

A. That was the amount approved by the department director.

Q. In proposing the use of five grams of pentobarbital did you consider its effect on someone who suffers from cavernous hemangioma?

A. No. I did not.

Q. Do you know if anybody did?

A. At the time that it was drafted, I don't. I have no knowledge that anybody did.

Q. Do you have any knowledge of whether anyone has conducted a study to evaluate the effects of pentobarbital on someone with cavernous hemangioma?

A. I'm not aware of any study, or if one has been conducted.

[33] Q. Do you know if anyone has looked at – any other states to see if they – excuse me – strike that.

Has anyone looked at any other states that uses pentobarbital to see if they've executed someone using pentobarbital that suffers from cavernous hemangioma?

A. I'm not aware of anyone.

Q. Are you aware of any states that have executed someone with cavernous hemangioma?

A. I don't know whether any state has or has not.

Q. Have you looked into that question at any point in your capacity as the director of corrections, in the Department of Corrections until present?

A. No, I do not recall ever looking into that.

Q. If you turn to the second page of the open protocol. Do you see the section that says monitoring of prisoner?

A. Yes, I see that section.

Q. And the number 1 says, the sentence at number 1 says the gurney shall be positioned so that medical personnel can observe the prisoner's [34] face directly or with the aid of a mirror.

Do you see that sentence?

A. I do see that sentence.

Q. Why was it important for the medical personnel to be able to observe the patient's face directly?

A. That language was carried over from a previous protocol so I'm not sure why it was originally inserted.

Q. Do you have an opinion as to why, or it would be important for medical personnel to observe that prisoner's face?

A. My opinion, yes, it would be important.

Q. Why – I'm sorry. Go ahead.

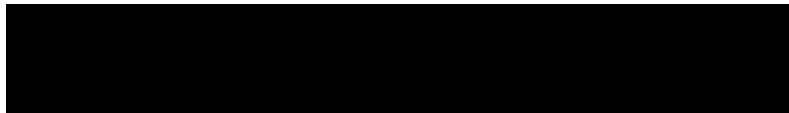
A. So that medical personnel could discern whether or not the prisoner was suffering any unusual distress.

Q. Have you ever attended an execution?

A. I have been on site for an execution but I have not been visually in a place where I could visually observe.

Q. Do you know where the medical personnel stand in relation to the individual who is being executed?

[35] A. Yes, I do.



[REDACTED]

Q. Do they have line of sight, unobstructed line of sight to the offender?

A. I believe so, yes.

[REDACTED]

Q. I just want to make sure I understood what you said a few moments ago. You have never personally been in the room or in an area where you can actually witness the execution itself, is that correct?

A. That is correct.

Q. But you are otherwise I think as you said on site?

A. Correct.

\* \* \*

[41] execution team takes responsibility for the offender don't change from their normal duties as the medical unit, so whatever responsibilities they would have to any other offender they would have to that offender.

Q. The non-execution team medical members –

A. Uh-huh.

Q. – are you aware of any policies or protocols that pertain to whether they can or cannot be involved in the execution of an inmate?

A. I don't recall if it is in the contract with that organization or if it's a policy or procedure. But they are – they are excluded from participating in the execution process.

Q. Right. So I'm just trying to reconcile that with what you were just describing in which they might, I believe you said provide some sort of medical attention.

A. Uh-huh.

Q. If they're excluded from the execution process by policy, and we can look at the policy if you want, but if they are excluded from the execution process by policy, then how or why can they provide medical attention to the inmate?

[42] A. Well, for instance, you asked me throw h the entire day. [REDACTED]

[REDACTED] Let's say at 7 o'clock in the morning the offender slipped and fell and hit his head. our regular medical unit would be responsible for providing whatever medical care that offender would need from that slip and fall. They're not providing any kind of medical care to prepare for the execution, to further the execution, anything related to it but they have a responsibility, you know.

Q. Sure. But they're not evaluating the inmate to determine whether he suffers from any specific conditions that might lead to complications during the execution process.

A. Correct.

Q. That is outside of their responsibilities, is that correct?

A. That's correct.



Q. So then focusing exclusively on the medical component of the execution team. Prior to the execution do they check the inmate's airways to see if they're having difficult breathing?

A. I don't know.

[43] Q. Aside from administering any additional prescriptions that the inmate might require as part of his daily dose, is there any other evaluation that the medical component of the execution team undertakes that you're aware of?

A. There is a review of the offender's medical history that I'm aware of and then there's, like I mentioned, the physical observation, and it is my understanding under the current practice those are the only two things that occur.

Q. Okay. Looking at the open protocol that you have in front of you.

A. Uh-huh.

Q. Is there anything in the open protocol, and take your time to review it, that speaks to any observation or medical review – strike that.

Is there anything in the open protocol in front of you that speaks to any evaluation that the medical component of the execution team is supposed to undertake prior to the execution?

A. No. There is nothing in the open protocol discussing whether there will or will not be an evaluation of the offender prior to the [44] execution.

Q. Are the execution team members required or expected to follow the execution protocol?

A. They are expected to follow the execution protocol.

Q. Why is it important for them to follow the execution protocol?

A. This is the protocol that the department has adopted to execute an offender and it's important that they follow the department's directions.

Q. And not stray from the protocol?

A. Not without permission.

Q. Are you aware of any studies that were undertaken to evaluate the effect of pentobarbital on the whole body?

A. Not that I recall.

Q. Are you aware of any side effects of pentobarbital on the whole body?

A. Not specifically, no.

Q. And of course I mean with the exception of causing death?

A. Correct.

Q. I just want to make sure we're clear. [45] Yeah.

Do you know of any other states in the United States use pentobarbital?

A. Yes, I do.

Q. How do you know that information?

A. I researched. I guess let me clarify. I have not since leaving the position of general counsel. I don't track this issue nearly as much as I used to, but I know that other states have in the past used pentobarbital and I know that from researching the methods of other states in that role.

Q. Why did you review the methods of other states?

A. One was to prepare the protocol for the Missouri Department of Corrections and then I continued to monitor what other states were doing in that role in case I was asked by the director or anybody else, you know, status of how we compared to other states.

Q. Of all the states that you looked into did they all use some means of lethal injection for execution?

A. The states that I looked into, yes.

Q. Are you aware of any states that do [46] not use lethal injection?

A. I know there are states that have options for lethal injection or some other method as an option. I'm not aware of any state that lethal injection is not at least an option.

Q. What other options are available at the states that you've looked into?

A. I want to say one of the states still has a firing squad, I think one state still technically on the books has the electric chair as an option. I think one state may technically still have hanging as an option but may have come out and said they won't use it. But now I'm really stretching my memory.

Q. Sure. I believe you mentioned lethal gas as one of the options?

A. I'm not aware –

Q. Sorry. maybe you didn't mention lethal gas.

Are you aware of any other states that use lethal gas as a means of execution?

A. I'm not aware of any state that has adopted lethal gas as a current method of execution.

Q. Are you aware of states that have it [47] where it's legally allowed as a means of execution?

A. I think there are states that have statutes that would allow it but I'm not aware of any state that has a protocol to use it. Missouri being an example of that.

Q. So is Missouri legally allowed to use lethal gas?

A. The statute in Missouri says that the director can pick a protocol that's either lethal injection or lethal gas.

Q. Does Missouri have a lethal gas protocol?

A. No. Not that I'm aware of.

Q. When you were asked to draft or revise the lethal injection protocol, were you asked to either draft or revise a lethal gas protocol?

A. I was specifically told lethal injection.

Q. Just want to make sure that you're answering the question I'm asking. Were you also asked to look into either drafting or revising a lethal gas protocol?

A. No one asked me to do that.

Q. Have you ever drafted a lethal gas [48] protocol?

A. No, I have not.

Q. Are you aware of anyone else who was asked to draft a lethal gas protocol?

A. Not at Missouri.

Q. You're aware of someone outside the state of Missouri who was asked to draft a lethal gas protocol?

A. I know there were two states who were asked to research that subject. I don't know if they drafted protocols or not.

Q. Do you know what states those were?

A. Louisiana and Oklahoma.

Q. Do you know why those states drafted a lethal gas protocol?

A. As I said I don't know that they drafted protocol.

Q. I'm sorry. I apologize. Thank you for clarifying.

Do you know why they looked into drafting a lethal gas protocol?

A. I don't recall specifically. I think it was either the direction of a governor or legislature.

Q. Are you aware of anybody in the [49] Department of Corrections or otherwise works for the state of Missouri currently or formerly who has undertaken any efforts to draft a lethal gas protocol?

A. To my knowledge nobody in the Department of Corrections has taken efforts to draft a lethal gas protocol.

Q. What about outside the Department of Corrections?

A. Not that I'm aware of. And I guess to be clear, I'm not aware of the department asking anybody to do that.

Q. Have you ever spoken to legislators about adopting lethal gas?

A. I have not.

Q. Do you know if any individuals in the Department of Corrections have spoken to legislators about adopting lethal gas?

A. Not that I recall.

Q. Does Missouri have a gas chamber?

A. Not a functioning one.

Q. Can you be a little bit – so when you say not a functioning one, what do you mean by that?

A. The old Missouri state penitentiary [50] had a gas chamber and Missouri used to use lethal gas. I believe the state still technically owns the property and I'm not sure if that property's been leased to the city of Jefferson or not but I know the old chamber which is no longer functioning is part of a tour of the old Missouri state penitentiary.

Q. Is the old Missouri state penitentiary a museum now?

A. Yes.

Q. So the old gas chamber is part of the tour of the museum?

A. I believe so.

Q. Do you know how much it would cost to conduct an execution by gas?

A. No.

Q. Do you know how much it costs to conduct an execution by lethal injection?

A. No.

Q. Do you know if anyone's undertaken any studies to determine the costs to conduct an execution by either gas or lethal injection?

A. I don't know that anybody's done a study but I know the department could calculate what they pay for an execution by lethal injection.

[51] Q. Could the department also calculate how much it costs to do an execution by gas?

A. No.

Q. Why couldn't the department do that?

A. There are too many unknown variables about what an execution by gas would entail so it would be impossible to figure that cost out.

Q. Has the department ever tried to figure that out?

A. Not to my knowledge.

Q. And what variables are you referring to when you say there would be too many variables?

A. Well, without protocol we wouldn't know even basic things, like the cost of the gas, the cost of equipment to administer the gas, the cost of whatever facility would be necessary to construct or modify to conduct the execution there. We wouldn't know the number of staff members needed to conduct the execution and then based on where that execution occurred the number of staff members necessary for safety of the – and security of the location. And those are just off the top of my head. There may be others.

Q. Sure. But to your knowledge has the Department of Corrections, let's take Missouri in [52] general, ever looked into answering those questions?

A. Not to my knowledge.

Q. Do you know if it's possible that you would not need an actual gas chamber or facility but execution by gas could be conducted using a gas mask?

A. I'm not sure. I don't have the expertise to tell you whether or not an actual chamber is needed or if it would be sufficient to do it by mask.

Q. Do you have the expertise to determine how to execute someone by lethal injection?

A. Personally, no.

Q. How did you develop the expertise or at least the appropriate level of skills to draft the protocol, or to revise the protocol for the lethal injection?

MS. COULTER: I'm going to object to any questions regarding the development of the current protocol. It is prohibited by the discovery order.

MR. FOGEL: I think it's relevant because at this moment were probing the [53] feasibility of using lethal gas and the witness has testified that he does not have the expertise or did not have the expertise when he was in the position at the Department of Corrections to be able to answer those types of questions. Yet if the witness can still develop a protocol on lethal injection, I think it's fair to probe why he has the certain set of skills to do it for one means of execution but not the other.

MS. COULTER: I think you can ask about what skills he may have – I understand where you're going but I think you can go head and limit it to asking him what skills he has that allowed him to participate in the drafting but I don't think you can get into how – who he may have consulted with in forming the policy. If that makes any sense.

MR. FOGEL: So let me ask a question this way and then you let me know if it's permissible or not.

MS. COULTER: Okay.

Q. (BY MR. FOGEL) Did you have at the time that you were asked to revise the lethal injection execution protocol, did you already have sufficient knowledge to revise the protocol at that [54] point in time?



A. At the time I was asked, no, I did not.

Q. Did you develop knowledge or we'll even say sufficient expertise in order to be qualified to revise the lethal injection open protocol?

A. After I was asked to revise the protocol I developed the knowledge I believed was necessary to present the draft that I presented.

Q. Have you ever attempted to acquire similar knowledge in order to develop a lethal gas protocol?

A. I have thought about it but I have not undertaken the kind of efforts that I did for the lethal injection protocol.

Q. What did you think about when, as you just said, what were you thinking about?

A. As I mentioned before Missouri statute allows lethal injection and lethal gas, so I did a little bit of research so that I could become familiar with what that could mean or could entail. I read a few articles that were available theorizing how an execution by lethal gas would be both feasible and legal. And then at that point I [55] kind of hit a wall. Those articles were more theoretical and I didn't know where to go from there on how to draft a protocol and since it was more just having a working knowledge of what that would be, I didn't really dig deeper.

Q. Was this approximately in 2013?

A. It would have been over the course of time, between 2013 and 2000 – while I was general counsel.

Q. And was this, the review of these articles, or would it be fair to say, is it okay if I call it research, would that accurately describe?

A. Yes, I'm okay with that,

Q. So did you undertake this research relating to lethal gas in connection with your responsibilities of revising the execution protocol for lethal injection?

A. I'm not sure I can agree with that. I felt as the general counsel it was my responsibility to be at least familiar with the legal methods of execution. You know, I mentioned I did that for lethal gas because it was in the Missouri statute but I also researched other methods in other states, that's how I know that firing squad is legal in one state. So I wanted a [56] working knowledge so as general counsel if I was asked what are other states doing I could somewhat answer that question or very quickly know the resources that I could go to to answer those questions.

Q. You mentioned that you quote, hit a wall when you were researching lethal gas. Can you expand on what you mean by that?

A. There are a number of factors to write a protocol that I – the research available was not sufficient to answer to me and given the difference between lethal gas, you know, the articles I read were transitioning from, for lack of a better word, poison gases that were used historically to more inert gases. You know, I read articles that proposed various gases but I didn't even know what kind of expert I would need to go to to tell me which inert gas would work more effectively or less effectively.

Delivery methods, there wasn't really any discussion on the research that I found about as we talked about before. Would you need an actual chamber or would some kind of face mask or gas mask be sufficient. If it was, what were the requirements of that.

[57] I knew that because we were doing this on – in a workplace, there would be OSHA guidelines. So I

tried to look, if you're using some kind of toxic or hazardous gas material, what the requirements for venting the rooms and those kind of things. And execution by lethal gas falls outside the – I'm sorry, I shouldn't be sarcastic, but execution, this kind of situation didn't seem to comply with the regulations, or be contemplated by the regulations of OSHA, so I didn't know who would I go to about that.

I wouldn't know the quantity or the concentration of the gas. Again, the articles were theoretical and I wouldn't know what kind of expert to go to or what kind of person to go to to answer those questions. You know, which gas is better. If I use a gas, what quantity or quality I would need to use. How long it would take and then the safety of the environment around it. How to best administrate and then also to protect for the individuals who are witnessing the execution.

Q. So you did not know the answers to those questions?

A. I didn't know the answer to those questions and I didn't know how to go to find [58] answers to those questions.

Q. So it's fair to say you did not consult anyone else in trying to determine the answers to those questions?

A. I talked generally. We have a health and safety unit and I mentioned the OSHA regulations. I generally talked to them, you know, where would be the guidance on, if you were introducing a lethal gas into the workplace about ventilation and things, so they directed me there. But like I said, I wouldn't know who to talk to. It didn't seem to fall in any specific expertise.

Q. And because you couldn't find somebody with that specific expertise to answer those questions those questions generally remained unanswered?

A. I had not been directed to do anything more than that. Like I said, it was just me thinking personally so that I could be prepared, so, I mean to be candid, no, I didn't go out and try to find answers to those questions.

Q. Did you report – I don't want to say findings, because it sounds like you didn't necessarily make any findings, but did you report that you had undertaken this research and had these [59] questions to the director of the Department of Corrections?

A. No, I didn't. I didn't provide any specific detailed report on my information to the director.

Q. Did you provide any update on your research to any of your other supervisors?

A. No. Nobody had asked me to do that research. I had taken it upon myself.

Q. And aside from that research that you just discussed, have you undertaken any – did you undertake any other efforts to evaluate the feasibility of using lethal gas in the state of Missouri?

A. I don't recall anything other than what I have just discussed.

Q. Am I correct that you were undertaking this work when you were general counsel of the Department of Corrections?

A. That's correct.

Q. And in 2014 you were no longer the general counsel, is that right?

A. 2000 – yes, that’s correct.

Q. Did you share any of this information with the individual who succeeded you?

[60] A. Yes. I think we discussed generally lethal gas. I’m not sure the level of detail but it would have been some detail.

Q. Why did you discuss lethal gas with your successor?

A. He was taking my role and I felt that the general counsel for the Department of Corrections should have some knowledge especially of a method that was listed in the statute, so I kind of explained to him what I had done and the walls that I had hit.

Q. What else did you and – who is the individual that followed you as the general counsel?

A. Richard Williams.

Q. What else did you and Mr. Williams discuss regarding lethal gas?

A. That would have been it. It would not have been a – well, I take – I don’t recall when this lawsuit was filed so there may have been a discussion that Mr. Bucklew was alleging or requesting lethal gas. That would have been the only other conversation.

Q. So you discussed it in connection with your conversations with Mr. Williams relating [61] to Mr. Bucklew’s lawsuit?

A. To the litigation.

Q. And it was – because it was your understanding that Mr. Bucklew was alleging that lethal injection would pose a significant harm to his health in violation of his 8th Amendment rights, is that correct?

A. That is my understanding of his allegations.

Q. Okay. And did you have that conversation with Mr. Williams because you were considering whether lethal gas was a viable alternative?

A. No.

Q. Is that because you just did not know whether lethal gas could be a viable alternative?

A. No. That conversation was about the litigation, that it had been filed, you know, a review of the litigation.

Q. After you became deputy general counsel did you do any other investigation or research relating to lethal gas?

A. I may have read some articles about, I mentioned those two states, and again timelines are difficult, but those two states doing reports [62] or studies. So I may have read news articles about them but I didn't do – and in this sense I wouldn't agree with the word research.

Q. I'm sorry?

A. When I became –

Q. You would not agree with the word research. Fair enough. Okay.

Do you know if Mr. Williams or anybody else within the general counsel's office of the Department of Corrections did any research or general looking into the possibility of lethal gas?

A. I don't have any specific knowledge and Mr. Williams would have been the only one in my opinion who would have had a role in that in that as the general counsel, so I don't know if he did or didn't. I

don't think anybody else in the legal unit. They would not have done it in connection with their job. I cannot speculate about their personal life.

Q. The materials that you uncovered through the course of your research on lethal gas, what did do you with them? Strike that.

Do you still have the materials that you uncovered from your research on lethal gas?

A. No, I do not.

[63] Q. What did you do with them?

A. I don't recall to be honest.

Q. Did you give them to Mr. Williams?

A. I don't think I did.

Q. Did you hold on to them at the time that you became deputy general counsel?

A. Maybe for a period of time. But like I said, I don't recall what happened to them.

Q. Did you keep a hard copy file of the information you gathered on lethal gas?

A. I may have saved or I may have printed one article or two and it may have been saved, maybe as more intentional sounding, I may have retained that for a period of time.

Q. Right. Did you keep any electronic files?

A. No.

Q. You mentioned that there are variables relating to lethal gas that remain unknown to you, is that right?

A. That's correct.

Q. And to your knowledge nobody within the Department of Corrections or under the state of Missouri has ever tried to answer those variables or unknowns?

[64] A. That's correct.

Q. Did you ever reach the conclusion that lethal gas was not a feasible option within the state of Missouri?

A. With the resources I had available to me I would say that it wasn't a feasible option.

Q. And what was the basis for that opinion or conclusion?

A. As I said, I think there were just a number of variables that I'm not sure that we had the resources to answer. And as I said, I kind of thinking it through didn't even know where to go to get those answers.

Q. So you didn't know the answers to those questions, yet you concluded that it would not be a feasible option because you didn't know the answer to those questions?

A. Because we didn't have the resources to answer those questions, that's kind of where I was at.

Q. Matt, I'm showing you a document that's marked as Plaintiffs Exhibit 9. If you can just take a moment to review that.

A. (Reviewing document.) Okay. I've reviewed this.

\* \* \*

[73] means of execution?

A. Yes.



Q. Do you know if the Department of Corrections has a set of factors or considerations in determining whether a means of execution is a viable or feasible alternative?

A. I'm not sure I understand that question.

Q. Probably because its a poorly worded question.

What factors does the department – strike that.

What factors does the Department of Corrections take into consideration in determining whether a different means of execution is feasible?

A. I don't know.

Q. Are you aware of any set factors or procedures that the Department of Corrections has in evaluating whether an alternative means of execution is feasible?

A. No, no formal ones.

Q. No formal commission or committee of individuals that are dedicated to evaluating them?

A. No, the ultimate say is the director of the department so I don't know if he had any set [74] factors. I'm not aware of anything in writing, not aware of any policy or procedure.

Q. The director of the Department of Corrections has final say on what is – what means of execution are used, is that correct?

A. That's correct.

Q. Okay. And so he would have the final say in determining whether lethal gas is a feasible means of execution, correct?

A. Correct.

Q. Did you discuss any of your quote research or looking into lethal gas with the director of the Department of Corrections?

A. Not in any specifics.

Q. Did you discuss it at all?

A. Once or twice we mentioned lethal – or I mentioned lethal gas was an option and we probably briefed him on the litigation by Mr. Bucklew and he emphatically expressed to us that lethal gas was not something he wanted to do.

Q. I'm just looking back and reading the transcript, the rough transcript. It says once or twice you mentioned lethal gas was an option.

A. Uh-huh.

Q. Could you explain to me what you said [75] to the director when describing lethal gas as a potential option?

A. I think I would have said – I shouldn't say what it says. I think what I recall saying, the conversation I remember most vividly is that Mr. Bucklew had or we anticipated he was going to propose a method of lethal gas. So we reminded the director that lethal gas was authorized by the statute and he made it clear that he didn't want us to pursue that.

Q. Is that why you stopped looking in to why lethal gas was a feasible alternative?

A. No.

Q. Would you have had authority to continue looking into the possibility of lethal gas as an alternative had the director not told you not to look into it?

MR SPILLANE: I'm going to object to the question. I think it assumes facts not in evidence. I don't think he said the director told him not to look into it. I think he said the director told him they were not going to do it.

MR. FOGEL: Can we go back and look at the answer the witness gave?

(WHEREUPON, A DISCUSSION WAS HELD OFF THE RECORD)

[76] Q. (BY MR. FOGEL) He made it clear to us that he didn't want us to pursue that. What do you mean then by what the director told you he didn't want you to pursue that?

MS. COULTER: I'm going to object at this point. It's going into attorney-client privilege if he was acting as legal counsel to the director.

MR. FOGEL: Are you instructing the witness not to answer the question?

MS. COULTER: Yes.

Q. (BY MR. FOGEL) Okay. Aside from that conversation did you have any other conversations with the director regarding the use of lethal gas?

A. I may have had one or two others or one or two total. I don't recall the specific number.

Q. Did you tell the director that lethal gas was not a feasible option?

MS. COULTER: Objection, attorney-client privilege.

Q. (BY MR. FOGEL) Just so it's clear for the record, you're instructing the witness not to answer the question?

[77] MS. COULTER: Unless he wants to answer but my advice to you would be not to answer.

THE WITNESS: I'm going to follow the advice of my legal counsel.

Q. (BY MR. FOGEL) Was this a privileged communication – who else was present for this communication with the director?

A. I believe the general – I think one of the conversations happened when I was the deputy general counsel and the general counsel would have been present in the room but that would have been it.

Q. And the other conversation?

A. Would have been as general counsel so it would have been just me.

Q. Just you and the director?

A. And the director.

Q. Nobody else was present for the conversation?

A. Correct.

Q. I think as we've established both lethal gas and lethal injection are allowed by law under Missouri statute, correct?

A. Correct.

Q. Do you believe that the Department of [78] Corrections has an obligation to explore the viability of lethal gas as a means of execution?

A. No.

Q. Do you know when the last time the state of Missouri tested the gas chamber before it went into retirement for use as part of the tour?

A. No, I don't.

Q. Do you know the results of the last time it was tested?

A. No, I don't.

Q. If it was determined that lethal injection was not a viable option for means of execution, what would the state of Missouri do?

MS. COULTER: Objection, calls for speculation.

Q. (BY MR. FOGEL) Do you know what the state of Missouri would do if lethal injection was determined not a viable option for a specific inmate?

A. No, I don't know.

Q. Did you make – at the time of Mr. Bucklew's litigation in 2014, or at any other point in your capacity as working in the general counsel's office at the Department of Corrections, did you make the recommendation that the Department [79] of Corrections explore the possibility of lethal gas?

MR. SPILLANE: Excuse me. I'm going to object on privilege. You said in his capacity as general counsel what recommendation did he make? I'm objecting based on attorney-client privilege.

Sue?

MS. BONOIST: Yeah, well, I agree. I was starting to talk and Mike jumped in.

A. I'm going to follow the advice of counsel.

Q. (BY MR. FOGEL) Sure.

Outside of your capacity as other deputy general counsel, general counsel or legal counsel, did you ever make the recommendation that the Department of Corrections should consider exploring the viability of lethal gas as a viable alternative?

A. No.

Q. Are you aware of anybody else ever making that recommendation?

A. I'm not aware of anybody making that recommendation.

Q. Based on your experience do you think the Department of Corrections is capable of [80] undertaking an investigation into whether lethal gas is a viable alternative?

MS. COULTER: Objection, speculation.

A. Your question is whether the department is –

Q. (BY MR. FOGEL) Capable of undertaking investigation to determine whether viable gas is a viable alternative – excuse me, whether lethal gas is a viable alternative.

A. I guess I would say yes, the department is capable of initiating, undergoing an investigation if it so chose to do so.

Q. But as far as you're aware to date the department has chosen not to do so?

A. It has not done so.

Q. Do you know if it has chosen not to do so?

MS. COULTER: Objection. I think the basis for his answer would be based on privileged conversations.

Q. (BY MR. FOGEL) Is that correct, that your basis for knowing that would be based on privileged conversations?

A. The only conversations I would have had regarding that were in my role as either deputy [81] general counsel or general counsel.

Q. So the answer is yes, it would be based on privileged conversations?

A. Yes.

Q. Okay. And I'm not interested in probing your privileged communications.

To your knowledge, though, you are not aware of anyone undertaking any further research or otherwise looking into the prior information you gathered on lethal gas, is that correct?

A. That's correct.

MR FOGEL: Why don't we take a short break?

(WHEREUPON. A RECESS WAS TAKEN BY THE PARTIES)

Q (BY MR FOGEL) Matt, before we took a break we were talking a little bit about, you know, I'm using the term research here as we previously discussed, to describe the looking into you did regarding lethal gas as a possible means of execution. And one of the things you mentioned or I guess kind of the walls, part of the wall that you ran into is that you did not know how much gas should be used.

Was one of the questions also what [82] type of gas to be used?

A. Correct.

Q. And fair to say you did not figure out an answer to arrive at an answer to either question, is that right?

A. That's correct.

Q. At the time that you were drafting, or when you were about to start revising, I should say for the first time the lethal injection protocol, did you how much pentobarbital should be used, just pentobarbital

generally? Did you know that pentobarbital should be used?

A. The first time I redrafted was under propofol.

Q. Okay.

A. And the answer to your question on that one was yes.

Q. Yes, you knew pentobarbital should be used?

A. Yes, given the nature of the changes I knew what drug and how much. I wasn't tasked to change that portion of the protocol.

Q. Got it. So did someone tell you that were going to use pentobarbital?

A. No.

[83] Q. How did you find out or how did you make a determination to revise protocol to use pentobarbital?

A. I was tasked with revising the protocol. I made the recommendation of pentobarbital.

MS. COULTER: And I'm going to object to any questions on this line of inquiry because it does talk about the development of protocol which is excluded from the discovery order.

MR. FOGEL: Yes, but this – well, let me ask another question and maybe we can maybe revisit that objection.

Q. (BY MR. FOGEL) How did you know how much pentobarbital to put in to the revised protocol?

A. That number came from protocols that had been used in other states.



Q. So you undertook some research or investigation to determine what would be the appropriate amount of pentobarbital to include?

A. Yes.

Q. Did you ever undertake any research or investigation to determine how much gas should possibly be used in a lethal gas execution?

[84] A. No. there was no research available to answer that question.

Q. You also mentioned that you did not know whether OSHA would apply to lethal gas, is that correct?

A. That's correct.

Q. Does OSHA apply to lethal injection?

A. Not that I'm aware.

Q. You do not know if it does not and you also do not know if it does, one way or the other?

A. And I guess I should say too that one of the – one of the areas, you know. I don't know either – first, sorry.

Q. Sure.

A. To answer your question, no, I don't know either way. But one of the articles that I read that proposed lethal injection, or lethal gas as a feasible method was from deaths that occurred on the workplace and accidental deaths that occurred on the workplace and that's where I got the idea of OSHA regulations providing a guideline or a framework for those who would be witness to the execution by lethal gas.

Q. Did you undertake any other research [85] beyond that relating to the OSHA guidelines?

A. No.

Q. Is either the open or closed protocol designed such that it can be customized to an inmate's specific condition?

A. Yes.

Q. How is the open protocol designed so it can be customized to an inmate's specific condition?

A. You said or.

Q. Sure.

A. The open protocol is not designed to be customized.

Q. How was the closed protocol designed to be customized to an individual's specific condition?

A. Each time that there's a scheduled execution for an inmate that is reviewed and customized as needed. As long as it doesn't conflict with the open protocol.

Q. Do you know how the closed protocol would be modified for someone who suffers from cavernous hemangioma?

A. No, I don't know.

Q. Are there any protocols in place if

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[1] U.S. DISTRICT COURT  
WESTERN DISTRICT OF MISSOURI  
(KANSAS CITY)

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Civil Docket for Case #: 4-14-cv-08000-BP

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RUSELL BUCKLEW,

*Plaintiff,*

vs.

GEORGE LOMBARDI, *et al.*,

*Defendants.*

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DEPOSITION OF DAVE DORMIRE  
Taken on behalf of the Plaintiff  
January 24, 2017

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\* \* \*

[14] Center?

A. Yes.

Q. Commonly known I think as the ERDCC, is that right?

A. Yes.

Q. And who is that?

A. Troy Steele.

Q. And what's your understanding of Mr. Steele's position?

A. He has similar responsibilities that I have as warden. He's in charge of that prison, he's in charge of

the safety and security and responsible to the staff and the offenders.

Q. How often would you say you interact with Mr. Steele?

A. Not on a regular basis, maybe only two, three, four times a month in addition to a site visit now and then.

Q. Who do you report to?

A. I report to the director of the department.

Q. And that was formerly Mr. Lombardi. correct?

A. Yes.

Q. And then it is now Anne Precythe?

[15] A. That's correct.

Q. And what's your understanding of the director of the department's role?

A. The director is over all the departments, over all the divisions, has ultimate responsibilities over the department.

Q. And have you interacted with Ms. Precythe since she took on her new role?

A. Some, yes.

Q. And what have those interactions been related to?

A. Meeting with her, she visited, we went to Bonne Terre yesterday to show her that institution.

Q. Do you have any medical training?

A. No.

Q. Did you ever attend medical school?

A. No.

Q. Are you a chemist?

A. No.

Q. A biologist?

A. No.

Q. Does the state of Missouri have an execution protocol?

A. Yes.

[16] Q. And what is your understanding of an execution protocol?

A. My description of it is that it's a plan for how an execution is to be carried out.

Q. And why does the state of Missouri have an execution protocol?

A. We, I believe we need a formalized plan to make sure we're following the procedures the way, consistently each time.

Q. So that's Plaintiffs Exhibit 5.

A. (Reviewing document).

Q. Do you recognize that document?

A. Yes.

Q. Can you describe what that document is?

A. It is Missouri Department of Corrections preparation and administration of chemicals for lethal injection.

Q. Is that commonly referred to as the open protocol?

A. I believe so, yeah.

Q. What's your involvement in execution by lethal injection?

A. My rule during the execution is to brief the state witnesses and stay with the state [17] witnesses during the execution.

Q. Is that it?

A. That's, I meet, I have some responsibilities to make sure that the institutional operation, the non-medical, medical members are there. I meet with them, I head up the execution. I make payment on behalf of the department to the medical members at the time.

Q. You mentioned that you meet with the execution team members in advance.

A. Yes.

Q. What's the purpose of that meeting?

A. I am, I'm there just overseeing the operation to make sure everything is in place and everything's in order.

Q. Can I elaborate that, on that a little bit more? So what are you looking at that's in order? Is it the chemicals, or?

A. It is everything in, that we have to do in preparation for an execution to make sure everyone's in place, that the institutional operations are proceeding as they should.

Q. By everything do you mean the execution team members or is it broader than that?

A. A little bit broader than that. I'm

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[22]



Q. You mentioned that the warden also is involved in the execution although not part of the execution team, correct?

A. Correct

Q. And are you referring to the warden of the ERDCC?

A. Yes.

Q. And what is your understanding of the warden's responsibilities during an execution?

A. When directed to proceed he reads the warrant and directs the execution to proceed. Once given direction from the director of the [23] department.

Q. You also mentioned the deputy warden. Also of the ERDCC?

A. Yes.

Q. And what is the deputy warden's role?

A. Operational. In charge of ensuring that the victims and states and offender witnesses are moved and kept separate and all of those sort of things.

(MARKED PLAINTIFF'S EXHIBIT NO. 12)

Q. (BY MS. NOTTON) Are you familiar with this document?

A. Yes.

Q. Can you describe what it is?

A. This is a document to the non-medical members of the team indicating they're to use this notation NM1, 2, 3, 4 to protect their identity.

Q. So these are the letters that tell the execution team members what their pseudonyms are.

A. That's correct.

Q. Okay. Can you turn to the second page? That letter is a letter to team member NM2, is that correct?

A. Yes.

[24] Q. In your response to Interrogatory number 9 you don't identify an NM2.

A. Correct.

Q. Is NM2 no longer part of the execution team?

A. That's correct.

Q. Do you know what role NM2 played?

A. NM2 would have been a non-medical team member at one point.

Q. Turning back to your affidavit, which I believe is Plaintiffs Exhibit 7. In that affidavit you indicate that the Department no longer uses Methylene blue, is that correct?

A. That's correct.

Q. In paragraph 4 you say the DOC has not used Methylene blue in any execution since January of 2014. Correct?

A. Correct.

Q. You go on to say that the DOC has the intention of doing so in the future. Is that accurate?

A. Yes.

Q. They do intend to use Methylene blue in the future?

A. No. I should have said no intention.

[25] Q. So to be clear the DOC has no intention of using Methylene blue in the future.



A. Yeah. We have no intention of using it in the future.

Q. Thank you. You can put that document aside.

A. Okay.

Q. Turning back to the open protocol which is Plaintiffs Exhibit 5. This indicates that pentobarbital is the drug used in the lethal injection process, is that correct?

A. Yes.

Q. Is that the only drug used?

A. Yes.

Q. Do you know the effects of pentobarbital on the human body?

A. I have no medical training but I've observed the five grams of pentobarbital cause death.

Q. Do you know why it calls for five grams of pentobarbital?

A. Five grams, no. I don't know how that was determined to be the amount.

Q. Do you know why it calls for two syringes?

[26] A. I believe it's based on the quantity and the size of the syringes.

Q. If pentobarbital is not available does the Department have any backup plans or protocols in place?

A. No.

Q. The protocol indicates that medical personnel put IV lines into the prisoner, is that correct?

A. That's correct.

Q. Before inserting any of the IV lines do you know if the medical personnel check an inmate's airways?

A. I am not present during that, no. I don't know.

Q. Okay. So you don't know if they check blood pressure?

A. I don't.

Q. Or anything else.

A. I do not.

Q. If an execution team member is not able to find a strong enough vein to insert the line into is there a protocol in place for that?

A. Under, in these lines it talks about the, some options in there. They may insert a [27] primary and it says or central venous line and it indicates other options to that.

Q. Have you ever observed an execution where they had trouble inserting the IV?

A. No.

Q. So to your knowledge none of the prior executions in Missouri have encountered any difficulty with that.

A. I'm not present during that process.

Q. Are you aware of any side effects to pentobarbital?

A. No.

Q. The protocol talks to the monitoring of a prisoner during an execution. What is your understanding of the purpose of that monitoring?

A. They have an EKG machine and direct observation, I believe the purpose is to, for medical personnel

to access to make sure it is going according to the protocol.

Q. Do you know what the medical personnel are looking for as they monitor?

A. Not in detail, no.

Q. Is anyone else responsible for monitoring the prisoner?

A. Non-medical staff are watching as [28] well, but. The primary responsibilities for monitoring would be the medical staff.

Q. The protocol suggests that the staff, the inmate is positioned so the medical personnel can observe the prisoner's face directly. Why do you think it focuses on the face?

A. I don't know.

Q. The protocol indicates that the first five grams of pentobarbital is injected and then following a sufficient amount of time for death to occur medical personnel examine the prisoner. And that's in section E. What would you say is a sufficient amount of time for death to occur?

A. From my observation with state witnesses it occurs at about seven minutes where they go and check.

Q. In section F of the open protocol it discusses the sequence of chemicals and chemical log. Are you familiar with those documents?

A. Yes.

Q. Are you involved with those documents in any way?

A. I sign when those come back, I sign those prior to the director of the department signing those when they come back after an [29] execution.



A. That's correct.

Q. Can you describe for me what valium is used for?

A. We don't use valium anymore but at one time we offered vellum to the offenders for a sedative if they wanted one. This was prior to the execution.

[30] Q. But that's no longer offered?

A. No.

Q. Why not?

A. We currently do not have any valium.

Q. What is versed?

A. I don't know the drug terms. It also is a sedative in my understanding.

Q. And the inmate has the option of taking a sedative, is that correct?

A. Yes.

Q. And when is that sedative offered to the inmate, do you know?

A. About. I'm going to say something like four hours before the execution and then with the statement the offender can ask for a sedative any time following that.

Q. Are they able to ask for it up until execution?

A. They are.

Q. Would there be any reason why an inmate would be given a sedative without them wanting it?

A. I can see a scenario. I'm not aware of any situation. If an offender were potentially out of control I could see that scenario but that [31] hasn't occurred.

Q. And then finally lists Lidocaine. What is Lidocaine used for?

A. That is. I believe that is a, something that they use when they're setting the IV. I don't believe, it's not considered a controlled chemical or anything but it's something they use when they set the IV.

Q. And is it topical or do they inject it, do you know?

A. I do not know.

Q. And to your knowledge are any other chemicals or drugs involved in the execution process at all?

A. Not in the process, no.

Q. So the open protocol suggests that any irregularities should be noted on the sequence of chemicals or the chemical log. What does that mean?

A. That would, to my mind that would mean that something other than five grams were utilized for pentobarbital or something like that.

Q. Have you ever seen one of these documents have an irregularity?

A. No.

[32] Q. Is there a protocol in place for an instance where there is an irregularity?

A. Other protocol says that it's notated if there is one.

Q. And nothing further is done after that.

A. I don't know that I understand your question.

Q. Sure. Let me rephrase.

So if an irregularity was noted are there subsequent steps than taken after that or is it just a notation that's made?

A. We have not had that situation so it would be hard for me to tell you when nothing would occur or whether we would react and do something. It would depend on what occurred.

Q. Okay. So to your knowledge there's nothing, there's no steps or a specific protocol in place for that.

A. For what is your question?

Q. For dealing with any irregularities.

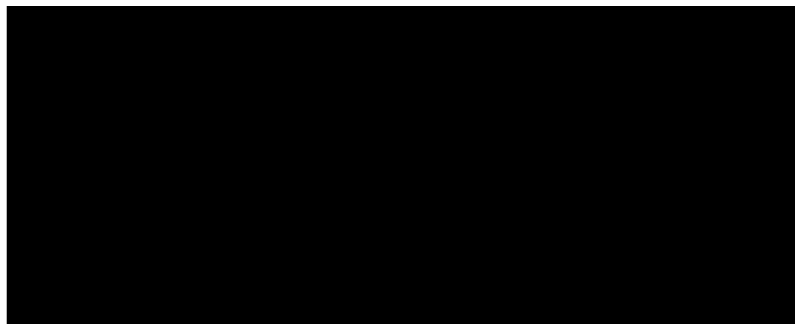
A. I believe we would react. The reason for us to review is to see if there were and to report those.

Q. Of course. But my question is is [33] there anything formally documented for that?

A. To say what we would do if a scenario happened?

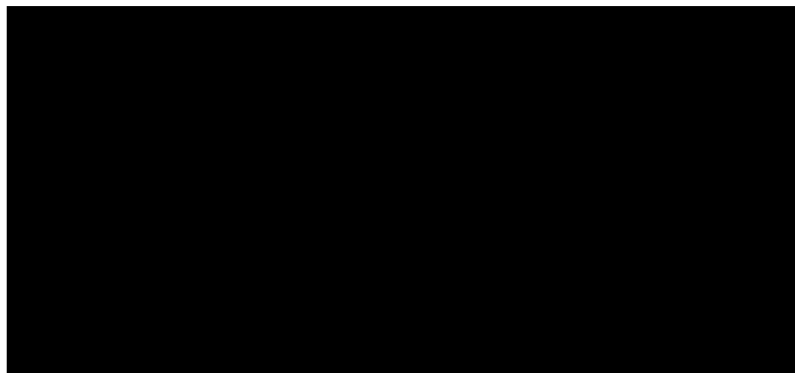
Q. Yes.

A. No.

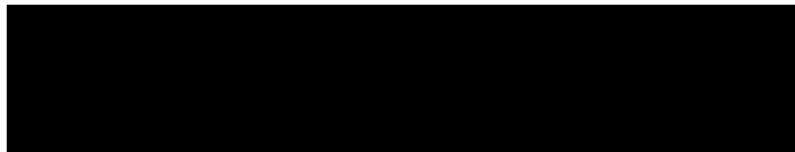


Q. Okay. So once you receive the sequence of chemicals and chemical log what do you do with them?

A. I look at them, sign them and send them to the director.



[34]



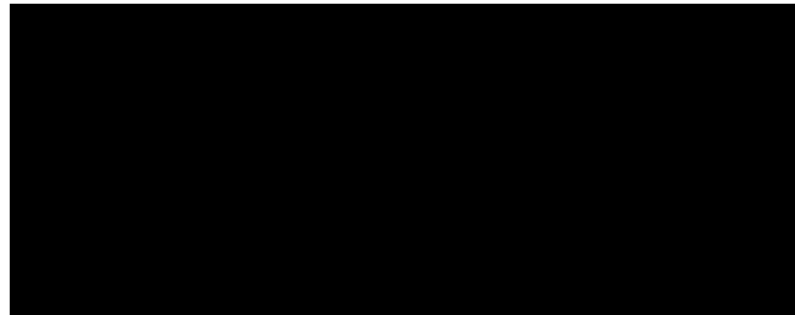
Have you ever seen an execution halted for any reason?

A. No.

Q. Can you describe for me how prisoners are positioned during an execution?

A. They're laying on the [REDACTED] there

[35]



Q. And the gurney is set up so that the inmate is laying flat, is that correct?

A. Yes.

Q. Have you ever seen the gurney in any other position?

A. I don't think so,

Q. During an execution if the drug does not appear to be functioning as expected is there a protocol in place for that?

A. There's a protocol to assess and discuss with the director about repeating the process.

Q. What do you mean by repeating the process?

A. The protocol says to have five grams [36] ready and then if death has not occurred then medical personnel assess, report, that information goes to the



department director for her decision of whether or not to administer a second five grams.

Q. What about if the prisoner begins convulsing, is there a protocol in place for that?

A. There is not.

Q. How about if a prisoner starts hemorrhaging, is there a protocol in place for that?

A. No.

Q. How about if a vein blows, is there a protocol in place for that?

A. No.

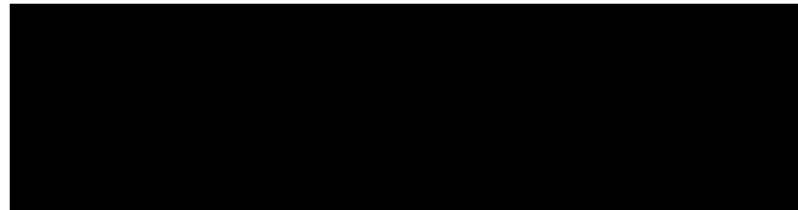
Q. Would it be fair to say that the department has not had to deal with a situation like that under the current protocol?

A. True.

Q. Is there a run-through of the execution in advance?

A. Yes.

Q. And when does that occur?



[37] Q. Is that for a particular execution the one that occurred [REDACTED]

A. We have various run-throughs making sure staff are all prepared [REDACTED] we did a full run-through because it's been a while since we've done a run-

through so we ran all the staff through their dunes yesterday.

Q. And how often does that occur?

A. It occurs [REDACTED] was the first time we've had a full one for quite a while because we've had, after executions we don't do a full run-through if we've had an execution recently.

Q. And that run-through assumes the execution will go as planned, is that correct?

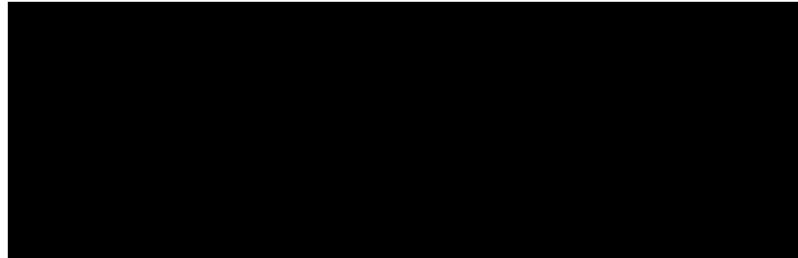
A. Yes

MS NOTTON: Why don't we take a little break?

A. Sure.

MS NOTTON: Perfect.

(WHEREUPON A RECESS WAS TAKEN BY THE PARTIES)



[38] A. Okay.

Q. Have you seen this document before?

A. Yes.

Q. Can you describe what it is?

A. It is a pre-execution summary of medical history.

Q. And what is it used for?

A. It is used to inform the medical staff of the execution of any conditions the offender might have.

Q. And who fills this out?

A. Our medical director at central office. Delouis Williams.

Q. And you said it was Delouis?

A. Delouis Williams, yes.

Q. And where does Delouis Williams get that information from?

A. She gets it from his case file.

Q. Okay. And when is this usually filled out in advance of an execution?

A. Generally two to three to four weeks ahead of an execution.

Q. Are there any other medical evaluations that are done prior to an execution?

A. This is the only one I'm aware of.

[39] Q. Do you know if inmates are evaluated in any other way prior to an execution?

A. I know that mental health does a report.

Q. Is that it?

A. As far as evaluation, yes, I believe so.

Q. Are you involved in approving an execution in any way?

A. In which?

Q. Are you involved in approving an execution in any way?

A. No.

Q. Are any steps taken to prepare a prisoner for execution?

A. We offer obviously mental health counseling, we offer chaplaincy services, thing like that. I don't know, we have a case worker that's assigned to assist. I don't know exactly what your question is.

Q. Is there a process in place to determine if an individual is competent to be executed, medically or otherwise?

A. I believe that's the purpose of the mental health evaluation that's submitted.

[40] Q. Does the physician on the execution team ever evaluate the inmate prior to an execution?

A. I don't know what the term evaluate would mean. Obviously [REDACTED] is the one placing the IV so I don't know what procedure and what [REDACTED] does just prior to that.

Q. Okay. Does [REDACTED] interact with the inmate before the actual execution day?

A. Before the day? No.

Q. Okay.

You've observed executions before, correct?

A. Yes.

Q. Now many times would you say?

A. All the ones that have occurred since I've been director so that's, I don't know how many that number is. 17. 18. I don't know the number. Something like that.

Q. Where are you normally observing these executions from?

A. From the state witness room.

Q. And can you describe where that is in relation to the execution room?

A. It is one of three rooms that [41] surrounds that room where the offender is on the gurney. One is state witnesses, one is victim's witnesses and one is his witnesses.

Q. And are you behind glass or a door?

A. We're behind glass, yes.

Q. Is anyone generally in the execution room with the inmate during an execution?

A. No.

Q. Turning to your answer to Interrogatory number 3. I believe you answered that all executions using pentobarbital have been rapid and painless, is that correct?

A. That is correct. I don't see it in that – oh, yes. That is correct. Yeah.

Q. What would you consider to be rapid?

A. As I stated earlier the offender is seemingly unconscious within a few seconds and each time the medical staff have gone in he has been deceased at about seven minutes, seven or eight minutes.

Q. And is your basis for that strictly your own personal observation?

A. Yes.

Q. You also indicate it's painless. What's your basis for that?

[42] A. I see no movement, no reaction from the offender.

Q. And outside of your personal observations do you base that on anything else?

A. No.

Q. Do you know what cavernous hemangioma is?

A. No.

Q. Are you aware that Mr. Bucklew has tumors in his airway?

A. Only if it's on that medical sheet.

Q. To your knowledge have you ever had an inmate with cavernous hemangioma?

A. To my knowledge, no.

Q. Have you ever had any inmates on death row who were prone to hemorrhaging or choking?

A. I don't know. I'm not aware of any.

Q. Do you know if the department's ever researched whether a person with cavernous hemangioma can be safely euthanized or executed?

A. I don't know that.

Q. Do you know how Mr. Bucklew's condition has been monitored?

A. I know that we have medical staff in [43] every facility that monitor all medical conditions.

Q. Will any special steps be taken in the days or weeks leading up to an execution to monitor his condition?

A. I don't know the answer to that. I know medical staff will tell us if they believe there's any issues they have with his condition but I'm not aware of anything that will occur right now.

Q. Have you ever had an execution stopped or delayed because, for medical reasons?

A. I know Offender Bucklew was scheduled for an execution and I know under appeal it was stayed. But I don't know whether it was due to legal processes or his medical, I don't know the rationale that was used to stay it.

Q. Outside of Mr. Bucklew's case though are you aware of any?

A. No.

Q. Are the execution team members aware of each inmate's medical conditions, assuming they have any?

A. Yes.

Q. And how are they made aware?

A. I bring them that document that shows [44] the medical issues that have been identified.

Q. The one page pre-execution medical summary?

A. Yes.

Q. Anything else?

A. No.

Q. Do you know if the protocol will be customized in any way for a condition like Mr. Bucklew's?

A. I have no reason to believe it would be.

Q. How does signoff for an execution work, do you know?

A. Say that term again.

Q. Signoff for an execution, so who signs off on the execution?

A. I don't know what that term means.

Q. Sure. Let me rephrase.

What is the process for approving an execution to go forward?

A. I know that the director of the department is charged with making sure there are no stays in place and they stay in communication with the governor's office, with the attorney general's office to make sure there are no stays or other [45] reason that would hold up the execution. If there are none then the director gives the directive to proceed.

Q. Is lethal injection the only manner allowed under Missouri law to inflict the punishment of death?

A. No.

Q. What else is allowed?

A. The statute refers to lethal gas.

Q. Does the state of Missouri have a lethal gas protocol?

A. No.

Q. Why not?

A. We don't have a method or a gas chamber right now.

Q. Do you know why not?

A. We have an execution protocol that has been rapid and painless so that's what we've utilized.

Q. Are you aware of the DOC or the state conducting any evaluations into the use of lethal gas?

A. No.

Q. If lethal, the lethal injection protocol was not a viable option for an execution



[50] grievance is a segment and the appeal is a segment. Each one has a timeline.

Q. And you indicated earlier that on the appeal process you're just looking to make sure those, the timing was followed and whatever protocols or policies are in place were followed, is that correct?

A. I indicated on medical grievances, as a warden that's what I'm looking for is to make sure those are followed because I'm not making a medical response as a warden. I'm signing off that the health services administrator is signing those responses, I am signing those grievances but not as a person that is making a medical opinion or anything.

Q. Okay. So if an inmate were to bring the same grievance again, and let's say there was a different policy in place, would that change the evaluation process?

A. The timelines?

Q. The timeline or how it's evaluated on appeal.

A. Our policy is, says how many days each segment which I'm describing is to occur. That doesn't change unless it's considered an [51] emergency grievance then it is sped up because it's considered an emergency grievance.

Q. And what do you generally consider an emergency grievance?

A. In my opinion that's something that would immediately affect someone's life.

Q. Okay.

MS. NOTTON: That's all of our questions.

MS. COULTER: I've got a couple of questions for you.

EXAMINATION

QUESTIONS BY MS. COULTER:

Q. You had talked about the gurney that the offender is strapped to prior to the execution.

A. Yes.

Q. Do you know if the angle of the gurney is adjustable?

A. I believe it is. I know it's not a fixed gurney as far as attached to the building or anything, it's movable, but I believe it is, it can be moved, changed.

Q. So the head of the gurney could be raised?

A. That's my belief. If it can't be I [52] know we can get one that does.

Q. If the anesthesiologist were to decide that it would be in the best medical interest of the offender to adjust the gurney would the anesthesiologist have the freedom to do that?

A. Yes.

Q. We had talked a little bit about the Methylene blue dye that had been used previously.

A. Yes.

Q. Why isn't that used anymore?

A. The pharmacy we were using would no longer sell it us.

Q. Why is that?

A. They feared exposure and media attention that would hurt their business.

Q. Do you currently use any dye?

A. No.

Q. In the execution of Mr. Bucklew would you anticipate any dye at all would be used?

A. No.

Q. You also indicated that valium is not used anymore. Why is that?

A. Again, our pharmacy no longer is willing to provide that.

Q. And why is that?

[53] A. Again, fear of exposure and fear of media attention.

Q. Do you use any kind of pharmaceutical as a sedative in place of the valium?

A. No.

Q. What about the versed, is versed still used?

A. No, we don't have versed either. Same reason.

Q. Do you use anything in place of the versed?

A. Pardon?

Q. Is anything used in place of versed as a sedative?

A. We have some benadryl that is used for anxiety, that is what we use if they're showing anxiety.

The only other issue we would have is if he was, if he, mental health and him decided he needed something more then we would have to potentially go to our contract provider to get something.

Q. And have someone from the Corizon to prescribe a sedative?

A. Yes.

[54] Q. And the use of a sedative is optional to the inmate, is that correct?

A. Yes.

Q. We had talked about the medical history that's provided to M3 prior to the execution. Can M3 receive additional medical information if he or she believes it's required?

A. Yes.

Q. You had also talked about the process for informal resolution requests and grievances. Is there any change in that policy if it is a condemned inmate, a death sentenced inmate?

A. Not to my knowledge.

MS. COULTER: I don't have any more questions.

MS. NOTTON: No more questions.

MS. COULTER: You have the right to review a transcript of your deposition and check it for error, not error in content but error, transcription errors and then sign it or you can trust that everything's been transcribed accurately and waive your signature.

A. I'll rely on my attorney.

MS. COULTER: So are you choosing to waive your signature?

[55] A. Okay.

(Whereupon, the deposition concluded at 3:15 p.m.)

[1] U.S. DISTRICT COURT  
WESTERN DISTRICT OF MISSOURI  
(KANSAS CITY)

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Civil Docket for Case #: 4-14-cv-08000-BP

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RUSELL BUCKLEW

*Plaintiff,*

vs.

GEORGE LOMBARDI, ET AL.,

*Defendants.*

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VIDEO DEPOSITION OF GEORGE LOMBARDI  
Taken on behalf of the Plaintiff  
January 24, 2017

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\* \* \*

[18] Adult Institutions and in 1986 I became director of the Division of Adult Institutions and remained in that capacity until I retired in 2005. After I retired in 2005 I did consultant work with the facility for committed youth in Washington D.C. for about three years and then in 2009 I was appointed director of the Department of Corrections by Governor Nixon until I retired on January the 10th of this year.

Q. Are you currently employed?

A. I am not.

Q. So thank you very much for that comprehensive summary and I just have some followup questions regarding some of the positions that you described.

Can you generally describe your responsibilities when you were the program coordinator, I believe you said it was the Renz Prison Farm?

A. Yes. Actually there were groups of inmates at that time who were denied parole but were flattening out the time as we used to call it which meant that they were denied parole but they still, you know, they're finishing their time, at that time it was seven-twelfths, in other words

\* \* \*

[32]



Q. Are you always present for the actual execution?

A. Yes,

Q. Are you required by law to be present?

A. I'm not sure what the law says about that but I am anyway so it doesn't make any difference. Or was.

Q. You mentioned that you served in this role as director of Department of Corrections until January 10th, 2017 when you retired?

A. Correct.

Q. Why did you retire from that role?

MS. COULTER: Objection, it exceeds the scope of the discovery order.

MR. FOGEL: What part exceeds it –  
Why don't we just go of the record for a moment?

\* \* \*

[66] your understanding that this protocol would be used for upcoming executions?

A. I don't know that, as I said I am no longer the director so I can't predict what the future is regard to that.

Q. Understood. Just asking for your understanding as of January 10th, 2017, that this would be protocol that would be used for executions.

A. That was the protocol that was in place on January the 10th.

Q. Thank you.

A. Predicting the future is not something I can do.

Q. Thank you.

To your knowledge from October 18th, 2013, which is the revision date, to present, were there any executions performed using this protocol?

A. Yes.

Q. Do you recall approximately how many?

A. I believe there was like 19.

Q. And to your knowledge this was the protocol that was used for the most recent execution in the state of Missouri.

A. Yes. For all the executions from the [67] 13th through the last one. From October '13 to the last execution.

Q. So I'd like to ask some questions – strike that.

I want to focus on the first section here, Execution Team Members, and I just want to state at the outset to be clear, I'm not asking for the names of the team members, I'm just asking for their position titles and their functions and I believe that's consistent with *Judge Phillips'* discovery order.

MS. COULTER: I agree.

MR. FOGEL: Thank you.

Q. (BY MR. FOGEL) And the first sentence under Section A, execution team members, it says the execution team consists of department employees and contracted medical personnel including a physician, nurse and pharmacist.

Do you see where I'm reading Mr. Lombardi?

A. Yes.

Q. First beginning with department employees. Which department employees are involved, are on the execution team? Again just talking about the titles, not their names.

[68] MS. COULTER: I'm going to object in that I don't know that he can answer and talk about the department without asking, without disclosing their names. I mean I don't know the answer to the question that you're asking but in the event that it would disclose or lead to the discovery of their identity I object.

MR. SPILLANE: May be I can be of assistance. Are you asking what the designations of the employees are such as NM1, NM2, so forth?

MR. FOGEL: That's a fair point.



Q. (BY MR. FOGEL) So you're referring to Mr. Lombardi's interrogatory response identified individuals –

MR. SPILLANE: Are you asking what their code names are basically?

MR. FOGEL: Well, why don't we look at the interrogatory.

MS. COULTER: If you know which number that is.

MR. FOGEL: I think it's Exhibit 4.

MS. COULTER: There's a very brief list.

A. Okay.

Q. (BY MR. FOGEL) And I'm looking at [69] this response to Interrogatory 9.

A. Yes.

Q. And at the top of that page it says pursuant to this court's order defendant provides the following general information regarding DOC's, Department of Corrections, current execution team members, and it lists a number of positions. Do you see where I'm looking?

A. I do.

Q. And to your knowledge does this listing of individuals correspond with that first sentence that I read on the open protocol?

A. Yes.

Q. Department employees, contracted medical personnel including a physician, nurse and pharmacist?

A. Yes.

Q. Then it goes on to say that an execution team also consists of anyone selected by the department

director who provides support for the administration of lethal chemicals, including individuals who prescribe, compound, prepare or otherwise supply the chemicals for use in a lethal injection procedure.

Are there any other individuals.

\* \* \*

[74] Q. And of course you have familiarity with where the individual is being executed is physically located.

A. Correct.

Q. Thank you.

And going back to Section A under Execution Team Members of the open protocol it identifies contracted medical personnel including a physician, nurse and pharmacist. Are there any other medical personnel besides from a physician, nurse and pharmacist who would be present?

A. Medical personnel?

Q. Correct.

A. No.

Q. And let's just speak very generally about why to your understanding would a physician be present?

A. Say again.

Q. Why would a physician be present?

A. Because he's the person that examines the individual, prepares the chemicals, it stands on its face exactly what that person does in the protocol.

Q. And could you direct me where in the protocol you're pointing to?

[75] A. Yes. Part B. part C, part D.

Q. So those sections all refer to medical personnel in general.

A. Yes.

Q. My question was specifically regarding the physician. To the extent you understand the differences in the roles between the physician, the nurse and the pharmacist, I'm just asking you to explain what specifically each role does.

A. The physician does B, C and D.

Q. And what about the nurse?

A. The nurse stands by for assistance.

And can perform B, C and D as well.

Q. And the pharmacist?

A. What about them?

Q. What role does the pharmacist handle during the course of executions?

A. Pharmacist supplies the pentobarbital.

Q. So skipping down to section B, preparation of chemicals. Do you see that section Mr. Lombardi?

A. I do.

Q. And do you see B(1) talks about [76] syringes I and 2?

A. Uh-huh. Yes.

Q. Do you know why there are five grams of pentobarbital?

A. Because that's the amount that will make, that will be powerful enough to ensure that the person is deceased according to the physician.

Q. And if you look down at Number 3 it also asks for, it mentions five additional grams of pentobarbital. What is your understanding of why there are five additional grams of pentobarbital?

A. If in fact, to ensure that the person is deceased. If in fact they have not passed then there's a second possibility of adding additional, and that's what that's for.

Q. Do you know what the effects of pentobarbital are on the human body?

A. I know this amount of pentobarbital kills a person.

Q. Do have you any understanding beyond that as to the effects of pentobarbital?

A. No.

Q. Are you aware of any side effects from pentobarbital?

A. I'm sorry?

[77] Q. Are you aware of any side effects from pentobarbital?

A. No.

Q. If pentobarbital is not available, are there any backup chemicals –

A. Say again.

Q. If pentobarbital is not available are there any chemicals that are used in its place?

A. We have not had that issue.

Q. So pentobarbital is the only chemical that is used for lethal injections in the State of Missouri, is that correct?

A. As of when I left on January the 10th.

Q. Okay. Looking down at Section C, the intravenous lines. Do you see that on the open protocol?

A. Yep.

Q. And it says medical personnel shall determine the most appropriate locations for intravenous or IV lines.

Is this the same medical personnel that's referred to above under execution team members?

A. Correct.

[78] Q. What is the point – and it goes on to discuss a primary IV line and secondary IV line. Do you know the point of having both a primary and a secondary line?

A. To ensure that there's an adequate amount of chemical inserted.

Q. So the chemical goes through both IV lines?

A. Right.

Q. Does the chemical go through both lines simultaneously?

A. I don't even know that.

Q. Okay. Have you ever encountered a scenario where the medical personnel could not insert an IV line into the individual?

A. No.

Q. Lower on in that paragraph it says medical personnel may insert the primary IV line as a peripheral line or as a central venous line, it goes on to say providing they have appropriate training, education and experience for that procedure.

What do you understand that to mean when it says appropriate training, education and experience?

[79] A. I think it stands on its face. Just simply that they know how to do that procedure.

Q. Have you an experience where medical personnel were not experienced, did not have the training, education and experience for that procedure?

A. Never.

Q. Why is it important for medical personnel to have appropriate training, education and experience?

A. To ensure that the process is carried out successfully.

Q. And when you say successfully you mean that the individual dies.

A. Correct.

Q. Before inserting the IV lines does any medical personnel check the individual's airways?

A. I don't know that.

Q. Do they check blood pressure?

A. I don't know that.

Q. Before inserting the IV lines do they to your knowledge do any other check of the heart rate or any other –

A. The heart rate is monitored.

[80] Q. It's an EKG?

A. Right.

Q. Are there any other evaluations the medical personnel does immediately before they introduce the IV lines into the individual?

A. I'm not aware.

Q. So we were talking a little bit earlier about the monitoring of the prisoner and I believe that's addressed at Section B of the open protocol, that's the page ending in 920, or excuse me, 020. Do you see that at the top of the page?

A. Yes.

Q. And number 1 says the gurney shall be positioned so that medical personnel can observe the prisoner's face directly or with the aid of a mirror.

What is a gurney?

A. It's the hospital bed.

Q. And is the individual situated on the gurney during the execution?

A. Yes.

Q. And how are they situated on that gurney? Are they sitting –

A. They're laying down on the gurney.

Q. So they're laying flat on the gurney.

[81] A. Yes.

Q. Is the gurney horizontal?

A. What do you mean horizontal?

Q. Is it, and I'll represent for the record that I'm using my hand to indicate a horizontal straight line.

A. Yes. It's not vertical, yes, it's horizontal.

Q. Is the gurney at all adjustable, in terms of could they adjust the angle?

A. I don't know.

Q. In your experience have all executions taken place where the gurney is lying flat?

A. Yes.

Q. If an individual had a specific condition that made it uncomfortable or painful for them to lay in a flat position do you know if a gurney can be adjusted such that they wouldn't be lying flat?

A. I don't.

Q. Do you know at what point in the execution process the individual is strapped – are they strapped to a gurney?

A. Yes.

\* \* \*

[90] A. Yes.

Q. But when you said the director you're referring to yourself, correct?

A. Yes.

Q. So in your judgment what would be an appropriate amount of time of waiting –

A. I would listen to what the physician had to say about the need.

Q. Do you have an independent opinion of what would be a sufficient amount of time?

A. No.

Q. Going down to E(5) where it says at the conclusion of the process and after a sufficient time for death to have occurred medical personnel shall evaluate the prisoner to confirm death.

Similar question, what is your understanding of a sufficient time for death to have occurred?



A. The heart monitor being flatlined is the way in which the physician makes that determination.

Q. In your judgment what do you think constitutes a sufficient time for death to have occurred?

[91] A. Say that again.

Q. Is 10 minutes a sufficient amount of time for death to have occurred?

A. I leave that up to the physician to share that, what ■ thinks.

Q. Do you have an opinion as to what a sufficient time for death to occur is?

A. No. As I said, it has never occurred that we had to use a second group of drugs.

Q. I understand.

A. Ever.

Q. Just asking generally about what you determine to be a sufficient amount of time.

A. Right.

Q. Skip down to section F and particularly F(4). It's the last sentence that begins if any irregularities are noted.

A. Yes.

Q. And it goes on to say that DAI, I believe that's the director of adult institutions.

A. Correct.

Q. Division director shall promptly determine whether there were any deviations from this protocol and shall report his findings to the department director.

[92] A. Correct.

Q. What irregularities would be noted during an execution?

A. There have never been.

Q. That wasn't my question. My question is what irregularities is this referring to?

A. It would be hypothetical for me to guess what that would be and I'm not going to do that.

Q. If somebody had, if the IV was not properly inserted, excuse me. If the administration of the intravenous lines into the individual's IV – excuse me, strike that.

If the IVs were not properly inserted would you consider that an irregularity?

A. Ultimately it would have to be or otherwise it wouldn't be a successful execution, so that seems irrelevant.

Q. That was my question. My question is what do you understand irregularities to mean?

A. I don't know because it never has occurred, but that's the answer I have. Period.

Q. Under the protocol what happens if irregularities are reported to you?

A. The DAI director should report to me [93] as the department director.

Q. And then what do you do with that information?

A. I would keep it, we would have it in that recorded data that the chemical log and so forth. Never happens, so I've never had to do it.

Q. Am I correct then in your testimony, your testimony is in your experience you've not experienced or seen any irregularities?

A. Never.

Q. Do you, to your knowledge are there any protocols in the event that an irregularity does arise?

A. Say again.

Q. Are there any protocols in the event an irregularity arises during the execution?

A. This is the protocol.

Q. So what is your understanding if an irregularity arises, what protocol does the execution team follow?

A. They know whatever the irregularity was, DAI director reports it to the director.

Q. But I'm talking about at that very moment in time.

Let me be more specific. If the [94] inmate responds negatively to the drugs, the pentobarbital or one of the sedatives, what protocols are in place to address that?

A. It's never happened, I don't anticipate it happening so I don't have it. I don't have an answer to that because it's never happened and I don't anticipate it happening.

Q. That's a little bit different than the question I'm asking, but just to be clear is your answer then that you're not aware of what protocols would be in place in that situation?

A. Well, I think it goes back to if in fact the first set of, if the first injection of the drug in some way did not in fact render the individual deceased then an

irregularity would be yes, we ought to do the second and that would be the irregularity.

Q. Sure. And the irregularity in that circumstance is the individual did not die right away at some point after five grams were administered and then you administered the second five grams of pentobarbital.

A. Correct.

Q. So my question is in a circumstance where the individual reacts negatively to the drugs [95] that are administered, negatively not being they don't die, just there's some adverse health reaction, what protocols are in place to deal with that situation?

A. It has never happened, we don't have a protocol for it. I don't anticipate it ever happening.

Q. What if a prisoner begins convulsing during the execution process?

A. It's never happened and it won't happen, I don't believe. This is a powerful drug that is injected, if not the first time the second time and there's just no way a person could live through that. According to my –

Q. My question is not necessarily whether they live or die, I'm just talking about their reaction to the drug.

A. I have nothing for you in that answer. Nothing.

Q. You're not aware of any protocols.

A. Nothing.

Q. If the individual starts choking during the administration of the chemicals, are you aware of any protocols in place to deal with –

A. That's never happened and no, we [96] don't have anything. I would rely on the physician to deal with that issue.

Q. You're not aware of any protocol to deal with it?

A. No.

Q. If a vein blows during the course of the administration you're not aware of any protocols in place to deal with that?

A. No.

Q. Who makes the determination to stop an execution?

A. The only thing that stops an execution is if there's a stay that occurs.

Q. Aside from the stay are there any protocols in place to stop an execution?

A. Absolutely not.

Q. So we talked about some medical personnel who are present for the executions, correct?

A. Yes.

Q. Are you aware of a protocol for the non-anticipation by health services staff members?

A. Say again.

Q. The protocol titled – rather than test your memory why don't I show you the document.

[97] (MARKED PLAINTIFF'S EXHIBIT NO. 8)

Q. (BY MR. FOGEL) Mr. Lombardi, if you could take a moment just to review that document.

A. (Reviewing document). Okay.

Q. Are you familiar with this document?

A. No, not – vaguely. Not my policy, it's the DAI's policy.

Q. Okay. And that's the director of adult institutions?

A. Right.

Q. And I'll represent to you this is a document that was produced to us by defendants in connection with this litigation and just focusing on the line where it says purpose, it says this procedure has been developed to ensure health services staff members do not participate in offender executions.

Are you familiar with that policy?

A. Generally, yes.

Q. Could you explain what that policy is?

A. Yeah. That means people that work for us in health services will not be involved in it.

Q. And when you say us are you saying

\* \* \*

[118] Q. Prior to Mr. Bucklew's scheduled execution in 2014 are you aware of any special steps that were taken in the days or weeks leading up to the execution to monitor his condition?

A. I don't know that.

Q. You don't recall whether that happened one way or the other?

A. I don't. Exactly.

Q. Do you know what a DNR is?

A. Say again.

Q. A DNR. Do you know what that is?

A. Yes. Do not resuscitate.

Q. And what does that mean, or what is a DNR?

A. An individual or a family member for somebody that's incapacitated indicates that no extraordinary measures to keep a person alive when they are in fact, have an illness of such grievous content that they're going to pass away.

Q. Is part of the protocol prior to an execution to give an inmate an option to sign a DNR?

A. Not to my knowledge.

Q. Do inmates sign DNRs?

A. Yes.

[119] Q. They do?

A. Yes. Who is in charge of – strike that.

To your knowledge did Mr. Bucklew sign a DNR?

A. I have no idea.

Q. Does the Department of Corrections force inmates to sign DNRs?

A. No.

Q. Is lethal injection the only manner allowed under Missouri law to inflict the punishment of death?

A. No, the statute also indicates gas could be used.

Q. Any other manners besides gas and lethal injection?

A. No.

Q. Does the state of Missouri have a lethal gas protocol?

A. Does not.

Q. Do you know why it does not?

A. Because we have pentobarbital as the use.

Q. Can you explain why the use of pentobarbital means that the state should not have [120] a lethal gas protocol?

A. The lethal gas protocol, the lethal gas situation is very controversial, no other state has used it to my knowledge. I do have some knowledge of the old gas chamber, when the first individual was to be executed we put smoke in the gas chamber and it all came out and would have killed everybody present. It is a very volatile and difficult situation and we would never consider it, especially when we have pentobarbital which works rapidly and easily.

Q. Does the state of Missouri have a gas chamber?

A. No. Not anymore.

Q. When was the last time somebody was executed by gas?

A. I don't know, the 30s.

Q. Has the state of Missouri to your knowledge decreed a lethal gas protocol at any time?

A. Absolutely not.

Q. Has the State of Missouri investigated whether it should adopt a lethal gas protocol?

A. Whether what?

[121] Q. They evaluated whether it should adopt a lethal gas protocol?

A. No.

Q. Why is the state taking the position that lethal gas is not feasible?

A. I think I shared that with you just a moment ago. Because it's dangerous, nobody's ever used it and



our own experience in the first execution in terms of testing the chamber indicated that everybody present would have been killed. So it was not used for the first execution either.

Q. When you say the first execution what are you referring to?

A. I mean in modern times, I'm talking about since the death penalty became constitutional again and that was Tiny Mercer was the inmate and he was in fact executed by lethal injection.

Q. Do you recall what year that was, or approximately?

A. No. It's available though.

Q. Okay. And is it your testimony that the state of Missouri tested using lethal gas as an option at that point in time?

A. We tested the chamber.

Q. The chamber.

[122] A. Yes.

Q. And the outcome of that test was that lethal gases would leak out through the chamber.

A. Correct.

Q. Did the state of Missouri evaluate – let me back up.

Is that the only reason why the State of Missouri does not use the gas chamber?

A. No. Because there's another alternative with lethal injection which works safer, quicker, so that was the option.

Q. Has the state of Missouri to your knowledge looked into properly sealing the gas chamber such that any gas would not leak out outside the gas chamber?

A. No.

Q. Does that gas chamber still exist today?

A. Yeah, I think parts of it are in the old penitentiary.

Q. Is the old penitentiary, I'm sorry if I'm asking an obvious question –

A. Missouri State Penitentiary which is no longer part of the Department of Corrections.

Q. What is used in that building today?

[123] A. I'm sorry?

Q. What is that building used for today?

A. Tours.

Q. Are there any other gas chambers in the state of Missouri?

A. I have no idea but I don't think so.

Q. Maybe I should be a little bit more clear. Any gas chambers in any state facilities throughout the state of Missouri to your knowledge?

A. Oh, no. Absolutely not.

Q. Does the state of Missouri have a protocol in place in the event that it is determined that lethal injection is not a viable form of execution?

A. No.

Q. To your knowledge what would happen in that circumstance?

A. Say again?

Q. If it was determined for some reason that lethal injection was not a proper, or viable means to execute somebody what would happen in that circumstance?

A. That's a hypothetical and I have no idea, I'm not going to answer that.

Q. Has the Department of Corrections [124] explored the possibility of alternative forms of execution?

A. No.

Q. Does the state of Missouri look to other states for guidance in its execution protocol?

A. On the contrary, states have looked to us for protocol possibilities.

Q. But has the state of Missouri to your knowledge looked to other states for guidance on its execution protocol?

A. No.

(MARKED PLAINTIFF'S EXHIBIT NO. 9)

Q. (BY MR. FOGEL) Mr. Lombardi, I'm showing you a document, I'm sorry, you've just been handed a document that's been marked Plaintiff's Exhibit 9. Just take a moment to review the document and familiarize yourself with it.

A. Okay.

Q. Are you familiar with this document?

A. I am not.

Q. Do you know what a Fiscal Estimate Worksheet is?

A. Nope.

Q. You see in the top right there's a [125] bill number and it says HB, as in boy, 2082?

A. Yes.

Q. Do what you know that means, or refers to?

A. I would assume it means House Bill 2082, whatever that is.

Q. Do you know what House Bill 2082 is?

A. No.

Q. Does the Department of Corrections at the time that you left your role as director, does the Department of Corrections have authority to consider alternative means of execution?

A. Say that again.

Q. Does the Department of Corrections have the authority to consider alternative means of execution beyond lethal injection?

A. No.

Have a what again?

Q. Does it have authority to consider alternative means of execution?

MS. COULTER: I'll object to the form of the question. I think it's vague in terms of you don't know from whom the authority would come, if that makes any sense.

\* \* \*

[130] Q. You don't know what the state would do?

A. I don't know.

Q. Do you know how much it costs to execute somebody by lethal injection?

A. I don't have that figure off the top of my head but it is available.

Q. When you say it's available –

A. I mean there are figures –

Q. There are figures out there.

A. That question has been asked by members of the general assembly and the Department has had to provide that information.

Q. It's publicly known, okay. Do you know the cost of lethal injection as it relates to cost for lethal gas execution?

A. Of course not. I have no idea.

Q. I have no further questions at the moment for you.

A. Thank you.

MS. COULTER: I don't have any questions. I think he'll waive signature.

MR. FOGEL: That's fine. And pursuant to our discussions this transcript will remain confidential – highly confidential for [131] certainly the next 10 days and then we will confer within that process.

MR. SPILLANE: The way I define it it's not 10 days from now but 10 days after receipt.

MR. FOGEL: Thank you for clarifying and then after receipt –

MS. COULTER: We were kind of talking about, if you all are requesting a draft we would determine the rest as in the receipt of the final deposition. I mean that's how we would interpret it. Just want to make sure there's no ambiguity there.

MR. FOGEL: We're in agreement.

With that I think we're done. Mr. Lombardi thank you very much for your time.

VIDEOGRAPHER: It's 12:41. We're off the record at the end of our tenth media and the conclusion of our deposition.

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560

[1] IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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No. 4:14-CV-8000-BP

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HIGHLY CONFIDENTIAL

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RUSSELL BUCKLEW,  
*Plaintiff,*

vs.

GEORGE LOMBARDI, *et.al.,*  
*Defendants.*

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DEPOSITION OF ANNE PRECYTHE  
TAKEN ON BEHALF OF THE PLAINTIFF  
February 22, 2017

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\* \* \*

ANNE PRECYTHE,  
of lawful age, produced, sworn and examined on behalf  
of the PLAINTIFF, deposes and says:

(The deposition began at 9 a.m.)

EXAMINATION

QUESTIONS BY MS. NOTTON:

Q Good morning. Thank you for being here this  
morning.

I am Susan Notton with Sidley Austin. This is my colleague, Reachel Bimmerle, and we represent the Plaintiff in this matter, Mr. Russell Bucklew.

If Defense counsel wouldn't mind introducing?

MS. COULTER: Caroline Coulter on behalf of the Defendants.

MR. HANSON: David Hanson on behalf of the Defendants.

MR. SPILLANE: Mike Spillane on behalf of the Defendants.

[7] BY MS. NOTTON:

Q And if you wouldn't mind introducing yourself on the record also, please?

A Anne Precythe, Director of Corrections, State of Missouri.

Q Thank you.

I'm going to hand you a document this has been marked as Plaintiff's Exhibit 31. Are you familiar with this document?

A No.

Q Well, I will represent to you that this is a deposition notice and that you are here today pursuant to that notice, is my understanding.

MS. COULTER: Our office would have accepted service on her behalf, so she may not have seen it before.

BY MS. NOTTON:

Q Have you been deposed before?

A No.



Q Okay. Well, I guess I will give you some ground rules then. So, throughout today's deposition I'm going to assume that you understand what I'm asking you, unless you tell me otherwise.

A Okay.

Q So, if you need me to clarify anything, please, just let me know.

I will wait to ask another question till you're done [8] answering. If you don't mind not answering till I'm done asking the questions, so we can have a clean record.

And then, please, also try to always give a verbal response so that the court reporter can get it on the record.

And we can always take a break if you need to so, please, just let us know.

What did you do to prepare for today's deposition?

A Met with Caroline and Mike on Thursday morning.

Q Okay. How long did you meet with them for?

A Twenty minutes.

Q Okay. Have you met with anyone else in preparation for the deposition?

A No.

Q Have you spoken to anyone else besides counsel, such as Mr. Bucklew?

A No.

Q How about any of Mr. Bucklew's treating physicians?

A No.

Q Any of the other Defendants?

A No.

Q Okay. Did you review any documents?

A No.

Q Have you reviewed any transcripts from other depositions?

A No.

[9] Q Any other preparation?

A No.

Q Have you reviewed the complaint in this case?

A No.

Q You indicated that you've never done a deposition before. Have you ever testified at a hearing?

A Yes.

Q Can you describe that?

A I was a probation/parole officer in the State of North Carolina, so I testified in many probation violation hearings, parole violation hearings. And then I also testified as Director For Community Corrections in North Carolina at the administrative office of the hearings O-A-H office, the administration hearings, in personnel matters.

Q Have you ever been a defendant in a lawsuit before?

A No.

Q Have you ever been subject to any formal/informal complaints related to your work with inmates?

A No.

Q Any complaints whatsoever during your time with the North Carolina Prison System?

A No.

Q And how about so far as director here?

A No.

Q Can you walk me through your education after high [10] school?

A I completed four years at the University of North Carolina in Wilmington and received a bachelor of arts degree in psychology.

Q And you were appointed Director of the Missouri DOC in January; is that correct?

A Correct.

Q And what did you do prior to your appointment?

A I was Director For Community Corrections, which is probation and parole, in the State of North Carolina.

Q And can you describe, generally, what your responsibilities were in that role?

A So, my responsibilities were overseeing the 2600 staff that handled supervision of 100,000 offenders in the communities of North Carolina that were under jurisdiction from the courts and the parole board. So, I did not have direct responsibilities in prisons.

Q Have you ever had direct responsibilities in the prisons before your current role?

A No.

Q Were you also appointed to the National Institute of Corrections and Advisory Board?

A Yes.

Q Can you describe what is that?

A I served as the community corrections person on that [11] particular board. And we would meet once, maybe twice a year, to discuss national issues as they related to juvenile jails, adult prisons, community corrections and just the national trends, the national movements about what went on in those different entities.

Q Are you still involved in that?

A I am.

Q And how long do you expect that to last for?

A I have no idea.

Q Okay. You are currently director of the Missouri DOC, correct?

A Correct.

Q Can you describe your responsibilities as director?

A My responsibilities as director are to oversee the Director for Adult Institutions, as well as the operations that happen within our prison system, the personnel aspects that go along with running a department, as well as the legal aspects. It's overseeing all of the operations and having an impact on the probation and parole processes that happen in working in conjunction with the parole board.

Q Have you changed the reporting structure at all since arriving?

A I have named a deputy director, Matt Sterm, and that's the only change I've made at this point.

Q Do you anticipate making any other changes to the [12] reporting structure?

A Yes.

Q Do you have a sense of what those will be?

A No.

Q Do you have any medical training?

A No.

Q Have you ever attended medical school?

A No.

Q Are you a chemist?

A I am not.

Q A biologist?

A I am not. That's why I as psychology major.

Q Does North Carolina have the death penalty?

A We do.

Q Is it still in use?

A There's been a moratorium in place since, I believe, 2006.

Q Do you know if they use lethal injection?

A They do.

Q Do you know if they use any other methods of execution?

A I do not.

Q Were you ever involved in the execution process in North Carolina?

A I was not.

Q Are you aware of any complications with executions in [13] North Carolina?

A I am not.

Q Are you aware of any executions ever needing to be halted in North Carolina?

A I am not.

Q Does the State of Missouri have an execution protocol?

A Yes.

Q What is your understanding of an execution protocol?

A What, specifically, are you asking? What the process is?

Q Or just what you think its purpose is?

A Are you asking what is the purpose of the – an execution?

Q Of an execution protocol.

A It's to make sure that there's a uniform, consistent process. So, that it's administered properly and safely and humanely each and every time.

Q Okay. Do you know what an open portion protocol is?

A No.

Q How about a closed portion protocol?

A No, I think I have heard those words, but without looking back at notes or something, I don't recall exactly what those were.

Q Are you familiar with Missouri Execution Protocol?

A Yes.

[14] Q I'll hand you a document. I've handed you what's been previously marked as Plaintiff's Exhibit 5.

A Uh-huh.

Q Have you seen this document before?

A Yes.

Q Can you, generally, describe what it is?

A It describes who's a part of the execution team, how the chemicals are prepared, the medical procedure that is established for doing the IV, and then how the process is – the actual execution procedure itself from the time that the chemicals are administered.

Q If you look at the bottom on the second page there's a date; what is that date?

A October 18, 2013.

Q And to your knowledge is this the most current protocol?

A Yes.

Q Are you familiar –

A Wait just a minute.

Yes.

Q Are you familiar with what drugs are used during an execution in Missouri?

A Yes.

Q What are those drugs?

A Phenobarbital.

[15] Q Is that it?

A And saline.

Q Is that it?

A To my knowledge, yes.

Q Do you know what effect phenobarbital has on the human body?

A Stops the heart and the – no.

Q It's okay if you don't know. That's fine.

A Let's just say no.

Q Okay. Are you aware of any studies considering how phenobarbital might affect people differently?

A No.

Q Are you aware of any side effects of phenobarbital?

A No.

Q If phenobarbital is not available, do you know whether the DOC has any other protocols in place for that?

A No.

Q Do you know what the DOC would do in that instance?

A No.

Q To your knowledge is this the protocol that Missouri intends to use for upcoming executions?

A Yes.

Q Do you know whether executions have been performed using this protocol?

A Yes.

[16] Q And about how many?

A I don't know.



Q More than five, would you think?

A Yes.

Q More than ten?

A I don't know. I haven't been here in Missouri, so I can't speak to prior executions.

Q Understood.

Was it used in the most recent execution?

A Yes.

Q And when was that?

A January 31, 2017.

Q And were you director at that time?

A I was.

Q Is that the first execution you experienced here in Missouri?

A Yes.

Q Is that the only one that you've experienced so far?

A Yes.

Q Are you aware of any executions since this protocol was put in place that did not follow it?

A No.

Q Without providing any names or identifying information, can you, generally, describe the composition of the execution team?

[17] A It's made up of about 50 members of employees within the Department of Corrections.

Q And can you, generally, describe the functions of the different members of the execution team?

A They – it’s an extremely detailed process. They range from patrolling the facility to responding to protesters, to parking, to parking for the state’s witnesses, the victim’s witnesses, or excuse me, state’s witnesses, the – yeah, the victim’s family, and then the offender’s family and separating people, staying with those three groups the entire time to facilitate the movement of the officials during the process.

It consists of members that are with the offender during the entire process. It’s a very – it’s a very detailed process that – I mean, it takes a large number of people to make sure that everything runs as planned.

Q Understood.

Do you know whether there are any medical team members on the execution team?

A There are.

Q Do you know about how many?

A Two.

Q And are they in the execution room during an execution?

A What do you consider the execution room?

[REDACTED]

[18]

[REDACTED]

Q And do you know what the function of the medical team members are?

A Yes.

Q Can you describe that?

A One of them is to monitor the machine that the inmate is hooked up to and then one is to administer the IV.

Q And what is the purpose of monitoring?

A To check the vitals of the inmate during the procedure and to ensure that the IV is established safely.

[REDACTED]

Q On the first page of the open portion protocol it talks about how the department director can decide who's on the [19] execution team. In the very first paragraph.

A Okay.

Q Do you anticipate making any changes to the execution team for upcoming executions?

A Not at this time.

Q On the second page it discusses the process of injecting the phenobarbital and the saline solution under Section E. And in the fourth paragraph there

it says that the inmate will be checked following a sufficient amount of time for death to occur. What do you interpret that to mean?

A Five minutes.

Q Exactly five minutes?

A From the time that the – I know what the protocol is and its five minutes from the time that the initial solution is administered.

Q Okay. On the very bottom of that same page, under Section F, paragraph four, it talks about a sequence of chemicals and chemicals log. Do you see that?

A Uh-huh.

Q It also notes that there – the possibility of an irregularity being on one of those forms. Do you see that?

A Yes.

Q What do you understand an irregularity to be?

A I don't know.

Q I've handed you what's been previously marked as [20] [REDACTED] Are you familiar with this document?

A No.

Q Have you ever –

A Oh, not this document.

MS. COULTER: If she could have a minute. Look through the pages.

THE WITNESS: Okay. So, this is the document that lays out the execution process, the team and what

everybody's responsibility and processes are. So, yes, I am familiar with this.

BY MS. NOTTON:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Q Do you know who would make that decision?

A No, that's the court process. No.

Q Are there any circumstances under which you might be prepared to halt an execution?

A No, unless there were issues in the facility, something came to light that was, I mean, needed to stop the process. I mean, then you have to make that decision, but if there are no [22] legitimate reasons to stop, we wouldn't stop the process.

[REDACTED]

[REDACTED]

Q Do you know what might cause a delay in the preparation process?

A It could be that there was trouble establishing the IV line in the – in the inmate.

My understanding is if inmates are known to be drug users their IV might not be stable. I mean, their veins may not be stable. So, I mean, it, again, dealing with people, you don't know exactly what could possibly come up. So, you have to be prepared to respond accordingly.

Q Have you seen or heard of that occurring under this protocol before?

A The only protocol that I'm aware of is that in incidences in the past if it's a regular drug user the veins – the typical veins have been difficult, but there's – they have always been able to establish the IV, it might have just taken longer than normal, that's the only thing that I've heard.

Q Do you know whether it's possible to alter the protocol in any way?

A For who to alter the protocol?

Q How about for you to alter the protocol?

[23] ■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

■ [REDACTED]

Q Do you foresee making any changes to the protocol that would impact upcoming executions?

A No.

Q If you could turn to page 62, please.

Earlier you indicated that phenobarbital and a saline solution were used during the execution; is that correct?

A Uh-huh.

Q Are you familiar with the document you're looking at on page 62?

A I've not seen it before.

Q Okay. Its titled chemical log. And it notes phenobarbital at the top. Do you see that?

A Oh-huh, I do.

Q And then it also notes Valium underneath that. Do you see that?

A I do.

Q Do you know if Valium is used during an execution?

A No, I don't.

Q You don't know?

A The only use that I'm – I think Valium is used if the [24] person previously had requested or wanted a sedative prior to the time leading up to the actual execution.

Q Okay. What about Versed, the next chemical listed?

A I'm not familiar with that.

Q Okay. And how about lidocaine?

A That's one that I had heard in the past may be had used, but I'm not familiar with that.

Q Okay. So, to your knowledge it's only phenobarbital and a saline solution that are used during the execution and then the possibility of a sedative; is that correct?

A That is correct.

[REDACTED]

[REDACTED]

Q Do you know whether they would give an inmate a sedative without the sedative being requested?

A What?



Q Let me try again.

Do you know whether an inmate might be given a sedative even if the inmate doesn't ask for it?

A No.

Q You indicated earlier that an inmate is monitored by the execution team medical members; is that correct, during –

[25] A Correct.

█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]

Q Okay. Are there nonmedical members of the execution team?

A Yes.

Q Do you know what their role is?

A Yes. So, remember the execution team consists of about 60 people.

Q Right. So, let's narrow that a little bit.

A Okay.

█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]  
█ [REDACTED]

[REDACTED]

Q Okay. Anything else that you know of?

A (Indicated no.)

Q Do you know whether inmates are evaluated in any way [26] prior to an execution?

A I know there's a mental evaluation prior to, and that's the one that I'm familiar with.

Q Can you describe that for me?

A No.

Q Do you know whether you're involved in that process at all?

A I send the letter to the governor's staff to let him know that the inmate is competent and able, that there are no mental health deficiencies that would prohibit.

Q And what would you look at to inform that decision?

A The reports that were given to us by the facility staff, who evaluate the inmate.

Q And can you describe a little bit the facility staff that you're referring to?

A No.

Q Do you know at all whether it would be medical staff or nonmedical staff?

A Yes. I didn't know we could be that broad. It would be medical staff and psychological staff, mental health evaluators.

Q And do you know whether that would be the medical execution team members that would do that or would it be the general treating physicians?

A I would assume it would be the general treating [27] physicians in the facilities, because the offender is not at the actual location where the execution takes place until a matter of days beforehand. So, it would be at whatever facility they were currently housed.

Q So, then would it be fair to say that that evaluation is done more than just a couple days in advance?

A Yes.

Q Do you know whether there's a process in place to prepare a prisoner for execution?

A I do not know for a fact that there is. I cannot describe what that would be.

Q Do you know whether an inmate is evaluated medically before an execution to determine whether they're fit?

A I do not know.

Q If you could turn to page 58. It doesn't actually have a 58 on it, but it's between 57 and 59.

A Oh, okay.

Q Have you seen this document before?

A I have not.

Q At the top it says a pre-execution summary of medical history; is that correct?

A Yes.

Q Do you know what something like this might be used for?

A Yes.

Q Can you describe that?

[28] A It appears to me it would be used to determine someone's medical history prior to an execution, since its included in an execution packet.

Q Do you know whether this is given to the execution team?

A I would think that it is.

Q Okay. Do you know who might fill it out?

A I do not. I would think that it would be filled out prior to him getting to – I guess, my thought process here is that it's two different processes. There's a process leading up to when he goes to the facility for the execution, but I do not necessarily consider what is happening there part of the execution team, because the execution team to me is isolated to the specific incident. So maybe I'm not following some of this.

So, this would all be part of the packet. So, yes, it would seem to me that this would be completed by physicians at the facility where the inmate is currently located prior to being moved to the facility where the execution will take place.

Q Okay. Do you know whether the general, treating physicians are able to participate in an execution?

A They do not.

Q Okay. But they can still fill out this form, to your knowledge?

A I would say that they're the ones who fill this out. I'm not familiar with anybody at the prison where the execution [29] occurs filling out this form. I have no knowledge of that.

Q Okay. So, is it fair to say then that you don't know who would fill out this form?

A I would agree with that.

Q Okay. And is it also fair to say that you are not sure who would get this form?

A I am good with that too.

Q Do you know if any additional evaluations are performed prior to an execution?

A I do not.

Q Prior to an execution, so before the protocol would be initiated, do you know who's involved in an inmate's medical care?

A I do not have the specifics on that.

Q Would that be Corizon staff members, to your knowledge?

A Yes.

Q Do you know whether the Corizon staff members are facility specific?

A I do not.

Q So, for example, would the same doctors provide care at Potosi as at the ERDCC?

A I do not know.

Q Okay. Do you know at what point the execution protocol is considered to be started such that the medical or treating physicians would no longer be involved in an inmate's care?

[30] A No.

Q Do you know whether the regular treating physicians would still provide care on the day of execution at all?

A I don't know.

Q Do you know whether there's any restrictions on sharing information between the regular Corizon treating physicians and the execution team members?

A I don't know.

Q Do you know when the last time an inmate sees a doctor before an execution?

A No.

Q If you doubt an individual's competency to be executed medically or otherwise, what would you do?

A I don't know.

Q Is it fair to say that you don't know whether the execution – the medical members of the execution team evaluate the inmate at all?

A Correct, that's fair.

Q And you don't know what information is given to the medical members of the execution team?

A I do not.

Q Do you know if they are allowed to ask for additional information, if they want it?

A I do not.

Q Do you know whether you would delay an execution if a [31] medical team member asked for additional information?

A I do not.

Q What about if a medical team member thought that a prisoner was not fit to be executed?

A I don't – the med – I don't know exactly how to respond to that. The medical team members that are there do not have enough information to make a determination if somebody's fit.

Q So, that determination is made in advance of when the medical execution team members would see the inmate; is that correct?

A I would assume so.

Q Do you know what cavernous hemangioma is?

A No.

Q I will represent to you that it's a condition where blood vessels form benign tumors.

Mr. Bucklew suffers from this condition. Do you know who Mr. Bucklew is?

A I do not.

Q I will represent to you that he is the Plaintiff in this matter.

So, I will assume then that you have never seen Mr. Bucklew?

A I have not.

Q Or spoken to him?

[32] A I have not.

Q Did you learn about Mr. Bucklew at some point?

A When I found out I was being deposed.

Q Are you aware that he has tumors in his airway?

A I do not.

Q Are you aware that he experiences bleeding?

A No.

Q Are you aware that he's given medical supplies, such as gauze, to deal with that bleeding?

A Nope.

Q Are you aware that the Defense's expert has concluded that he has a Mallampati four airway?

A No.

Q Do you know what that means?

A I do not.

Q Do you know whether an inmate has ever had this condition before?

A I do not.

Q How about a death – an inmate on death row?

A I do not.

Q Do you know if the department has ever researched whether anyone with this condition has been safely executed?

A I do not.

Q Does the execution team know of Mr. Bucklew's condition?

[33] A I do not know.

Q Do you intend to make them aware of his condition?

A I do not.

Q Do you know whether the execution team will be able to see Mr. Bucklew in advance of the execution?

A They would not. I do not.

Q You do not know or they would not see him in advance?

A Who, specifically, are you talking about on the execution team? Because it's – I mean, there are a lot



of people involved. So who, specifically, are you talking about?

Q So, my focus would be on the members that are actually administering and involved in the room during the execution and helping to carry it out.

A And none of those people will see any inmate until the time of the execution.

Q So, they would not see an inmate until the inmate was brought into the execution room and put on the gurney; is that correct?

A Correct, yes.

Q And prior to that, they're not provided any information medically or otherwise?

A No.

Q Do you know whether they're provided anything on the day of execution though?

A No.

[34] Q And you don't intend to provide them with anything?

A I do not.

Q So, you couldn't tell them about his bleeding, for example?

A It's not – okay. I don't know how that will be handled.

Q Okay. Do you know whether the protocol can be customized for a particular inmate?

A I'm – would – okay. So, I've been through one execution and it was – it had no complications tied to it in any way, shape or form. So, I do not know what information would be provided to the team, based on

what medical implications may exist within an inmate.

If that were to come, we would have to figure out what are the – what is able to be done or not done. I don't know how we would respond to that until you have a situation in front of you that an execution was ordered to be carried out and then we'd have to figure out what can be done.

So, I mean, you're asking me questions that I don't know, because I don't have a situation that I have had to research and be a part of.

Q So, is it fair to say that you've never had to make that judgment call before?

A Thank you. That is correct.

Q Prior to an execution, do you take any efforts [35] personally to prepare yourself?

MS. COULTER: I'm going to object at this point don't know how that's relevant and to me that's very vague. Prepare herself in what way?

BY MS. NOTTON:

Q Well, answer if you understand.

A I have a – I have a personal view of how I look at that.

Q Can you describe that for me? Are you saying like a personal belief or I'm trying to understand if – what steps you might take to prepare for an execution?

A So, to me an execution from a Department of Corrections standpoint is business. It is our job to carry out the laws of the State of Missouri. If an execution is ordered by the Supreme Court of Missouri my job is to ensure that we do it in the most humane

way possible. And I have complete confidence in every one of my staff members that are involved, as well as medical staff in making determinations if it's appropriate. And that is what we do. And to me it's business and that's my job as Director of Corrections.

Q Understood.

If you are aware that you have an inmate scheduled for execution that might have a unique medical condition, would you prepare in any other way?

A I think doing due diligence and working with medical [36] staff and understanding everything around the case that there is to understand, that would be the additional preparation.

Q So, would that encompass something like researching that unique medical condition?

A That's not my job. I'm not a medical person. My job is to carry out the laws of the State of Missouri.

Q Do you anticipate familiarizing yourself with something like that though, if you were aware that an inmate had a condition?

A I can't speak to that.

Q Okay. Do you know if the protocol calls for any specific steps to be taken if an inmate that is a unique medical condition?

A I am not aware of that.

Q If an inmate were to hemorrhage during an execution, is there a protocol in place for that?

A I don't know.

Q Do you know what you would do?

A I don't.

Q How about if an inmate were to choke during an execution, is there a protocol in place for that?

A I don't know.

Q Do you know what you would do?

A I don't.

Q How about if an inmate were to start to bleed during an [37] execution, is there a protocol in place for that?

A I don't know.

Q Do you know what you would do?

A I don't.

Q How about if an inmate's vein were to become comprised or to blow, is there a protocol in place for that?

A I don't know.

Q Do you know what you would do?

A I don't.

Q The closed protocol discusses the use of the curtains. Are you familiar with that?

A I am.

[REDACTED]

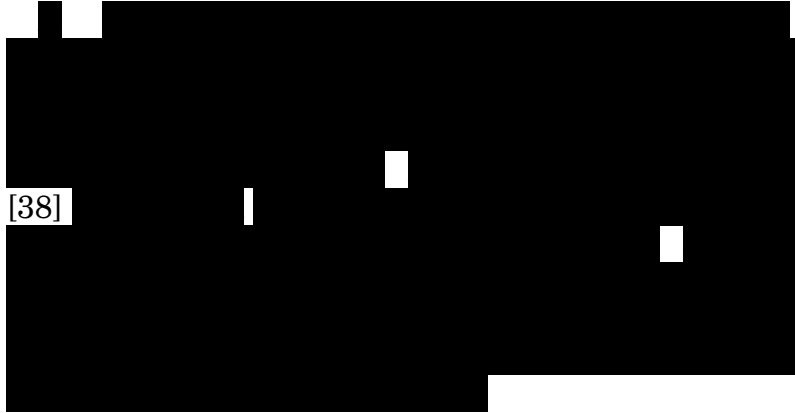
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



Q If an inmate were to start visibly bleeding during an execution, would you close the curtains?

A I would assume so. I'm – I don't know the answers to these questions.

Q If the curtains are closed, would an inmate's attorneys still be able to see the inmate?

A No.

MS. NOTTON: Can we take a short break?

MS. COULTER: Sure.

(Recess.)

BY MS. NOTTON:

Q In one of our prior depositions the warden of the ERDCC indicated if an execution team member is unable to find a vein that he would call you to get authorization for a cutdown procedure. Do you know what that is?

A That is where the – yes, they go below the waist in the groin area, I believe, or lower part of the leg.

Q And what do they do?

A They look for a vein that's available there.

[39] Q Do you know what type of tools would be used for that?

A No.

Q Would you anticipate authorizing something like that if you got a call?

A I would.

Q Okay.

A Yes.

Q Do you know whether execution team members are allowed to opt out for any reason?

A They are.

Q Okay. And would you – and what would you do if an execution team member wanted to opt out?

A I would allow it.

Q Do you require any run-throughs of the execution process in advance of an execution?

A Its not required, but it has been done in the past. And we did one with this past – with Mr. Christianson.

Q Do you expect to do that before each execution?

A Probably, until I'm comfortable with them.

Q And does that go through the current protocol, start to finish?

A Yes.

Q And does it assume that the protocol will go according to plan?

A It would be based on the – the situation that was [40] presented to us.

Q Can you describe what that means?

A So, similar to your request, it would go – yes, it would go as planned based on, yes, the issue and anything that surrounding that particular execution, it would go – the run-through would go as planned.

Q Just to make sure I'm understanding, so it would go as planned, meaning it would assume that the protocol would be able to run start to finish without any issues?

A Correct.

Q Is lethal injection the only manner allowed under Missouri law to inflict the punishment of death?

A To my knowledge, yes.

Q Do you know whether lethal gas is authorized in Missouri?

A I do not.

Q I will represent to you that a Missouri statute does authorize –

A Okay.

Q – both lethal injection and lethal gas.

Does the State of Missouri have a lethal gas protocol?

A Not to my knowledge.

Q Do you know if it ever had a lethal gas protocol?

A I do not.

Q Are you aware of any other states having a lethal gas [41] protocol?

A I am not.

Q Do you know whether the State of Missouri has a gas chamber?

A I do not.

Q Do you know approximately how much it costs to execute an inmate?

A I do not.

Q Can you ballpark it?

A I cannot.

Q When you became director, were you informed about Missouri execution procedures?

A Not about their – when I became director, yes.

Q Okay. And was that focused only on lethal injection?

A That was the process that was planned for that one, yes.

Q For that one, meaning for the execution at the end of January; is that correct?

A Lethal injection is the process used by the State of Missouri and so, that's what we're doing.

Q Have you discussed whether lethal gas might be an available option for an execution?

A I have not.

Q Do you know whether the state has rejected it as an option?

[42] A I do not.

Q Are you aware of any studies conducted by the state in to the viability of lethal gas as an option?

A I am not.



Q Is there a formal process in place for evaluating whether an alternative means of execution might be used?

A I don't know.

Q Do you know how you would go about looking into something like that?

A Not yet. I'd have to rely on my team to help me.

Q Have you ever looked into the possibility of execution by lethal gas?

A I have not.

Q Do you know what factors the state might consider in determining the viability of an alternative means of execution?

A I don't.

Q What is your impression of the feasibility of lethal gas?

A I don't have an impression.

Q Do you know what the State of Missouri would do if lethal injection was considered not a viable option for an execution?

A I don't.

Q Do you know whether the state has ever considered use of something other than a gas chamber?

[43] A I don't.

Q How about something like a gas mask?

A I don't – I don't have any – I don't.

MS. NOTION: Can we take one more quick short break?

MS. COULTER: Sure.

(Recess.)

BY MS. NOTTON:

Q Okay. Just a couple more questions.

A Okay.

Q So that we're clear, do you have the authority to alter or customize the execution protocol in any way?

A I do.

Q And can you explain that?

A As Director of Corrections I would rely on the team that participates in the preparation for execution to help determine if there were any alterations that needed to be made.

Q And can you describe what type of alterations can be made?

A No, because I don't know what alterations would need to be made.

Q So –

A You asked if I could and I said I could. But I can't tell you how it would or why it would, because I don't have any reason to change it.

[44] Q I see.

So, to be clear, you would have the authority to change anything in the execution protocol if you felt it was needed to be changed?

A If I had been advised by my team that changes needed to be made, I would have the authority to make changes.

Q To any of the protocol itself?

A If I were advised by my team that changes needed to be made, not knowing what any of that might be, I have the authority to make changes to the protocol.

Q So, let's say phenobarbital wasn't available, would you have the authority, for example, to use a different drug?

A I don't know that.

Q How about if an inmate suffered from some medical condition that made them prone to bleeding, would you change the protocol in some way?

A I would have to be given information from medical. I mean, that goes into understanding all that goes behind the particular inmate that is preparing to be executed. I mean, that's all part of understanding the case and what goes on behind it and if any alterations needed to be made, but I would rely on my team to provide me with the information.

Q So, in your mind what would you consider alterations?

A I don't know. I have no idea.

Q Do you know when you would make a decision like that to [45] alter the execution protocol?

A No.

Q Do you know whether the inmate would be informed if the execution protocol was altered?

A I don't know.

MS. NOTTON: I have nothing else.

CROSS-EXAMINATION BY MS. COULTER:

Q Director, can you tell us, when did you start with the Missouri Department of Corrections? Do you know which date?

A I was confirmed January 10th.

Q Okay. And which year?

A 2017.

Q Thank you, Director.

And in your capacity as director you've participated in only one execution?

A Correct.

Q And that was the execution on January 31st of 2017?

A Correct.

Q And earlier we heard testimony regarding the execution team. When you answered you described what you had said was a large group of individuals, was that your personal – that's how you interpreted execution team –

A Yes.

Q – to mean?

Okay. Are you aware of the department's protocol, [46] which specifically defines execution team members?

A Yes.

Q Okay.

A I am now.

Q In your definition were you not intending to expand execution team members as defined by the policy?

A Expand, no.

Q Okay. And obviously, the executions take place at a prison?

A Yes.

Q And prisons require staff?

A Yes.

Q And so, there are going to be other individuals at the prison, beyond execution team members defined by policy, that are still going to be participating in some fashion; is that correct?

A Yes.

Q Okay. You were also discussing or we had also asked questions regarding medical information relayed to medical team members. Do you – do you now know whether or not medical information is relayed to the execution medical team members?

A I do.

Q And is the offender's medical information relayed to those medical team members?

A It is.

[47] Q Okay. But you do not provide that information; is that correct?

A I do not.

Q Okay.

A No.

MS. COULTER: I don't have anything further.

MS. NOTTON: I have a few additional questions.

REDIRECT-EXAMINATION BY MS. NOTTON:

Q Can you describe what your understanding of execution team is now?

A Yes. The execution team is the core team, would be the members in the room adjacent to the execution chamber itself.

Q And does that – what does that team consist of? So, no identifying information, but –

A Would consist of medical and nonmedical employees.

Q Okay. And do you know about how many?

A Four people, to my knowledge.

Q You indicated that you now know that medical information is relayed to the execution team; is that correct?

A It is.

Q What medical information is relayed; do you know?

A I do not know, specifically. The medical history form would be given to the one of the medical staff in the room, but I'm not aware of the specific medical information.

Q And are you referring to the form that we looked at in [48] the closed protocol?

A On page 53.

Q Do you know who fills out that form?

A I do not.

Q Do you know if anything else is given?

A I do not.

Q And earlier you indicated that if you were to alter the protocol in any way you would rely on information from your team. Were you referring to the execution team?

A Yes.

MS. NOTTON: No further questions.

RE-CROSS-EXAMINATION BY MS. COULTER:

Q Director, if you could look at Plaintiff's Exhibit 5 in front of you. And if you could read that first paragraph there?

A The execution team consists of department employees and contracted medical personnel, including a physician, nurse and pharmacist. The execution team also consists of anyone selected by the department director, who provides direct support for the administration of lethal chemicals, including individuals who prescribed, compound, prepare or otherwise supply the chemicals for use in the lethal injection procedure.

Q Okay. And I know we have had a lot of, I guess, questions today on the definition or your interpretation of the definition. Is this – let me ask: When you had previously explained execution team members, your belief is that it is [49] still consistent with the protocol as defined by the execution protocol?

A Yes.

Q Okay. And that would include anyone who would provide direct support for the administration of the lethal chemicals –

A Yes.

Q – correct?

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MS. COULTER: All right. I have no further questions.

MS. NOTTON: Nothing else.

Deposition concluded at 10:40 a.m.

\* \* \*



[1] IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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No. 4:14-CV-8000-BP

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HIGHLY CONFIDENTIAL

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RUSSELL BUCKLEW,  
*Plaintiff,*

vs.

GEORGE LOMBARDI, *et. al.,*  
*Defendants.*

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DEPOSITION OF TROY STEELE  
TAKEN ON BEHALF OF THE PLAINTIFF  
February 21, 2017

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\* \* \*

[14] for about four years.

Q Can you walk me through the different positions you have had since becoming part of the Missouri DOC?

A I was a correctional services trainee, which did classification. And then that automatically transitioned into a caseworker position. Then I went to a functional unit manager and then promoted to deputy warden and then to warden.

Q When you were promoted to deputy warden, what facility was that at?

A It was at the Southeast Correctional Center in Charleston, Missouri.

Q And how long ago were you in that role?

A (No response.)

Q A while it seems?

A Yeah, I'm trying to think. Approximately 16 years ago maybe, 16, 17 years ago.

Q So, then it was about 16 years ago that you became warden?

A Probably closer to 18 when I started in that position.

Q And where were you warden at?

A I've been the warden at three facilities. Later I was warden at the Southeast Correctional Center, Potosi Correctional Center and current warden at Eastern Regional Diagnostic Correctional Center.

[15] Q Were your responsibilities similar across the three facilities?

A Yes.

Q Can you describe your role and responsibilities as warden?

A It's to, basically, be the overseer of all prison operations either through direct supervision or liaison and then to kind of be an ambassador to the community.

Q And how long have you been warden at – can I call it the ERDCC?

A Yeah.

Q How long have you been warden there?

A Little over two years.

Q And how long were you warden at Potosi?

A Approximately between four and five years.

Q So, then about ten years or so at the Southeast Correctional Center, right?

A No. As, actually, as a warden I was there for about another four to five years.

Q Okay. As warden at the ERDCC who do you report to?

A The deputy director.

Q Of the entire DOC?

A No. The deputy director of the department of adult institutions. Currently Alan Earls.

[16] Q And what is your understanding of Mr. Earls' role?

A To supervise a zone of the institutions. So, I report the general operations of our institution to Mr. Earls. And then he does a third of the state. He's over a series of institutions.

Q Can you talk me through some of the day-to-day responsibilities that you do just to get a better sense of what your job entails on a regular basis? Perhaps, it's not the same every day.

A In general, I would define it as a problem solver.

Q Okay.

A You have a lot of review that is necessary through, you know, for grievances, transfers, outside work release, you know, staff complaints, general information. Then you have a guidance role where you're

kind of the ambassador between central office or Jefferson City and the institution. So everyday, you know, I'll meet with particular staff on new policies, new expectations or things that we need to do and then general operations. I meet with my deputy wardens and my executive staff every morning and we do an exchange of information. So, any guidance or anything that they need we discuss. And then answer a lot of phone calls and a lot of letters, either from staff or offenders or outside entities, etc. Pretty average day.

Q Do you interact at all with the director of the DOC?

[17] A Very little.

Q What would the little interaction relate to?

A I see her or him, now it's a her, during the executive staff meetings they generally attend to give us any instructions or announcements or anything. And then specifically at ERDCC, due to the execution protocol, they're present for that. So, I see them there. And then occasionally, they will make a tour of the institution.

Q Uh-huh.

A But other than that, in just general announcements, I don't have a lot of one-on-one.

Q And Anne Precythe is the current director of the DOC; is that correct?

A Yes, ma'am.

Q And what is your understanding of her role?

A Oh, her role is to supervise the entire department, both, Department of Adult Institutions, Department of Rehabilitative Services, the Human Relations Department and then the probation and

parole services. So, she encompasses everything or the supervision of everything.

Q Have there been any changes in your role since Ms. Precythe took over?

A No.

Q Does the State of Missouri have an execution protocol?

\* \* \*

[22] about the composition, which is allowed under the Court's scope of discovery order, but getting into more intricate details that have already been provided in the documents, I'm going to object on any additional questioning regarding the more intricate details of the execution team and their rules and responsibility.

MS. NOTTON: My understanding is that we are able to learn about the different roles of execution team members and what they, generally, do. So, I think it's fair for us to ask about what the medical team members might do during an execution.

MS. COULTER: So, I guess, maybe if we rephrase the question just based on Mr. Steele's personal knowledge about what those team members may or may not do, generally, I would be comfortable with asking, but we'll just kind of take it on a question-by-question basis.

MS. NOTTON: Okay.

BY MS. NOTTON:

Q So, to your knowledge what do the two medical team members of the execution team do during the execution?

A Generally, and I'm, again, I have no medical training, okay; but through observation, there's three basic things that they do: They draw the chemical, they set the IV line and pronounce the death.

[23] Q And to your knowledge what do the two non-medical team members do?

MS. COULTER: Again, just kind of limiting our scope to just your general knowledge about what the two [REDACTED].

THE WITNESS: They follow the rest of the protocol.

BY MS. NOTTON:

Q Are all of the execution team members present for the execution?

MS. COULTER: I'm going to object on relevance.

BY MS. NOTTON:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[24] [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Q Okay. So, the medical team members are able to observe the execution?

A Yes.

Q Are they responsible for monitoring the prisoner during an execution to your knowledge?

MS. COULTER: Can you or I guess, I object to just use or – on monitoring. Can you –

MS. NOTTON: Let me rephrase.

MS. COULTER: Thank you.

BY MS. NOTTON:

Q Are the medical team members, is part of their responsibility, to your knowledge, to observe and watch the prisoner during an execution?

A I don't know the answer to that.

Q In your interrogatory responses when describing the execution team you noted that the medical team members oversee the administration of lethal chemicals. What do you mean by oversee?

A My understanding, again, I'm uncomfortable answering [25] that.

MS. COULTER: Okay. Maybe can we just take a – well, would you be comfortable if we just took a brief minute so that I can ask him regarding his level of comfort.

MS. NOTTON: Sure,

MS. COULTER: And we can discuss it a little bit.

(Recess.)

(THE PREVIOUS QUESTION WAS READ BACK BY THE COURT REPORTER.)

THE WITNESS: Okay. My understanding is that – let me back up a little. Each person has their protocol role and for the most part don't get involved in the other person's role. Okay.

My understanding of the medical team, they draw the chemicals and then they set the IV lines, and as I discussed before, they pronounce the death. I'm not aware of anything else, specifically, that I'm aware of that they do other than those three things.

And it came to me just this second, they do, if we offer a sedative earlier in the day, they do give us the sedative to give to the offender or give the offender the sedative, depending on what time it is.

BY MS. NOTTON:

Q Is it the offender that would request the sedative?

A We – we ask them, you know, they don't have to ask, we [26] ask them.

Q Would they have ever given a sedative to an offender who didn't ask for it?

A No.

Q Do you know what drug is used for the sedative?

MS. COULTER: You can answer, if you know.

THE WITNESS: Currently, it's an oral Benadryl.

BY MS. NOTTON:

Q And when do you, typically, ask the offender whether they would want the sedative?



A There's – I don't have the protocol in front of me, so I would want to, specifically, look at it. Well, I do. Can I look at it?

Q Of course.

A Yeah. Because there's two points where – wait a minute. Okay. We do it at 1:30 p.m. and that's when they offer – the operations officer advises the offender that he can request a sedative at that time.

And then we also notify him that any time after that point he can request a sedative. And then we, specifically, offer again at 5:20.

Q This is all on the day of execution, correct?

A Yes. That's with the execution scheduled for six o'clock.

[27] Q The open portion protocol discusses how medical personnel determine the most appropriate locations for IV lines; is that correct?

A Yes.

Q Are you, generally, present when they're inserting the IV lines?

A Yes.

Q And how do they make that decision, do you know, for where to place the IV?

A I don't know.

Q Do you know whether they do a medical evaluation of the inmate before inserting the IV line?

A No, I don't know.

Q Have you ever observed a member of the execution team have trouble inserting an IV line?

A Yes.

Q Can you describe that?

MS. COULTER: I'm going to ask for, I guess, a little clarification, whether you mean trouble inserting the IV line?

MS. NOTTON: I can try to rephrase.

BY MS. NOTTON:

Q You indicated that you've seen them have trouble; what do you understand trouble to mean?

[28] A I've seen where they've had to try more than once, because the initial site the IV did not, again, I'm not a physician, but it didn't work.

Q The protocol allows the medical team members to insert multiple IV lines, if necessary; have you observed that?

A Yes.

Q Is that the norm to do multiple IV lines?

A Yes, to do two, one in each side or each arm.

Q And they're, generally, in the arm?

A Generally.

Q Have you seen the IV inserted some place else?

A I've seen attempts. I can't remember if at the end they were there or not, but I've seen attempts. And then I've definitely seen on one occasion where we couldn't use the arms at all.

Q And where was the IV inserted then?

MS. COULTER: If you know you can answer the question.

THE WITNESS: I don't know, specifically, but we did the technique which is called, and again, I'm not a

doctor, but they call it a cutdown, where they had to do the line in the leg area.

BY MS. NOTTON:

Q Have you ever seen it done in the hands?

[29] A I've seen it attempted, but I can't remember if it ended in the hand or if it ended in the arm, it may have been, yes, but I don't know for sure.

Q How are inmates positioned during an execution?

A They're laying on their back with their, you know, arms on each side.

Q I'm assuming they're strapped down?

A Yes.

■ [REDACTED]

■ [REDACTED]

[REDACTED]

Q Have you seen an inmate positioned in any other way for an execution?

A No.

Q Do you know whether it's possible to alter the way an inmate is positioned during an execution?

A No.

Q The open portion protocol talks about monitoring of prisoners and states that the gurney shall be positioned so that medical personnel can observe the prisoner's face directly or with the aid of a mirror. Is that true for the executions

[47] cell to the gurney. And then, you know, they bring him in and you know, put him on the gurney.

Q And where is the gurney located?

A It's – I don't know what we call the room, but actually, where the execution takes place. The way that it's set up it's a lot of rooms circling a room.

Q Uh-huh.

A Okay. Let's – be hard to describe for her to write. But you have a room in the middle and on one side will be a window where his visitors will be. Then there's another room where the victim visitors are. Then there's a room where the state visitors are. And then the other part of the square is where, what I call, the operations room is. All right. Well adjacent to that is another room where the offender is held. And so, when they bring him in, you know, then we – I come in and watch them, you know, place him on the gurney.

Q So, the gurney's in the actual execution room or chamber?

A Yes, yes. So, he walks in and then lays on the – it's more of a bed, and lays down on the bed and then they place the restraints.

[REDACTED]

[REDACTED]

[REDACTED]

[48]

█ █  
█ █  
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█ █

Q Can you describe why that occurred, if you know?

A I don't know the specific legal terms, but I know that there's been some holds or some – some legal procedures or something that, and again, I'm not legally trained, so I don't know the appropriate terms so, but I know that there's been reasons that they have said: Do not move the offender. We're waiting for some adjudication of some sort.

Q So, it's primarily for legal purposes just to get the all clear, essentially –

A Correct.

Q – for the execution –

A Correct.

Q – from the legal team?

\* \* \*

[54] things that are not here.

Q Can you describe those, generally?

█ █  
█ █  
█ █

█ █

█ █  
█ █  
█ █



Q And when you mentioned that you notified the director about the sedative, and is that primarily just to make him aware or her aware that the sedative was given or is there a different purpose for that?

A My understanding is just a part of the protocol. So, you know, I notify them as part of the protocol that we offered. And then, you know, that we notified the offender that even later if he were to request it, it would be available.

And then I tell them if any time in there that he does [55] take it then I call them and tell them that: Yes, he did or you know, initially I tell them if he didn't, but then if later if he requests it then I'll notify them.

Q Do you know whether it's possible to alter the protocol in any way?

A I – not at my level. If there's some variance from the protocol I notify the director and then the director would give us, you know, any permissions to – to vary. The only exception is I've halted, because a guy wanted to speak to the chaplain. So, I give him a second and brought the chaplain in. But other than that, any other variations I call the director.

Q Have you seen variations being taken under the current protocol?

A No, the only – well, the only two variations that I'm aware is the – when we did the cutdown permission to go into the leg and then we had a permission to

use one arm. We couldn't set a second arm, so we went with one.

(Recess.)

BY MS. NOTTON:

Q So, you had talked about that you had seen a cutdown used during an execution for finding a vein; is that correct?

A Yes.

Q And do you know approximately how long it took to do that cutdown?

[56] A No. I know that it took several minutes, you know. We had to, you know, go in and there's an actual cutdown packet of materials –

Q Okay.

A – that's available. And so, they had to go in and they, you know, they got that, they brought it in and you know, they were able to do it, you know. But you know, how many minutes it took, I, honestly, I don't remember.

Q Okay. But you wouldn't say it took like 15 minutes or something like that, would you, or do you just not remember?

A I, honestly, don't remember, you know. It was more than a couple of minutes and it could have been 15, maybe more than that, I don't think so, because it went fairly quickly. But you know, that's a whole, again, I'm not a doctor, but that's a whole procedure that, I learned that night, is much more complicated than what I thought. Again, I'm not a physician, but it – it – it, you know, it took a little bit.

Q Those tools that you refer to, those were available to the execution team; is that correct?

A Correct.

Q And so, these would be in the execution room or near by [sic]?

A Yeah, it's actually in that – not in the – I always say operations room, but there's, actually, a sealed sanitary [57] packet with all of the materials needed for that, that they just rip open and you know, can place over the area and you know, the gloves, everything is there for the – for the procedure.

Q Do you know what type of tools were used for that, generally, not medical terms –

A No.

Q – not needed?

A No, not – not really.

Q Did you see like a scalpel or some sort of knife?

A Yeah, it appeared. But I don't, again, I, at the time was talking with the offender so, you know, I wasn't concentrating on that part, you know.

Q Uh-huh.

A That's – I kind of let the medical people do their thing.

Q Uh-huh.

A And you know, I was, you know, talking to the offender.

Q Do you know at what point the decision was made to do the cutdown?

A Yes. The medical personnel told me that they could not get a good IV in either arm. And so, I went



to the director and asked permission to go to the shutdown format. And then was given permission, at that time was Director Lombardi. So, I was given permission and then went back in and told them that we had [58] received permission and then they, you know, did the procedure.

Q So, the permission was from the director to do that?

A Correct. Yes, ma'am.

Q And did the medical members of the execution team perform that shutdown?

A Yes.

Q And do you know whether it was the doctor or the nurse or both, perhaps?

MS. COULTER: I guess I'm going to object just on relevancy at this point with the line of questioning.

It's my understanding that the witness has already testified that he wasn't really sure what was necessarily going on, but that the medical personnel handled it. I guess, to the extent that you know the – an answer to that question, you can answer.

THE WITNESS: I know that they were both working together. I think the primary person was the physician.

BY MS. NOTION:

Q And this was done on the inmate while he or she was strapped to the gurney; is that correct?

A Yeah, to the bed.

Q Do you know whether any pain reliever was offered to the inmate before the shutdown occurred?

A I know that they did the shot, because I heard it, you [59] know. I heard him – normally in – well, every execution, they give a little shot before they place the IV so that they'll be less pain. And so, I've heard on several – well, every occasion, I've heard the medical personnel say: Hey, you're going to get a little stick here. We're going to give you a little bit to numb, but – and I heard that that night: Hey, there's going to be a little stick here and...

Q Would that be the lidocaine, do you think?

A I – I would be guessing. So, I would prefer not to answer. I don't know.

Q Okay. But outside of that shot, that it sounds like is typically given –

A Yes.

Q – you're not aware of them giving the inmate anything else?

A They – I'm sure that they wouldn't give him anything else –

Q Okay.

A – that would be – anything else would have to go through the director –

Q Okay.

A – for permission.

Q Could you describe, generally, how big the execution room is?

[60] MS. COULTER: I'm going to object on relevance. I don't know how the size of the execution chamber is relevant to the claims in the petition. And I don't know that – I know that obviously was not explicitly listed in the Court's order regarding the

scope of discovery, but to me this may fall into the intricacies regarding the execution protocol.

MS. NOTTON: The size of room.

MS. COULTER: Well...

MS. NOTTON: I'm trying to understand your objection.

MS. COULTER: Well, I don't know how it's relevant. I don't understand how the size of room is relevant to any of the claims, the surviving claim, that's in the petition. And like I said, I know that it wasn't specifically raised or addressed in the Court's order, that's the umbrella, I guess, that I would – to me that it would fall under.

MS. NOTTON: I would like you to still answer if your primary objection is relevancy grounds.

MS. COULTER: If you can – well, I'm trying to think if there's any – can I ask the witness: Is there any safety or security reason that you would have regarding the size of the room? I know we've talked, generally, about the positions of the room.

THE WITNESS: Not that I'm aware.

[61] MS. COULTER: Okay.

THE WITNESS: Okay. I don't know. I would say it's about this big, but –

BY MS. NOTTON:

Q This conference room big?





Q Do you know what information is shared between the Corizon staff and the execution team members?

A No.

Q Do you know whether the execution team members perform any medical evaluations of the inmate?

A No, they don't.

Q Do you know whether the execution team members would see an inmate before the actual execution day?

A Ask the question again. I'm sorry.

Q Sure.

Do you know whether the execution team members would interact with an inmate before the execution protocol were to [65] begin?

A No, they would not.

Q Is there a process in place to prepare a prisoner for execution?

A I don't know what you mean by process.

Q Are there any formal protocols or anything like that in terms of preparing the prisoner, himself, for an execution?

A (No response.)

Q Perhaps you have a protocol for a chaplain or something like that?

A Oh, okay, okay. I'm sorry. I didn't understand your question.

We make both a chaplain and a mental health staff available to the offender once he gets to Bonne Terre.

Q Okay. And so, an inmate goes to Bonne Terre first before the ERDCC or are those the same?

A I'm sorry. The ERDCC, which stands for Eastern Reception Diagnostic Correctional Center, when they arrive at the prison we make it clear to the offender that both mental health and chaplain services are available. Okay. Sorry about the clarification.

Q No problem.

Is the inmate told about the execution process at all?

A No.

\* \* \*

[73] he was present when we made the notification when they started the execution process.

Back up. I, personally, spoke to each offender to give them that notification. I just felt that it was right. And so, I went down and met with them and told them that they were going to begin to, you know, to set dates again. And he was one of the ones. Well, I told everyone that was here. So, you, [sic] know I spoke with him then too.

Q And here being Potosi, correct?

A Yes. I'm sorry. At Potosi.

Q I know, we're literally at Potosi.

A Yeah.

Q Do you know what cavernous hemangioma is?

A Nope.

Q Are you aware that Mr. Bucklew has this condition?

A No.

Q Do you know whether an inmate has ever had this condition besides Mr. Bucklew with the DOC?

A No.

Q Do you know whether the DOC has ever researched whether a person with this condition could be safely executed?

A No, I don't know.

Q Are you aware that Mr. Bucklew's tumors affect his airway?

[74] A No.

Q Do you know whether he experiences any bleeding?

A No.

Q Do you know that he's given medical supplies to deal with his bleeding?

A No.

Q Do you know anything about how Mr. Bucklew's condition has been monitored over the years at the prison?

A No.

Q Do you know whether any special steps will be taken leading up to an execution for Mr. Bucklew?

A No.

Q Do you plan on taking any steps, personally, in advance of an execution with Mr. Bucklew?

A No.

Q Do you know whether if a prisoner were to begin convulsing on the table, is there a protocol in place for that?

A No, I'm not aware.

Q What about if a prisoner starts bleeding or hemorrhaging on the table, is there a protocol in place for that?

A Not aware.

Q What about if an IV were to come out of a vein or a vein were to blow, do you know whether there's a protocol in [75] place for that?

A Yes.

Q And what is that protocol?

A We would go to the secondary protocol of re-administering dependent on what time the event would happen in the protocol.

Q So, by re-administering would you start the process again?

A It would depend on where in the protocol. I ask this question, you know, to just – in passing to the medical team for my own knowledge and said, you know, what would happen if we were, you know, this were to happen? And it would depend if the, you know, if all the medications had already been administered then it may not be necessary. If not, then it may be necessary to go and reset the IV and go to the second administration that would be something that I would notify the director and let them make the call.

Q So, the director would make that call?

A Yes, ma'am.

Q Outside of that, is there any protocol in place that you're aware of for – if an IV were to not function properly?



A No. Oh, you talking about once in place? Once we started the injection.

Q Yes. Yes.

[76] A No. No.

Q Is there a different protocol you're thinking of for before the IV is inserted?

A Yeah, that's where we did the step. Yeah.

Q Understood.

A That's why, I just didn't want to get the two confused.

Q Understood.

A Yeah.

Q Have you ever – let me start that again.

Are you aware of any of these issues arising during an execution under the current protocol?

A Yeah, we – that's where we had the – we went into the leg before we couldn't set an IV in the arm.

Q Right.

Outside of that instance?

A No.

Q Same for the bleeding or hemorrhaging and choking?

A Not that I'm aware, no.

Q Have you ever seen an execution team member ask to halt an execution?

A No.

Q Do you know whether the execution team members would be made aware of Mr. Bucklew's condition prior to the execution?

A I know that they receive his medical records.

[77] Q But outside of that, you're not sure?

A No.

Q Do you know whether any members of the execution team would be permitted to opt out if, for whatever reason, if they didn't want to participate in Mr. Bucklew's execution?

A Yes. I was told that at any time any of the members of the execution team, it was volunteer [sic], that nobody is made to do it

Q Have you ever seen that happen before?

A No, not since I've been there. No.

Q Do you know whether the protocol will be customized in any way for Mr. Bucklew?

A Not that I'm aware, no.

Q Do you know if it's possible to customize the protocol for an inmate?

A No, I don't know what – I don't know what customize would mean necessarily.

Q Do you know whether the protocol would be changed in any way to accommodate a prisoner, perhaps for a medical reason?

A I know that it could be, but I don't know if it would be.

I know that we could go directly to the cutdown, for instance, but any more than that, I'm not a doctor. I don't know.

[78] Q Okay. So, it's possible that it could be customized for the IV, for example, is what you're saying; is that correct?

A Right. Based on the physician and the director, if they had some discussion then I suppose it would be possible to go directly to that procedure, which is already in the protocol.

Q Outside of that procedure, are you familiar at all with how the protocol could be customized, if it can, outside of that?

A No.

Q Do you know whether a final medical evaluation is performed before execution?

A No.

Q Do you know the last time an inmate sees their regular medical staff, so the Corizon employees, for example?

A No.

Q Do you know whether Mr. Bucklew was ever transported to the ERDCC previously?

A I believe he was.

Q I will tell you he was.

A Yeah, I believe –

Q Prior execution –

A – he was.

Q – date.

Were you warden at that time?

\* \* \*

[90] A No.

Q And who would do that?

A It would be the medical staff present.

Q Of the execution team?

A Yeah. You're saying once the execution gets started, once we start, then it would be them, yes.

Q And you also indicated that you would approve any sort of object being brought into or given an inmate at the ERDCC; is that correct?

A Yes.

Q Would that include something like gauze?

A No.

Q Why not?

A You're asking whether I would approve it or whether I would review it?

Q More review, is what I was getting at.

A No, gauze is – that's a normal thing that, you know, we have a lot of offenders who get gauze or they'll get a little piece of tape or something or a bandage or a Band Aid or something. I don't look at every one of those. It's specifically more an item that will – could be a security concern, you know, a cane, you know, a cane is number one. We, you know, I – if it was a particular need for a crutch that was made out of some, say something different than it's a typical or [91] say a wheelchair that was animated other than a pusher or something like that, then that would be asking that my team and I could consider, but gauze would be – that would just be a normal thing that would be something we would –

Q What about something like a biohazard bag?

A It would depend on the size of the bag.

Q Okay. And is your primary focus there the security reasons –

A Correct.

Q – like that you're talking about?

A Correct.

Q Okay. Do you know who would know if the gurney can be adjusted?

A I would suppose that my deputy warden could tell me and I will know today, but it just never has come up and I just don't know.

Q So, is it fair to say that you've, under the current protocol, the gurney has only been flat?

A Yeah. It's just never been adjusted. So, I don't know that it can't, but I'm not going to say that it can, not knowing that it can, I just don't know.

Q Okay. Thank you.

A Thank you.

And I will know the size of the room.

[92] Q How big is it?

A I'm going to find that out too for my own interest.

Q Well, I am terrible with sizes, so . . .

Deposition concluded at noon.

[1] IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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No. 4:14-CV-8000-BP

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RUSSELL BUCKLEW,  
*Plaintiff,*

vs.

GEORGE LOMBARDI, *et. al.,*  
*Defendants.*

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DEPOSITION OF DR. WILLIAM MCKINNEY  
TAKEN ON BEHALF OF THE PLAINTIFF  
February 21, 2017

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\* \* \*

[10] A I briefly reviewed the electronic medical record on Mr. Bucklew.

Q Okay.

MR. VERMETTE: He was also provided with a copy of the complaint as well.

BY MS. BIMMERLE:

Q Got it. Okay.

Did you review any of the prior deposition testimony, other depositions in this case?

A I don't know of any.

MR. VERMETTE: No.

BY MS. BIMMERLE:

Q Okay. Have you spoken with anyone else besides your attorney?

A Have not.

Q Okay. That includes, you haven't spoken with Mr. Bucklew about this?

A Definitely not.

Q Okay. And then when you reviewed Mr. Bucklew's medical records, did you sort of go back to when you first started seeing him or just skim the most recent?

A I went back to the initial visit and then kind of skimmed forward.

Q Okay. Have you reviewed any press or news articles [11] connected with this case?

A None.

Q Have you reviewed the expert reports submitted in that case?

A I saw them – whenever...

MR. VERMETTE: Yeah, I think only that was – what was referenced in the complaint.

BY MS. BIMMERLE:

Q Okay. And then have you spoken with the state's expert at all?

A No.

Q Any other preparation?

A No.

Q So, well just walk through your education and employment background. Where did you get your medical license?

A University of Missouri Columbia.

Q Okay. And when was that?

A 1976.

Q Okay. And you completed a residency after that?

A Correct. Family practice, completed in 1980, St. John's Mercy.

Q Okay. And are you a general practitioner or do you have a specialty?

A It was family practice.

[12] Q Okay. And to confirm, you're not an ear, nose and throat specialist?

A Correct.

Q You're not an anesthesiologist?

A Correct.

Q Are you familiar with the condition cavernous hemangioma?

A Not as an expert, no.

Q Okay. Do you know whether cavernous hemangioma is a common condition?

A It's not common.

Q Okay. And were you familiar with cavernous hemangioma before you started seeing Mr. Bucklew?

A No.

Q Have you done anything to become more familiar with cavernous hemangioma since you started treating Mr. Bucklew?



A As I would hope any physician would, if you don't know anything about it, you'll look into it.

Q Okay. And what did you review to become more familiar?

A Medical literature or probably more likely Up-to-Date as a medical reference.

Q Okay. And are there any specific publications that you looked at –

A I did not.

[13] Q – that you recall?

Okay. Have you taken any specific classes or continuing education related to cavernous hemangioma?

A No.

Q Have you ever authored any articles about this condition?

A No.

Q Or presented about this condition?

A No.

Q Okay. You're presently employed?

A Yes.

Q And who is your employer?

A Corizon.

Q Okay. Before you were employed by Corizon, did you have a private practice at all?

A Private practice from 1980 to 1990.

Q And did you begin working with Corizon immediately after that or were you employed elsewhere?

A I was then employed by SSM from 1990 until I began my employment at that time with Correctional Medical Services, which was back, trying to remember, 2002.

Q Okay. And when you became employed by Corizon what was your title or your position?

A Medical provider.

\* \* \*

[22] Q Okay. Have you ever seen this memo before?

A Dwight provided me a copy of this, prior to that I have not seen it.

Q Okay.

MR. VERMETTE: That's right.

BY MS. BIMMERLE:

Q And what do you understand this or this procedure to mean?

A Which procedure are we talking about?

Q Okay. The nonparticipation by health services; does this apply to you?

A It does.

Q Okay. And in what way does it apply to you? What does it prevent you from doing?

A I think I've answered that per this policy, as we knew when we were employed by Corizon, medical personnel does not participate in any way having to do with preparation for or implementation of execution.

Q Okay. So, you don't provide any advice to the execution team about how to go about implementing its protocols?

A Correct.

Q At what point in time prior to a scheduled execution do you stop being responsible for an inmate's medical care?

A I didn't know that I stopped until the patient was [23] removed from my care.

Q Okay. So, you continue to provide care all the way up until they're transferred out for execution?

A Right.

Q Okay. Do you know whether the execution team receives a copy of the inmate's medical records?

A I do not.

Q So, you don't know whether anybody on the execution team reviews medical records?

A I do not.

Q Do you know who within the medical unit would be responsible for transferring a patient's medical records?

A I do not.

Q Are you familiar with the term pre-execution status?

A Am I? No.

Q And what does that term mean?

A My understanding of that is the patient has been read information that they're on a pre-execution status and they are awaiting to be transported. At this point they go to ERDCC while awaiting execution. When they are moved, that's at the discretion of DOC.

Q Okay. And does an inmate's placement on pre-execution status impact how you provide care?

A Of course not.

[24] Q Have you ever observed an execution?

A Never.

Q Have you had any other patients besides Mr. Bucklew who have been scheduled for execution?

A Yes.

Q And were they ultimately executed?

A Some were. Some weren't.

Q For those that, if they were not executed, were they typically returned to your care?

A Yes.

Q And how – how would you – did you note change in their demeanor or – or state of health upon return to you?

A State of health, no. Demeanor, yes.

Q And can you describe that change?

A Cocky.

Q So, for the process for receiving medical care, generally, are appointments typically instigated by medical service requests?

A Correct.

Q Do you personally review medical service requests?

A They do not come to me.

Q Who do they go to?

A Nursing personnel picks them up.

Q Do you know approximately how long after receiving a [25] request an inmate will typically get an appointment?

A I have no idea.

Q Is an inmate able to specify the doctor that they want to see?

A They can, but I'm the only one.

Q Oh. So, there's only – there's only the one primary care physician at Potosi?

A Correct.

Q Okay. About how many times have you seen Mr. Bucklew since you began treating him in 2005?

A I did not review that. I don't know. He's seen routinely in chronic care, so being the fact that he's in chronic care, depending on, he will be seen for each chronic care he's in, he'll be seen at least every six months.

Q Okay. And you say for each chronic care he's in, can he be in more than one chronic care at a time?

A Absolutely.

Q About how many chronic cares is Mr. Bucklew in?

A I don't know.

Q Could you ballpark it?

A I will not, because I have no idea. I don't know that part of his . . .

Q Got it. Understood.

Do you ever see Mr. Bucklew outside of his chronic care

[34] Q Uh-huh. And I guess, so just for my understanding, is a tracheostomy a particular way of intubating a patient?

A No. If a patient has been intubated for a prolonged period of time, and that may vary by the number of days, where the location, in order to not cause damage to the vocal cords they will remove the tube and they will do a tracheostomy to have it directly in the lungs, avoids putting pressure on the vocal cords.

Q Okay. But this report doesn't describe anything about him having been intubated, specifically?

A I have no knowledge of that. I'm just saying that he has had a tracheostomy.

Q Okay. And in the second paragraph here, starting with presents today, does it say here that he has increasing left – increasing size left side of face; is that shorthand?

A I'm – you're going to have to show me where.

Q If you look here, beginning with this paragraph, increasing size. Is that in reference to his hemangioma or the left side of his face, generally?

A I would say that he was referring to his hemangioma. I think it's probably a typo though, because it says left side. His hemangioma is on the right.

Q On the right?

A My fingers don't always obey.

[35] Q Okay. And does it also say down toward the bottom in assessment: Cavernous hemangioma per patient and nursing history increasing in size.

A Correct.

Q Okay. So, at least as of the time of this record it was noted that his hemangioma was progressing, it was increasing in size?

A No, I didn't say that, because I had nothing to objectively base that on. This is all subjective.

Q Okay. But subjective per a nurse, who is familiar with his care?

A Who had seen him previously, that's all I'm saying.

Q Okay. In going back to when you first started treating Mr. Bucklew for the cavernous hemangioma, can you describe, generally, what symptoms he presented with at that time?

A Complained just of the enlarged blood vessels that are on the right side of his lip and in his mouth.

(Recess.)

BY MS. BIMMERLE:

Q Okay. So, just to backtrack a little bit, you mentioned that there's no specific care for cavernous hemangioma; what did you mean by that?

A Meaning that there isn't a specific medication that can be given for cavernous hemangioma, which would be within what I [36] do.

Q Is there a course of treatment that doesn't involve medication?

A Probably would not use the word course. I would say, as you already know, there's an option of sclera therapy, option of radiation therapy and option of surgery.

Q Okay. In terms of day-to-day care though, how do you go about, I guess, ameliorating the symptoms of cavernous hemangioma?

A I do not have a medication that's going to change that. He's receiving pain medication, because that's his complaint of discomfort, but other than that, I do not have a medication. As Dr. Zitch plainly told the gentleman that he had nothing else to offer him.

Q Okay. So, then is it your understanding that there's no clear cure –

A Correct.

Q – for cavernous hemangioma?

Throughout Mr. Bucklew's medical records there are references to episodes of bleeding throughout the records. Can you, generally, describe what this bleeding is for Mr. Bucklew, how it presents?

A I find that interesting, that's why I reviewed the nurse's notes. In terms of him presenting with any emergency in [37] 2016, there were none. There was, in terms of a code 16, patient in trouble, nursing all goes to the site. As I said it earlier, I saw in the review he had a self-declared medical emergency, January of 2016, right eye. And self-declared, I believe, April of 2016 that he had bleeding and that's the only "emergencies" that he presented for medical assistant [sic].

Q Beyond emergencies though, does he experience episodes of bleeding that aren't coded as emergencies?

A I can only say I have never seen the gentleman present with a bleed.

Q Okay. In your review of his medical records and you know, having reviewed his medical records, how



do you describe his episodes of bleeding based on your review of his records?

A I don't describe them. I've never seen a bleed.

Q Okay. You also noted that you haven't noticed a big change in his condition, but have you noticed a change in his condition?

A I have.

Q And can you describe the change?

A I will try. It's not more than just the blood vessels appearing to get larger.

Q Okay. And has that been the only change in his condition?

A That's what you see when you – when you look at the

\* \* \*

[42] BY MS. BIMMERLE:

Q And so, is it your understanding based off this MRI that Mr. Bucklew's airway is significantly compromised by the cavernous hemangioma?

A Well, answer that as reply to many things. Using an example, if you do a CT scan on 100 people my age about one-third of them are going to have herniated discs and they have no symptoms. So in medicine if you have something that's there and the patient has symptoms and you have physical findings objectively you try to put it all together. But we don't treat anyone by a number or by a finding.

And in light of this, Mr. Bucklew's recently told me he still walks a mile, does fine breathing. Okay. So, yes, I see what you're saying, but is it impinging on his ADLs? At the time the answer would be: No.

Q Okay. Despite the statement that –

A Despite that statement, yes, because his activities of daily living and what he shares with me what he does is not consistent that he actually has an impairment with his ADLs or breathing.

Q Have you ever conducted any testing yourself to assess Mr. Bucklew's airway?

A Other than visualizing it, no.

Q Okay.

[43] A Because he tells me what he can do, that's the important thing.

Q Uh-huh. When you have observed Mr. Bucklew has he exhibited any – does he – does he breathe in an unusual way, would you say?

A He doesn't have respiratory – any respiratory compromise with normal activities. My office, where I work, is right next to where the people come in to medical. So, it's not unusual for Mr. Bucklew to be walking over to receive pain medication. When he's there he is showing no respiratory distress or difficulty breathing. He gets his pain medication, he chit chats with the nurses, and he leaves.

Q Okay. Would you say that there is a – that there's a range of difficulty breathing somewhere in between actual asphyxiation and breathing completely normally?

A Correct.

Q Okay. Does Mr. Bucklew breathe completely normally?

A I don't breathe completely normally, because I also have the same obstruction. I have an obstruction.

He may not breathe completely normally, but it's not impairing his activities of daily living. It's not limiting him.

Q Do you have any knowledge of whether Mr. Bucklew's position changes his breathing or impacts his airway?

A I'm trying to remember. I'm not – I don't recall if [44] he has a pillow elevation for his head or not.

Q Okay. If I told you that the records do show that you've given him a second pillow –

A Okay. Then that's probably why we do it as a – to make it more comfortable for him in some way.

Q Okay. So, the positioning of his head as compared to his cavernous hemangioma can effect [sic] his – how his –

A It may make it easier for him.

Q – breathing.

Okay. All right. Another medical record for you.

MS. BIMMERLE: This will be Plaintiff's Exhibit 24.

THE WITNESS: Okay.

BY MS. BIMMERLE:

Q Okay. And so, have you seen this record before?

A I have.

Q Do you generally recall the contents of this conversation with Dr. Zitch?

A I do.

MS. BIMMERLE: Okay. And for the record, this is a medical note made on April 12th of 2012.

THE WITNESS: Correct.

BY MS. BIMMERLE:

Q Okay. Down towards the bottom, can you just describe for us what Dr. Zitch had to say about Mr. Bucklew's condition?

[45] A I initiated a phone call to try and see what available therapies were for Mr. Bucklew, knowing that he previously had sclera therapy. I did not know at the time of the phone call that that particular ENT had been involved in his care prior to incarceration.

Given the fact that he was not a candidate for sclera therapy, Dr. Zitch had recommended that he try radiation therapy. Mr. Bucklew did not go through with that. He chose not to continue.

And so, I reviewed all of this with the ENT, and as it says in the note, Dr. Zitch said that Mr. Bucklew's risk of life threatening hemorrhage might be and could be, but would be a low risk. And stated that the hemangioma continues to grow in the next 10 years the risk will increase. Should Mr. Bucklew present with a persistent hemorrhage then, embolization would be considered, but he wasn't candidate for sclera therapy.

Q Okay. What precipitated your question as to whether Mr. Bucklew's – whether Mr. Bucklew was at risk of life-threatening hemorrhage?

A Good question, but I don't remember why I made the phone call that day other than wanting to know what else we could do for him.

Q Okay. But it was your understanding that should the hemangioma continue to grow, Mr. Bucklew's risk of hemorrhage [46] would increase?

A No, it was the information provided by the ENT that at this point he thought he would be low risk and

that if it did continue to grow over the next 10 years the risk would increase.

Q Okay. Do you recall why Mr. Bucklew discontinued radiation therapy?

A I wasn't involved in that as he was at a different camp when he was receiving that. All that I know is what the provider put on the record at that time.

Q What do you mean: He was at a different camp?

A He was receiving radiation therapy at Jefferson City –

Q Uh-huh.

A – because this was four days a week and going to be for three days, it's customary for the patient to stay at a different infirmary, which in this case would be Jefferson City Correctional Center as a convenience, both to the patient and as a courtesy to the DOC staff to –

Q They don't have to transport?

A – transport back and forth, sure. You don't want to put patients or DOC through it unnecessarily.

Q Was it your understanding that Mr. Bucklew had experienced some discomfort with radiation therapy?

A I wasn't aware that he had any discomfort. I would think that would be unlikely with what he had so far.

[47] Q Okay. You mentioned that you had reviewed his records from the radiation therapy?

A Yes. Not from the radiation therapy, from the provider at the other camp.

Q Okay.

A And that was the fact that he was unhappy being there. He didn't like not having canteen and wanted to be able to see his family. I quit.

Q Okay. And so, to the best of your knowledge, he didn't complain of facial pain, of nausea?

A I wasn't aware of that.

Q Okay. I have another record.

MS. BIMMERLE: This will be Exhibit 25.

THE WITNESS: Okay.

BY MS. BIMMERLE:

Q All right.

So, I'm looking at the record beginning on October 22, 2013, about halfway down the first page. Have you seen this document before?

A Yes.

Q Okay. And if I direct you down towards the bottom of the page where it says exam, can you explain what your findings were pursuant to this exam?

A (No response.)

[48] Q I believe this is yours. Yes.

A Just confirm, cavernous hemangioma of the lip, mainly on right side oral cavity and his uvula, another misfire by my finger there, this appears longer and fuller than last exam. No current bleeding.

Q Okay. So, at least on October 22, 2013, you thought that his uvula had changed in size since his prior exam?

A Right. Yes.

Q Okay. I guess by change, just to clarify for the record, that it had increased in size?

A That's right.

Q All right?

MS. BIMMERLE: And I have here Exhibit 26.

THE WITNESS: Okay.

BY MS. BIMMERLE:

Q Okay. So, I'm looking at the entry dated November 2, 2015, about halfway down the page.

A Yes.

Q And can you describe your findings regarding his oral cavity on that date?

A Well, he wasn't seen specifically for that. He came in with a sore throat and ear pain. The oral cavity, again, large cavernous hemangioma right, appears to increased [sic] in size as of the size of already large uvula.

[49] Q So, again, on that date in 2015 it was your understanding that at least since the last time you had seen him his cavernous hemangioma had increased in size?

A Yeah.

Q Okay. Since November of 2015 have you noted any other changes in Mr. Bucklew's condition since the date of that entry?

A This, I think, is going to be a progressive disease, that's what it's demonstrated over time. So, yeah, I would have to say it continues to slowly increase, not at the rate that I would initially have expected

when I first saw the gentleman, but Dr. Zitch is correct, it's a slowly progressive disease.

MS. BIMMERLE: I have another record here it will be Plaintiff's Exhibit 27.

THE WITNESS: Okay.

BY MS. BIMMERLE:

Q Okay. And so, I'm referring to the record, it's a nurse encounter on November 23, 2010. Have you ever seen this document before?

A I may have. I don't recall it.

Q Okay. I'm looking down towards the bottom of the record 11:00 a.m. responded to?

A Yes.

Q Okay. And here does it show that a nurse responded to – is that an inmate call light?

[50] A Where was the gentleman located? He is in the infirmary at this time, so that would be true.

Q Uh-huh. Okay. And he was found leaning over the toilet with blood coming from his mouth?

A That's what it says.

Q So, this is an instance where he was observed to be bleeding?

A In 2010, yes.

Q Okay. And at that time what was he given to alleviate the bleeding?

A Well, there's something missing here, it's called a plan. So, I don't know what happened after that.



Q So, I guess just a couple lines down it says that the inmate is given gauze to place in mouth and apply pressure.

A Oh, sure. Well, that would be standard.

Q Okay. Standard.

Did you generally provide, I guess, with these bleeding incidents, did you generally provide Mr. Bucklew with gauze to alleviate his bleeding?

A Mr. Bucklew can get gauze any time he needs them, that's not a problem.

Q Okay. How does he obtain the gauze?

A Asked for it. Nursing gives it to him.

Q Okay. And has he also been provided with biohazard [51] bags?

A I don't know.

Q Okay. Why might he be given biohazard bags?

A Most people get concerned about blood, particularly if you have a communicable disease.

Q Uh-huh. So, if he had gauze that he wanted to be able to get rid of from his cell he would need one of those bags?

A It would be nice.

Q Okay. Are you aware of how often he would ask for new gauze or new –

A I have no knowledge of that.

Q Okay.

MS. BIMMERLE: This is Plaintiff's Exhibit 28.

THE WITNESS: Okay.

MS. BIMMERLE: Okay. And for the record, this is another – another nurse encounter dated May 16, 2006.

BY MS. BIMMERLE:

Q And can you describe what the chief complaint was here? It was half halfway [sic] down the page.

A It states that he was eating chips and his mouth started bleeding, ruptured mandibular tumor. They said I could bleed to death from it.

Q Okay. And what action did the nurse take there?

A It appears that they cleaned it with normal saline and [52] removed the dried blood from his face and applied gauze in mouth with pressure.

Q Okay. And he was advised at that time not to consume chips or foods that would puncture the inside of his mouth?

A That's what it states.

Q Okay. Are you familiar with that advice having been given him at some point in time?

A I am not.

Q Okay. Would you, generally, agree that it's better for him not to consume chips or things that could puncture the inside of his mouth?

A I think we've already established for some time he has had a soft diet.

Q Okay. And you agree that that's advisable?

A Reasonable, yes.

Q Okay. Are you aware that Mr. Bucklew has also been diagnosed with a general anxiety disorder?

A Yes.

Q Can anxiety manifest in any physical symptoms?

A For example, like headaches.

Q Okay. Any other physical symptoms?

A Panic attacks, palpitations, just fear in general.

Q Okay. Shaking?

A Could.

[53] Q Okay. Have you observed any physical manifestation of anxiety in Mr. Bucklew?

A He's related to me that he's under stress regarding his legal condition, but in terms of physical manifestations, no.

Q So, you haven't noted his leg shaking or hand tapping or anything like that?

A My leg is shaking right now.

Q One could say that a deposition might be stressful.

A I find it could be.

Q Are you aware of any impact that Mr. Bucklew's anxiety has had on his overall health?

A Overall physical health, no, not really.

Q You mentioned that anxiety can cause headaches. Could that exacerbate pain that he already has in his face?

A Could intensify the pain, patient's perception of it, sure.

Q Okay. Would you expect a patient in Mr. Bucklew's position to suffer from anxiety?

A Which position?

Q I guess, the combination either in connection with cavernous hemangioma, we'll start there. Would you expect somebody with congenital cavernous hemangioma to suffer from any level of anxiety?

A I think your term is some level, yes, some level.

\* \* \*

[74] Q But this was an instance where medical personnel had observed –

A Back in 2013.

Q Okay. Have you, generally, provided him with any advice for how he could safely exercise without risk of bleeding?

A I have not told him specific things to do, but I always encourage everybody, they feel better if they're physically active and I think it's good for us all emotionally too.

Q That's probably true.

A When I get out of here I'm going to be exercising.

Q Mr. Bucklew does try to walk a mile a day?

A He's told me that he tries to walk. I don't know that it's that frequently – that frequency, but yes, he walks.

Q But you don't recall ever specifically telling him what he personally can do that would be safe, given his cavernous hemangioma?

A I didn't give him any restrictions either.

Q Okay.

A So, if he wants, obviously, not contact sports, it's a given, but short of that, no.

Q Okay. Right.

Going back to sort of severe respiratory concerns, what do you classify as severe respiratory issues or a severe [75] respiratory complaint?

A If someone came up and they were saying: I'm really having trouble breathing, then you would look at them, number one.

All these patients when they come they're getting O2 concentrations document plenty of oxygen in their blood. We're going to assess how rapidly they're breathing. We're going to look at their color and we're going to, if need be, listen to them, obviously. And then how does that go along with their medical condition or the mental health condition and how are they doing with their ADLs? Are they being impaired?

Q Would you say that somebody with – would you say that somebody with sort of severe respiratory concerns is always having a difficult time breathing?

A People with severe respiratory ailment, they always have difficulty, severe, yes, they always have significant impairment.

Q What typically leads to a severe respiratory ailment?

What type of ailment would that be?

A Chronic obstructive pulmonary disease.

Q Okay. So issues –

A Lung disease.

Q – within the lungs –

A Yes.

[76] Q Or maybe something like asthma?

A Another lung disease. If he had exacerbation of asthma –

Q Okay.

A – the lungs can't work.

Q How many patients have you had where the airway issue is a literal physical obstruction as opposed to a chronic pulmonary disease?

A Physical obstruction, meaning that they can't breathe?

Q A physical narrowing of the airway as opposed to –

A It's happened over time, because people they'll have a head or neck cancer or they'll have another cancer that has metastasized to the area and it can impair their airway.

Q Okay, would you say that those physical impairments present as a constant –

A Yes.

Q – issue in the same way?

A Yes. Once it's there, it's there.

Q Okay.

MS. COULTER: I don't have any further questions.

MR. VERMETTE: We'll read, please.

Deposition concluded at 3:10 p.m.

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IN THE UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

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No. 03-3721-WMKC

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RUSSELL BUCKLEW,  
*Petitioner-Appellant,*

v.

DONALD ROPER,  
*Respondent-Appellee.*

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THIS IS A CAPITAL CASE

FILED EX PARTE AND UNDER SEAL:

MOTION TO APPOINT MEDICAL EXPERT TO  
EVALUATE WHETHER PETITIONER'S  
EXECUTION BY LETHAL INJECTION  
CONSTITUTES CRUEL AND UNUSUAL  
PUNISHMENT IN LIGHT OF PETITIONER'S  
MEDICAL CONDITION

Petitioner Russell Bucklew, by and through counsel appointed by this Court to seek executive clemency for him, hereby moves the Court for an order under 18 U.S.C. § 3006(a) and 18 U.S.C. § 3599(f) authorizing petitioner's counsel to obtain expert services reasonably necessary to determine whether petitioner's execution by lethal injection constitutes cruel and unusual punishment in light of petitioner's affliction with a rare and dangerous vascular disorder. This disorder is characterized by grossly dilated blood vessels prone to uncontrolled bleeding. The administration of

general anesthesia may pose an extreme risk of hemorrhaging and excruciating pain.

In support of this motion, the petitioner states all as follows:

\* \* \*

11. Although the United States Supreme Court recently held, in *Baze v. Rees*, 128 S. Ct. 1520 (2008), that Kentucky's lethal injection protocol was constitutional, Mr. Bucklew's case presents unique issues far beyond what *Baze* addresses. Counsel has serious concerns that Mr. Bucklew will suffer the risk of serious harm amounting to cruel and unusual punishment during the administration of Missouri's lethal injection protocol in light of his affliction with cavernous hemangioma. To constitute cruel and unusual punishment post-*Baze*, an execution method must present a "substantial risk of serious harm." 128 S. Ct. at 1531. Here, petitioner seeks to demonstrate, through expert medical services, that Missouri's method of execution, *as applied uniquely to Mr. Bucklew*, may constitute cruel and unusual punishment. Accordingly, Mr. Bucklew seeks the appointment of a medical expert to examine the severity of such complications arising from his cavernous hemangioma.

\* \* \*

40. The symptoms associated with cavernous hemangiomas are the threat of stroke, seizures, visual and hearing loss, double vision, pain, bleeding, difficulty swallowing and breathing, and disfigurement. With large hemangiomas, spontaneous and uncontrolled bleeding may occur resulting in death.

\* \* \*



49. It is my opinion, to a reasonable degree of scientific certainty, that what the scientific community *does* know about cavernous hemangiomas casts doubt on the efficacy of an injection of sodium pentothal as an anesthetic for a person with cavernous hemangiomas, in that, for example, Mr. Bucklew has high-flow cavernous hemangiomas, meaning that they are supplied by an artery rather than a vein; and, therefore, given the fact that the cavernous hemangiomas are supplied by the same arterial system that supplies the brain, the cavernous hemangiomas are a factor what would cause slowing of the sodium pentothal to reach the circulatory system of the brain.

50. If the Court authorizes funding for my professional time and my out-of-pocket expenses in doing so, I will immediately commence a detailed medical literature review to see if I can find any existing research that might indirectly bear on the effects of Missouri's lethal injection protocol on an individual afflicted with one or more facial cavernous hemangioma. In addition, I would travel to Missouri and perform a diagnostic evaluation of Mr. Bucklew's specific condition.

51. In the absence of detailed findings by a qualified professional in my specialty as aforesaid, and the Department of Corrections' following the conclusions of such findings, the application of a three-chemical protocol for lethal injection to Mr. Bucklew creates a known likelihood of anesthetic failure resulting in abnormal prolongation of his execution, during which he would by definition be conscious to some extent, and/or his consciously enduring the pain and suffering that the Supreme Court has held to be unconstitutional from the second and third chemicals.

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Further, the affiant saith naught.

I swear or affirm that the foregoing is true and correct.

/s/ Adam J. Cohen  
ADAM J. COHEN

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 14-8000-CV-W-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE A. LOMBARDI, *et al.*,

*Defendants.*

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ORDER GRANTING IN PART AND DENYING  
IN PART PLAINTIFF'S MOTION TO COMPEL

This is a civil rights lawsuit, brought by a condemned inmate. Plaintiff contends that the State's method of execution as applied to him violates the Eighth Amendment because of his unique medical condition. More specifically, Count I of the Fourth Amended Complaint alleges that given his circulatory and related disorders, execution through lethal injection poses a risk of severe pain and suffering that can be alleviated if he is executed through the use of lethal gas. Counts II challenged the staffing and procedures to be employed during the execution and Count III asserted Plaintiff's First Amendment rights were violated because he was not provided information about the source of the chemicals to be used in the execution. These two claims were dismissed. (Doc. 63, pp. 14-16.)

Early in the discovery process, the Court issued an Order Regarding Scope of Discovery ("the Scope Order").

(Doc. 105.) The Order discussed broad categories and determined that some were proper subjects of discovery and some were not.

Shortly before the discovery deadline of March 10, 2017, Plaintiff contacted the Court to seek resolution of outstanding discovery disputes. A telephone conference was held on March 15, 2017, (“the March 15 conference”), following which the Court, *inter alia*, directed Plaintiff to file a Motion to Compel. (Doc. 163, pp. 1-2.) The parties were also directed to provide any related written discovery requests and the corresponding answers/objections.

The Motion to Compel, (Doc. 169), is fully briefed. It raises issues regarding (1) Plaintiff’s request to elicit further information related to, or depositions of, members of the execution team (particularly M2 and M3), (2) Defendants’ provision of a privilege log, and (3) Defendants’ efforts to fully search e-mails for responses to the discovery requests. The Court has considered the parties’ written arguments, the discovery requests, and the comments made during the March 15 conference. In light of these materials, the pleadings, and the Court’s prior Orders (including the Scope Order), the Court resolves the parties’ arguments as discussed below.

#### I. Additional Information About Members of the Execution Team

Plaintiff contends that Defendants should be required to provide additional information about the members of the execution team. Specifically, Plaintiff wants information about the team members’ training and experience, as well as access to depositions of team members taken in other cases that are the subject of Protective Orders issued in those cases. Defendants

contend that this information is not relevant in light of Plaintiff's remaining claim. Consistent with its prior rulings, the Court agrees with Defendants that this information exceeds that which is necessary in light of Count I's allegations.

The Court's explanation begins with the Fourth Amended Complaint, and in particular the differences between Count I (the only remaining claim) and Count II (which has been dismissed). Count I alleges that the use of lethal injection violates the Constitution because of Plaintiff's cavernous hemangioma and related complications. Plaintiff does not contend that using different chemicals, or administering chemicals in a different way, will diminish the risk of pain and suffering. According to Count I, the only way to significantly diminish the pain and suffering resulting from lethal injection is to execute Plaintiff with lethal gas. In contrast, Count II alleged that Plaintiff "will experience pain and suffering unless certain changes are made in the lethal injection protocol, and the failure to make these changes constitutes a deliberate indifference to his serious medical needs in violation of the Eighth Amendment." (Doc. 63, p. 14.) The Court dismissed Count II because the Fourth Amended Complaint did not "allege sufficient facts to indicate that the staffing and planning procedures Defendants intend to utilize will create a substantial risk of serious harm" and "does not allege what procedures should be employed (other than not performing an execution)." (Doc. 63, pp. 14-15.)

The differences in the allegations (and fates) of Counts I and II formed the basis for several decisions in the Scope Order, including the Court's decision regarding information about the execution team. The Scope Order's discussion of the issue is set forth below:

Plaintiff explains that “given the severity of his medical condition, the training and qualifications of the execution team members are especially important, as the risks of a botched or excruciating execution are particularly great in his case.” (Doc. 100, p. 6.) However, his remaining claim does not allege that changing the execution team members will significantly decrease the risk of pain and suffering, so the relevance of this information is not evident. This information might have been relevant to Count II, but Count II was dismissed. The Court holds that detailed discovery about the execution team members is unnecessary to resolving the issues in this case. Plaintiff may obtain, as part of the discovery regarding the execution protocol, information generally describing the composition of the team (*e.g.*, the number of doctors, nurses, anesthesiologists) as well as the functions they will perform. Finally, in light of the lack of a relationship between the execution team members and the specifics of Plaintiff’s claim, the Court discerns no need for Plaintiff to learn the identities of, or depose, the execution team members.

(Doc. 105, p. 8 (footnote omitted).) Thus, the additional information Plaintiff now seeks is barred by the Scope Order.

Plaintiff contends that the Scope Order should be amended because his claim requires he prove that the execution protocol presents a substantial risk of serious harm and that an alternative method of execution will significantly reduce that risk. However, the substantial risk of serious harm that forms the basis for Count I does not depend on the execution team’s training and experience. For instance, while

Count I alleges that the execution protocol will cause him to hemorrhage, cough, choke and suffocate, thereby suffering an “excruciating execution,” it does not allege that this risk is due to the execution team’s training or expertise. Count I also does not allege that more or different training will decrease these risks.

Relatedly, Plaintiff contends that information about the individuals involved in his execution – including their training – is relevant “because during various depositions in this case, Defendants made clear that there are various unwritten and/or informal protocols that Defendants and the execution team rely upon to carry out an execution – many of which are contingent on the degree of training of the medical team members.” (Doc. 169, p. 10.) As an example, it may be necessary to utilize a central line or a cutdown procedure, and Plaintiff wants to explore the execution team members’ qualifications for performing these procedures. However, this explanation is no different than the explanation Plaintiff originally offered prior to entry of the Scope Order, and it remains the case that Plaintiff’s claim does not depend upon either the manner in which a lethal injection is performed or the qualifications of the execution team members. Discovery is appropriate to determine how a central line or a cutdown procedure affects the risk of pain and suffering Plaintiff has identified. However, Plaintiff’s claim does not depend on “how well qualified” the execution team is.

Finally, Plaintiff suggests that the execution team’s qualifications and training are at issue because some information on these topics has been divulged during discovery. (Doc. 169, pp. 3-4; *see also* Doc. 164, pp. 13-14.) The Court does not agree that mere discussion of or reference to a topic during discovery makes further

discovery on that matter appropriate. There is no claim remaining that requires consideration of the execution team's qualifications and training, so the Court concludes that the Scope Order sets proper limits on discovery. Plaintiff's request for additional details about the execution team members and access to their depositions from other cases is denied.

## II. Privilege Log

Plaintiff served Interrogatories and a Request for Production of Documents ("RFP") in November 2016. Defendants responded in December 2016.<sup>1</sup> In most respects, Defendants' responses (1) raised "non-privilege based" objections, including objections based on vagueness, temporal scope, or perceived violations of the Scope Order, (2) reserved various privileges depending on how the other objections were resolved, (3) provided responsive documents, or (in some cases) (4) described documents that were privileged. The parties discussed Defendants' objections but did not agree on a resolution.

In presenting the issues to the Court at this juncture, Plaintiff focuses on Defendants' claims of privilege and argues the Defendants have not provided a privilege log as required by Rule 26(b)(5). Defendants rely on Rule 34(b)(1)(C) to contend that their obligation was fulfilled so long as they "explicitly identified in the discovery response (and production log) if a relevant privileged record communication was withheld and explained the basis for that privilege." (Doc. 173, p. 16.) The Court disagrees with Defendants

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<sup>1</sup> The discovery requests issued to each Defendant are similar, as are the responses. Plaintiff has supplied the requests posed to Defendant George Lombardi (and his responses) to represent all of the requests and responses.



and concludes that Rule 26(b)(5)(ii) – which specifically describes the contents of a privilege log – controls.

However, a privilege log is required only “[w]hen a party withholds information *otherwise discoverable*,” Fed. R. Civ. P. 26(b)(5)(A) (emphasis supplied), and with Defendants’ other objections unresolved it has not been established that Defendants are withholding any discoverable information because it is privileged. Thus, before addressing Defendants’ obligations under Rule 26(b)(5), the Court must determine whether anything Plaintiff has not been provided is discoverable.

*Interrogatory #1* asks Defendants to identify all policies and protocols that apply to execution by lethal injection. Defendants provided the current written execution protocol, and Plaintiff is not entitled to anything further.<sup>2</sup> Defendants also suggest a “closed portion” of the protocol is not being disclosed pursuant to § 546.720 of the Revised Missouri Statutes, which relates to identification of members of the execution team; this is sufficient to identify what has been withheld and is functionally equivalent to the information required by Rule 23(b)(5).

*Interrogatory #2* asks for policies and protocols related to execution by lethal gas. Defendants initially answered this interrogatory by stating that the Department of Corrections (“DOC”) “does not use lethal gas and has no lethal gas protocol.” In a Supplemental Response

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<sup>2</sup> At least, it *appears* from the text of Defendants’ answers that they provided the current written execution protocol. The Court does not know what documents are identified by the specified Bates Numbers. Regardless, the current written execution protocol *should* be provided to Plaintiff, and the Court’s rulings presume this has occurred.

(made after the parties conferred), Defendants pointed out that the DOC last utilized lethal gas for an execution in 1965. Plaintiff's explanation as to why the protocols and procedures from 1965 are pertinent are not persuasive, and the Court agrees with Defendants that it exceeds the needs of this case for them to ascertain the protocols for a procedure last used in 1965. The Court further notes that Defendants did not assert any privileges in their response to this interrogatory, so there are no privilege issues to be considered.

*Interrogatory #3* asks for several categories of information related to the chemicals used during a lethal injection. The Court concludes that much of the information sought is unnecessary given the claim that remains in the case. Plaintiff's claim does not depend on "the manner in which the chemicals are prepared and administered" or "the process and reasoning behind the selection of those particular chemicals and their respective doses." Therefore, this information need not be provided; and, given that the only privileges asserted relate to these matters, there is no need for Defendants to prepare a privilege log. Plaintiff is entitled to information that identifies the chemicals to be used, the doses, and "any risks, side-effects, or complications that could arise from their use." However, Defendants supplied information identifying the chemicals to be used and the manner in which they will be administered. Defendants also stated that they lack the medical training necessary to offer their own opinions about possible risks, side effects and complications, and they have no documents addressing these issues. Thus, Plaintiff has received answers to the portions of *Interrogatory #3* to which he is entitled.

*Interrogatory #4* is similar to *Interrogatory #3* in that it asks Defendants to describe the chemicals that are, or might be, used by DOC when using lethal gas as the means of execution. Defendants stated that there are currently no such chemicals, and consistent with its ruling regarding *Interrogatory #2* the Court is not convinced that the chemicals used in 1965 (or before) are relevant to this case. Nonetheless, Defendants' Supplemental Response states that DOC used cyanide gas, and Defendants are not required to speculate as to what chemicals would be used if DOC were to start utilizing lethal gas as a means of execution. For these reasons Defendants' response to *Interrogatory #4* (including the Supplemental Response) provides all the information to which Plaintiff is entitled and nothing has been withheld based on a privilege.

*Interrogatory #5* seeks "the process by which the current drug protocols were selected and included in the Execution Procedures," but the Scope Order already determined that this was not allowed. (Doc. 105, p. 6-7.) Therefore, Defendants need not document their claims of privilege.

*Interrogatory #6*, which asks Defendants to identify all documents "related to the viability or feasibility of lethal gas as an execution method in Missouri," is addressed not only by Defendants' initial response and Supplemental Response, but also by an e-mail, (Doc. 177-2), Defendants sent to the Court and to Plaintiff's counsel on March 30, 2017, ("the March 30 e-mail"). Initially, Defendants contended the request was overly broad in that it was not limited in time – an objection the Court believes was appropriate. Defendants also asserted attorney/client, work product, and deliberative process privileges. In the Supplemental Response,

Defendants contended they do not have any responsive documents. The March 30 e-mail describes a search of the e-mails of all Defendants and of attorneys in the DOC's general counsel's office, using the search terms "lethal gas" and "gas chamber." The search uncovered six documents, and Defendants contend all are privileged as attorney/client communications or attorney work product.<sup>3</sup> The e-mail further identifies the six e-mails by date, author, recipient and subject matter. The Court concludes that the e-mail constitutes an adequate privilege log for the six documents referenced therein.

*Interrogatory #7, Interrogatory #8, and Interrogatory #11* are similar to *Interrogatory #1* in that they asks [sic] for details about particular steps in the lethal injection protocol. Defendants' responses to *Interrogatory #7, Interrogatory #8 and Interrogatory #11* are similar to those they provided for *Interrogatory #1*; the Court's ruling is the same as well.

*Interrogatory #9* essentially asks Defendants to identify roles, responsibilities and functions of the execution team members. Notwithstanding Defendants' various objections they have supplied this information. Moreover, what Defendants has supplied is consistent with the Scope Order, (*see* Doc. 105, p. 8), and the Court's discussion in Part I of this Order. The only privileged information withheld is the names of the execution team members, and as discussed in the context of *Interrogatory #1* the information supplied satisfies Defendants' obligations under Rule 26(b)(5).

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<sup>3</sup> Plaintiff references the March 30 e-mail in his Reply Suggestions, but presents no argument suggesting that the documents identified therein are not privileged.

*Interrogatory #10* is similar to Interrogatory #9, but it asks for identification of members of the execution team if execution is performed through the use of lethal gas. The fact that DOC does not utilize lethal gas in executions answers this question. The Court further notes that Defendants did not assert any privileges in their response to this interrogatory, so there are no privilege issues to be considered.

*Interrogatory #12* is similar to Interrogatory #2 in that it asks about the process by which an inmate would be executed through the use of lethal gas. Defendants' answer is similar to that which was provided for Interrogatory #2, and the Court's ruling is the same as well.

*Interrogatory #13* asks for detailed information about the execution team members' training. This issue has been addressed by the Scope Order, (Doc. 105, p. 8), and the discussion in Part I of this Order.

*Interrogatory #14* asks for all "contingency plans that exist for when any complications arise during an execution by lethal injection." Plaintiff has been supplied the DOC's execution protocol, so Plaintiff has been supplied all formalized contingency plans for anticipated complications. Obviously, there might be unanticipated complications – but there is no way for Defendants to describe contingency plans for events that are not anticipated. And, a request for all unwritten contingency plans is too vague. The Court concludes Defendants have answered this interrogatory by providing the DOC's execution protocol. The Court further notes that Defendants did not assert any privileges in their response to this interrogatory (other than one related to the identification of the execution team members), so there are no privilege issues to be considered.

*Interrogatory #15* asks for contingency plans for executions by lethal gas; Defendants respond that DOC does not perform executions by lethal gas, which answers the interrogatory. The Court further notes that Defendants did not assert any privileges in their response to this interrogatory, so there are no privilege issues to be considered.

*Interrogatory #16* follows up on the preceding two interrogatories by asking if there are no contingency plans, why it is that none exist. Defendants' response explains that there are no contingency plans with respect to the use of lethal gas because DOC does not utilize lethal gas. While there are no responses purporting to explain the lack of additional contingency plans in the lethal injection protocol, the request is too vague and broad to be enforced. There are no objections to this response (based on privilege or otherwise), and there is no need for the Court make a further ruling.

*Interrogatory #17* asks for information about "failed executions or executions that did not follow the applicable protocol in effect at the time . . . including any and all information related to why those executions failed and any steps or actions taken in response." Defendants posed an objection, noting (correctly) that this interrogatory exceeds the bounds set by the Scope Order. Then, notwithstanding its objection, Defendants answered that there have been no such executions. The Court deems this response sufficient, particularly in light of the restrictions set in the Scope Order. The Court further notes that Defendants did not assert any privileges in their response to this interrogatory, so there are no privilege issues to be considered.

*Interrogatory #18* would require Defendants to identify all persons responsible for monitoring Plaintiff's

medical condition in the weeks before the execution, as well as information about such persons. Defendants presented a series of objections, one of which is based on relevance. The Court concludes this objection should be sustained. Plaintiff's claim is that (1) use of lethal injection – regardless of the chemicals utilized and regardless of the procedures utilized – will cause a serious risk of severe pain and suffering and (2) execution with lethal gas will significantly reduce this severe risk. Count II of Plaintiff's Fourth Amended Complaint alleged that Plaintiff's rights were violated because Defendant did not have a plan for taking necessary steps to assess Defendant before and during the execution, but the Court dismissed Count II. Interrogatory #18 might have been relevant to Count II, but it is not relevant to the sole remaining count.

*Interrogatory #19* asks Defendants to identify all communications, records, or correspondence involving Plaintiff's medical condition, as well as his "physical or mental fitness for execution." Defendants present several objections, some of which are based on privilege and some of which are not. The Court does not find all of them applicable.

Defendants objected because the interrogatory is not specific as to time and because Plaintiff "is not currently under an active warrant of execution." These objections are overruled. The lack of a time frame does not make this request burdensome; Defendants can (and should) provide Plaintiff with all information they have about his medical condition. The Court also holds the fact that there is or is not currently a warrant of execution is no bar to providing the information.

Defendants also objected that Plaintiff's mental condition is not an issue in this case, and they are

technically correct. Nonetheless, it seems far easier to simply provide Plaintiff with all of the medical records about himself than try to parse the documents. After all, Plaintiff is essentially requesting his own medical records.

Despite these objections, Defendants provided a response. The Court does not know what was provided; as indicated, the preferred course would have been for Defendants to simply provide Plaintiff with all of the medical information about him that they have (which, based on Defendants' response to RFP #15, may be what they did – and without objection). More importantly, in addition to providing a response, Defendants asserted three privileges: attorney/client, state secrets, and a concern that answering will identify members of the execution team. The third privilege is understandable, but it is not clear how the first two privileges apply and Defendants provide no explanation for them. It may be that the state secrets privilege is intended to be co-extensive with the concern about identifying members of the execution team, but if this is the case a document that identifies a person as a member of the execution team could perhaps be redacted in a manner that allows Plaintiff to discover information relating to his own medical condition. This discussion (particularly the Court's inability to ascertain why the privileges even apply) demonstrates the need for Defendants to provide a privilege log that identifies all documents responsive to this interrogatory that have been withheld.

Within ten days, Defendants are directed to respond to this interrogatory in full, and prepare a privilege log for any documents they withhold based on a privilege. In identifying the documents on the privilege log, Defendants should describe the document in terms of



its date, the nature or type of document, the author(s) and recipient(s), a summary of its contents or subject matter, and the reason why the document is privileged.

*Interrogatory #20* requires Defendants to describe any research of alternative execution methods “including execution by lethal injections, lethal gas, firing squad or electrocution, and the feasibility of any of those methods.” Defendants initially objected for a variety of reasons, including (1) the request exceeds the bounds set by the Scope Order and (2) attorney/client, work product, and deliberative process privileges. In their Supplemental Response, Defendants stated they had “not conducted any research and have had no communications concerning lethal gas as a method of execution.”

The Supplemental Response provides a response to the permissible aspects of *Interrogatory #20*. As presently phrased, this interrogatory is broader than permitted by the Scope Order, which allowed Plaintiff to seek information related to lethal gas but noted that “it is the only alternative method [of execution] he has alleged, so it is the only method for which discovery is justified and the breadth of this category must be limited accordingly.” (Doc. 105, p. 8.) Moreover, as the Court has stated previously, Count I does not allege that other methods of lethal injection will alleviate the risk of severe pain and suffering; therefore, information about “other ways” to conduct lethal injection are irrelevant. Given that Defendants fully responded to the proper aspects of this interrogatory by stating that no research about lethal gas has occurred, there is no need to consider the privileges.

*RFP #1* is similar to *Interrogatory #1* in that it essentially asks for the execution protocol. To that

extent, the Court's ruling is the same as with Interrogatory #1: Plaintiff should receive the execution protocol. RFP #1 goes further, however, seeking documents "related to the consideration and selection of the current protocols." The Scope Order determined that this was not a permissible area of discovery. (Doc. 105, p. 6.) RFP #1 also seeks documents "related" to the protocol; to the extent this seeks something beyond the protocol itself, it is vague in a myriad of respects. Assuming that Defendants provided the execution protocol, (*see* page 6, n.2), Plaintiff has received all to which he is entitled and there is no need to consider the privileges Defendants have asserted.

*RFP #2* requests several categories of documents related to the documents used in lethal injection. Most of the information sought was addressed in the Scope Order, (Doc. 105, p. 7), or the Order issued following the March 15 conference. (Doc. 163, ¶ 2.) The only category that was not previously addressed is Plaintiff's request for information about "potential chemicals" that could be used in a lethal injection. Given that Plaintiff's claim does not depend on the chemicals used, and he has not alleged that the use of alternative chemicals will reduce the risk of pain and suffering, Defendants need not respond to this aspect of RFP #2. These rulings obviate the need to consider Defendants' asserted privileges.

*RFP #3* asks for documents related to "the actual or potential chemicals" that might be used during an execution by lethal gas. Defendants object to the extent that it seeks information about the chemicals/gasses used in 1965 and before, and for the reasons discussed previously the Court agrees that such information need not be produced. Defendants also pose an objection based on deliberative process privilege, but

it is not clear whether any responsive documents more current than 1965 have been withheld. If, for example, the DOC has documents regarding the current availability of chemicals that could be used for lethal injection, such documents might be relevant and also might not be subject to the privilege. Assuming any such documents exist, Defendants must produce the documents or prepare a privilege log for any documents that are not produced based on a privilege. If no such documents exist, Defendants must certify as such.

*RFP #4* seeks documents “regarding the DOC’s selection, consideration or rejection of any actual or potential drugs to be used during an execution by lethal injection or lethal gas,” then sets forth a series of specific subjects Plaintiff considers encompassed by this request. Defendants first raise a non-privilege based objection, contending that to the extent *RFP #4* calls for documents related to the selection of the drugs to be used during lethal injection, the request exceeds the bounds set by the Scope Order. The Court agrees. (Doc. 105, p. 6.) Therefore, the request must be limited to the subject of lethal gas, and when so limited *RFP #4* is very similar to *RFP #3* – and in that respect the Court’s ruling is also the same.

*RFP #5* asks for documents “regarding the actual or potential use of a paralytic drug during an execution by lethal injection or lethal gas, including all documents related to the purpose the paralytic serves, if any, during such an execution.” Defendants first state that the lethal injection protocol does not use a paralytic drug, so there are no responsive documents related to the current protocol. The Scope Order precludes discovery on alternative methods of lethal injection, so there is no need to consider whether any documents related to alternative methods are also

privileged. Finally, given that DOC has no protocol for the use of lethal gas, it stands to reason that there are no responsive documents available.

*RFP #6* is similar to Interrogatory #6 and the Court's ruling is the same.

*RFP #7* is similar to Interrogatory #20 and Interrogatory #12, and the Court's ruling is the same.

*RFP # 8* is similar to Interrogatory #9 and the Court's ruling is the same.

*RFP #9* is similar to Interrogatory #13 and the Court's ruling is the same.

*RFP #10* is similar to portions of various interrogatories; it asks for documents related to the procedures "to prepare a prisoner for execution, including . . . steps taken to determine a prisoner's physical and/or mental fitness of execution." With the dismissal of Count II, information related to the manner in which Plaintiff is assessed before execution is not relevant. Assuming Plaintiff has been provided the execution protocol, the relevant portions of this question has been adequately answered and there is no need to further consider the privileges asserted by Defendants.

*RFP #11* asks for documents "regarding the monitoring of prisoners during an execution by lethal injection or lethal gas." Defendants have confirmed there is no protocol for execution by lethal gas. With the dismissal of Count II – including its claim that the protocol does not require adequate assessment of the prisoner during the execution – detailed information is not necessary. The Court deems it sufficient for Plaintiff to have received the execution protocol.

*RFP #12* is similar to Interrogatory #14 and the Court's ruling is the same.

*RFP #13* is similar to Interrogatory #17 and the Court's ruling is the same.

*RFP #14 and RFP #15* were answered without objections (based on privilege or otherwise) or qualifications, so there is nothing for the Court to rule on.

*RFP #16* asks for documents identifying those who treated or provided medical care to Plaintiff, "including, but not limited to, resumes, administration records, employee files, and treatment records." Defendants supplied some documents identified only by their Bates Numbers, and then objected because medical services are provided by an outside vendor and some documents (e.g., resumes and employee files) are not in Defendants' possession. Plaintiff provides no basis for overruling this objection and there is no privilege for the Court to consider.

*RFP #17 and RFP #18* ask for documents and records related to Plaintiff's medical condition, and Defendants object because there is no limitation as to time or scope. They are therefore similar to Interrogatory #19. (They are also similar to *RFP #15*, which – in contrast to *RFP #17 and RFP #18* – Defendants answered without objection.) The Court's ruling on *RFP #17 and RFP #18* is the same as for Interrogatory #19: Defendants should provide Plaintiff with all of his medical records, and prepare a privilege log for any documents that are withheld based on a privilege. *RFP #18* also asks for all documents "regarding Plaintiff;" this aspect of *RFP #18* is discussed in Part III of this Order.

*RFP #19* requires Defendants to supply "all documents referred to in, or used to answer or respond to" the Fourth Amended Complaint, the interrogatories, or the motions. Defendants' response refers to the documents that have been identified and supplied, and

objects to supplying anything beyond that because the request is “unduly burdensome, overbroad,” and calls for documents that are subject to the attorney/client and work product privileges. Given RFP #19’s breadth and the subjects addressed, the Court agrees and deems Defendants’ response to be sufficient without further identification of documents in a privilege log.

*RFP #20* asks for “[a]ll documents which refer or relate to, or support or refute, any affirmative defense you have asserted or will assert.” Defendants’ response is similar to their response to RFP #19. And, as with RFP #19, the Court deems Defendants’ response sufficient.

### III. E-Mails

During the March 15 conference, the Court discussed Plaintiff’s request for a certification from each Defendant that he undertook a good faith effort to procure responsive documents and fully respond to interrogatories. Defendants’ counsel confirmed that such a certification could be produced, and the Court stated “[i]f the defendants, then, could provide a certification to [Plaintiff] that they undertook all good faith effort[s] to procure documents and answer all interrogatories, then that seems to address this issue.” (Doc. 164, p. 22.) In the Order issued after the conference, the Court directed that “[w]ithin five business days, each Defendant shall provide a certification confirming that they undertook a good faith effort to procure documents responsive to Plaintiff’s discovery requests, and to provide answers to all interrogatories propounded by Plaintiff.” (Doc. 163, ¶ 1.) Defendants complied with this directive. (Doc. 165.)

The Motion to Compel alleges Defendants’ certifications are insufficient because they do not describe what Defendants did to search their e-mails. Defendants

do not respond to this contention; instead, they argue that they produced 76 e-mails and that this seemingly-low number is unsurprising given the Scope Order's limitations and the fact that lethal gas has not been used since 1965. (Doc. 173, p. 25.)

Defendants sent the March 30 e-mail to the Court and Plaintiff's counsel the day after they responded to the Motion to Compel. In that e-mail, Defendants revealed that in December 2016 they searched all DOC employee e-mails for the term "Bucklew" in order to ascertain the breadth of the documents responsive to RFP # 18, part of which asks for all documents "regarding Plaintiff." The search generated more than 38,000 documents. (Doc. 177-2, p. 3.) It may well be that all of the relevant, non-privileged e-mails have been produced in response to other discovery requests – but there is no way to know for certain. In their Reply Suggestions, Plaintiff represents that this is the first time that a search yielding more than 38,000 results has been mentioned, and they correctly contend that "[i]f Defendants had concerns about the number of results, the proper course of action would have been to raise the issue with Plaintiff's counsel," which would have allowed the parties to refine the search or adopt some other course to insure that all relevant e-mails were produced.<sup>4</sup>

Given the circumstances, the Court directs the parties to confer to develop search terms to further narrow the 38,000 e-mails identified in the December

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<sup>4</sup> As stated, the e-mail search was conducted in conjunction with RFP #18. The Court notes that Defendants' response to RFP #18 generally objects that the "request is vague, overly broad, and unduly burdensome" but does not mention that a search was conducted using "Bucklew" as the search term and that 38,000 e-mails were found.

2016 search. They should also discuss whether the search should be limited temporally (although there are no e-mails from before 2008 because e-mails before that date are not available) or in terms of whose e-mails should be searched.

Finally, the parties should discuss whether additional searches of DOC employees' e-mails should be conducted in order to insure that all e-mails responsive to Plaintiff's discovery request have been produced. It is possible that any searches combining "Bucklew" with additional terms will produce all relevant documents – but this point is far from certain. For instance, the March 30 e-mail also discusses a search of the Defendants' e-mails for the terms "lethal gas" and "gas chamber." The parties shall discuss whether this search should be expanded to the e-mails of others at DOC, or whether other searches utilizing other terms should be conducted.

#### IV. Conclusion

Plaintiff's Motion to Compel is granted to the extent described in Part III, and the parties shall confer within seven days of this Order and a new search of the e-mails should commence as soon as possible thereafter. The Motion to Compel is also granted with respect to Interrogatory #19 and RFP #3, RFP #4, RFP #17, and RFP #18 as described in Part II, and the responses called for by the Court's rulings should be completed within ten days. Plaintiff's Motion is denied in all other respects.

IT IS SO ORDERED.

/s/ Beth Phillips

BETH PHILLIPS, JUDGE

UNITED STATES DISTRICT COURT

DATE: April 11, 2017



STATE OF MISSOURI

[LOGO]

DEPARTMENT OF CORRECTIONS

PRE-EXECUTION SUMMARY OF  
MEDICAL HISTORY

Offender Name: Russell E. Bucklew

Age: 45 Weight: 168 Height: 5'8

ALLERGIES: Toradol, Compazine

Most Recent Vital Signs:

Temp: 98° Pulse: 109 Resp: 20  
Date: 5/2/14 Date: 5/2/14 Date: 5/2/14

B/P: 142/84 Pulse Oximetry: 99%  
Date: 5/2/14 Date: 5/2/14

Current Medications: Tramadol, clonazepam,  
hydroxyzine, gabapentin, ranitidine

Prior Surgeries: Fracture Right hand & arm,  
thoracotomy

Medical Problems: Gunshot wound to head 1996,  
Cavernous hemangioma-right half of maxilla (upper  
jaw) and upper lip present for 20 plus years, Hard of  
hearing.

Please complete the following questions based upon a review of the offender's healthcare and confinement records.

1. Has the offender recently had a cold or the flu? .....1.

Yes	No	Unknown
	✓	

2. Does the offender experience shortness of breath with activity? .....2.	✓	
3. Does the offender have Asthma, bronchitis, or any other breathing problems? .....3.	✓	
4. Does the offender wake up at night short of breath? .....4.	✓	
5. Has the offender ever had chest pain/heart attack/palpitations?5.	✓	
6. Does the offender have a heart condition/high blood pressure history or heart failure? .....6.	✓	
7. Does the offender have Diabetes or Thyroid disease? .....7.	✓	
8. Has the offender ever had Hepatitis, Jaundice, or any Liver disease? .....8.	✓	
9. Does the offender have any type of Kidney disease? .....9.	✓	
10. Does the offender have a history of Ulcers, Hiatal Hernia, or Gastric Reflux disease? .....10.	✓	
11. Does the offender have back or neck pain? .....11.	✓	

12. Does the offender have any numbness, weakness, or paralysis in the offender's arms or legs?.....12.	✓	
13. Does the offender have a history of stroke? .....13.	✓	
14. Does the offender have any muscle or nerve disease (Epilepsy or Parkinson's)? ....14.	✓	
15. Has the offender ever had a blood transfusion? .....15.		✓
16. Does the offender smoke? Has the offender ever smoked? Packs/day <u>2</u> Years smoked <u>20 yrs</u> .....16.	✓	
17. Does the offender have a history of IV drug use? .....17.	✓	

Explanation of any YES answers: 11. Complains of pain in jaw area 10. Acid reflux (medical problems)

Completed By: /s/ Deloise Will BSN Date: 5/7/14

June 17, 2008

STATE OF MISSOURI  
COUNTY OF WASHINGTON  
CERTIFICATION OF RECORDS

Before me the undersigned authority, personally appeared Robert Savage, who, being by me duly sworn, deposed as follows:

My name is Robert Savage, I am of sound mind, capable of making this affidavit, and personally acquainted with the facts herein stated.

I am a Corrections Case Manager II assigned as the Grievance Officer at Potosi Correctional Center (PCC).

Part of my assigned job duties include the custody and control of all original Grievances as they pertain to offenders at said PCC.

The original is a complete and accurate copy of PCC-14-545, filed by Offender Bucklew, Russell, Register No. 990137, as it appears in my file.

Further the affiant saith naught.

/s/ Robert Savage  
Signature of Affiant

In witness whereof I have hereunto subscribed my name and affixed my official seal this 28th day of April, 2016.

/s/ Timothy J. McFarland  
Notary Public

My Commission Expires: Dec. 11, 2016

[Seal] Notary Public

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Department of Corrections  
Medical Accountability Records System  
Lay-In/Restriction

AFP300B  
INQUIRE

12/02/14  
18:05:43

DOC ID: 00990137 BUCKLEW RUSSELL E

Nurse/Doctor: LARKIN DIANA L DLL001EM

Lay-In/Restriction:  
D0002 DRESSING SUPPLIES NEEDED IN CELL

Limits:

Comments: MAY HAVE GAUZE PADS AND  
BIOHAZARD BAG FOR C/O BLEEDING IN MOUTH

Assistive Devices:

Begin Date: 05/30/2014 Begin Time: 09:32 A

End Date: 05/30/2015 End Time: 11:59 P

Discontinue Date: 00/00/0000

F1=Help F3=Exit F12=Previous F13=Lay-In/Rest.  
F14=Comments F15=Devices

STATE OF MISSOURI  
COUNTY OF WASHINGTON  
CERTIFICATION OF RECORDS

Before me the undersigned authority, personally appeared Robert Savage, who, being by me duly sworn, deposed as follows:

My name is Robert Savage, I am of sound mind, capable of making this affidavit, and personally acquainted with the facts herein stated.

I am a Corrections Case Manager II assigned as the Grievance Officer at Potosi Correctional Center (PCC).

Part of my assigned job duties include the custody and control of all original Grievances as they pertain to offenders at said PCC.

The original is a complete and accurate copy of PCC-16-57, filed by Offender Bucklew, Russell, Register No. 990137, as it appears in my file.

Further the affiant saith naught.

/s/ Robert Savage  
Signature of Affiant

In witness whereof I have hereunto subscribed my name and affixed my official seal this 28th day of April, 2016.

/s/ Timothy J. McFarland  
Notary Public

My Commission Expires: Dec. 11, 2016

[Seal] Notary Public

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COMPLETE MEDICAL RECORD HISTORY

AFS923A

[80] DOC ID OFFENDER

00990137 RUSSELL E BUCKLEW

DOCTOR ENCOUNTER APPOINTMENT DATE  
03/20/2013

TIME 07:30 A

SHOW UP Y PCC

SUBJECTIVE

HISTORY OF COMPLAINT AND REASON S/HE  
NEEDS OBSERVATION

20130320 110643

44 yo c known large cavernous hemangioma. He reports he had severe pain upon leaving his cell last PM, became lightheaded and ? LOC but no injury. He was CODE 16; nl vital sings [sic], and pt did not want any further intervention.

Later he was another CODE 16 c/o facial pain c bleeding from hemangioma.

Pt was brought to medical and on-call physician ordered Vicodan [sic]. Bleeding ceased c pressure per gauze.

This AM Mr. Bucklew has eaten, up ad lib, no continued bleeding and is ready to return to his H-U.

Past Med Hx: ENT recommendation per note of 4/12/12 that he does not advised [sic] any additional intervention.

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OBJECTIVE

PERTINENT PE FINDINGS, LAB OR XRAY, VS  
INCLUDING WEIGHT

General: pt was on a mattress on the floor from which he arose and stood s difficulty. Mr. Buckles did not appear in any distress.

Face: + cavernous hemangioma Rt side of upper lip, to Rt side of nose, buccal mucosa, hard palate, and large uvula. No bleeding found.

ASSESSMENT

STATUS OF PATIENT

-Cavernous hemangioma; bleeding ceased and pt is stable.

20130320 110644

PLAN

TREATMENT PLAN

He may be released back to his H-U. No change in care.

DOCTOR WDM00#EM WILLIAM D MCKINNEY

SPECIFIC CHARTING INFORMATION

20130320 080253

03/20/2013 Doctor/Dentist encounter MSR filed

MSR DATE TIME COMPLAINT

03/20/2013 10:15A QMHP - CHRONIC CARE  
ENCOUNTER

SPECIFIC CHARTING INFORMATION

20130320 101549

03/21/2013 Technician/MH encounter MSR filed

MSR DATE TIME COMPLAINT



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03/20/2013 12:13 P INFIRMARY CARE-NURSE

NURSE ENCOUNTER APPOINTMENT DATE  
03/20/2013 TIME 07:00 A SHOW UP Y PCC

20130320 122216

SUBJECTIVE

PATIENT COMMENTS: tcu rounds

\_ PAIN ON 0-10 SCALE

\* \* \*

[110] DOC ID OFFENDER

00990137 RUSSELL E BUCKLEW

SUBJECTIVE CONTINUATION FROM PREVIOUS  
PAGE

20131028 084732

located in area of Rt eye and ear; awakening him from  
sleep early yesterday AM.

Pt reports, "it blew" meaning started bleeding in Rt  
post area of his mouth c relief.

Pt had dizziness c above pain; now much better.

OBJECTIVE

BP 124/082 PL085 RS016 TP0978 WT162 BS000  
PF000

Does not appear in acute distress this AM. Gait is  
fluid, steady, and on/off exam table c ease.

Oral cavity: large cavernous hemangioma on Rt, no  
current active bleeding.

ASSESSMENT

- Facial cavernous hemangioma.

691

PLAN

20131028 084733

- Pt understands this is expected course for his problem as previously described by ENT, Dr. Zitsch per note of 4/18/12.

- Pt will need gauze and biohazard bags PRN due to bleeding.

DOCTOR WDM00#EM WILLIAM D MCKINNEY

SPECIFIC CHARTING INFORMATION

10/28/2013

Doctor/Dentist encounter MSR filed

20131027 184003

MSR DATE TIME COMPLAINT

10/27/2013 10:00 P ACCIDENT/CODE 16

NURSE ENCOUNTER APPOINTMENT DATE

10/27/2013 TIME 09:00 P SHOW UP Y PCC

20131027 220713

SUBJECTIVE

code 16 called

OBJECTIVE

905pm pt in room, was actively bleeding from the mouth, gauze was in place upon arrival, bp 128/90 alert x3, c/o blurry vision, pain on rt side of face. Bleeding stopped after a few minutes with gauze reapplied. resp even/nonlabored, skin pale w/d. Pt stated "didn't eat" "I know there's nothing you can do for me". Pt received prn pain med earlier this date. Assisted to room to rest on bed. informed of DSC made for in the am for earlier c/o. see previous note.

692

ASSESSMENT  
ALT IN COMFORT

PLAN  
DSC

NURSE ARM00#EM ANGELA R MALLOY

BILL SUMMARY

1st Session of the 55th Legislature

Bill No.: HB1879  
Version: INT  
Request Number: 6354  
Author: Rep. Christian  
Date: 2/4/2015  
Impact: Minimal

Research Analysis

Please see previous summary of this measure.

Prepared By: Marcia Goff

Fiscal Analysis

HB1879 would allow death by nitrogen hypoxia to inmates facing the death penalty. Currently, it costs the Department of Corrections approximately \$500.00 per execution. This number could vary, but because of secrecy laws regarding Oklahoma executions, it is impossible, at this time, to get a precise figure.

Nitrogen hypoxia would be relatively cost effective, and could, in fact, have a positive effect on DOC's budget. The costs would be minimal and include the one time purchase of a gas mask (similar to what one experiences at the dentist), and the price for a canister of nitrogen.

Prepared By: Joshua Maxey

Other Considerations

None.

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IN THE SUPREME COURT OF  
THE STATE OF OKLAHOMA  
IN THE DISTRICT COURT OF  
OKLAHOMA COUNTY

[Filed: May 19, 2016]

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Case No. SCAD-2014-70  
D.C. Case No. GJ-2014-1

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IN THE MATTER OF THE MULTICOUNTY  
GRAND JURY, STATE OF OKLAHOMA

---

INTERIM REPORT NUMBER 14

The Fifteenth Multicounty Grand Jury of Oklahoma received evidence in its session held on May 17 through 19, 2016. In this session, the grand jury received testimony of witnesses, and numerous exhibits, in several different matters. The grand jury also returned one (1) Indictment which was returned to the Presiding Judge in Open Court for review and further action pursuant to law.

FINDINGS OF THE FIFTEENTH MULTICOUNTY  
GRAND JURY AS TO THE USE AND ATTEMPTED  
USE OF POTASSIUM ACETATE BY THE  
OKLAHOMA DEPARTMENT OF CORRECTIONS IN  
THE EXECUTION OF INMATE CHARLES  
FREDERICK WARNER AND THE SCHEDULED  
EXECUTION OF INMATE RICHARD GLOSSIP

The Fifteenth Multicounty Grand Jury of Oklahoma received evidence in its sessions held in October, November, and December 2015, and January, February, March, April, and May 2016, related to the use and

attempted use of potassium acetate by the Oklahoma Department of Corrections (“Department”) in the execution of Charles Frederick Warner (“Warner”) and the scheduled execution of Richard Eugene Glossip (“Glossip”). The Multicounty Grand Jury finds that Department of Corrections staff, and others participating in the execution process, failed to perform their duties with the precision and attention to detail the exercise of state authority in such cases demands, to wit:

- the Director of the Department of Corrections (“Director”) orally modified the execution protocol without authority;
- the Pharmacist ordered the wrong execution drugs;

\* \* \*

grand jury subpoenas, including responsive documents containing unredacted privileged information. Numerous Department employees have voluntarily participated in interviews with investigators assisting this Grand Jury, and several Department employees have provided testimony.<sup>391</sup>

- a. The Department should retain experts to advise the State on the newly-enacted alternative to lethal injection—Nitrogen Hypoxia.

During his testimony before the Grand Jury, the Department’s General Counsel discussed the challenges the Department faces in carrying out executions by lethal injection. The Department’s General Counsel

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<sup>391</sup> Indeed, the Director flew back to the State of Oklahoma on extremely limited notice to accommodate this grand jury’s schedule.

explained that qualified doctors are often unwilling to assist or are prohibited from assisting in executions due to their medical ethics and professional societies' rules, even banning certain types of doctors from even being present at executions. Further, obtaining proper drugs from pharmacies has become increasingly difficult since pharmaceutical companies are limiting their supplies of lethal injection drugs,<sup>392</sup> and pharmacies themselves are often unwilling to supply drugs to the Department due to privacy and safety concerns.

During this session, the Multicounty Grand Jury also heard testimony from Doctor A and Professor A regarding the viability of nitrogen hypoxia as an alternate method of execution. In 2015, the Oklahoma State Legislature added this method as the first alternative after lethal injection. According to the statute, in the event lethal injection is held unconstitutional or is otherwise unavailable, the death sentence can be carried out by nitrogen hypoxia.

Both Doctor A and Professor A testified executions carried out by nitrogen hypoxia would be humane, and as nitrogen is the most abundant element in our atmosphere, the components for execution via nitrogen hypoxia would be easy and inexpensive to obtain. Nitrogen is also simple to administer. The scientific research regarding nitrogen hypoxia has shown this method of execution would be quick and seemingly painless. In addition to scientific research, Professor A explained that high altitude pilots who train to recognize the symptoms of nitrogen hypoxia in airplane

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<sup>392</sup> During the course of this investigation, Pfizer announced it would prohibit the use of its drugs in executions. Included on the list are midazolam, pancuronium bromide, rocuronium bromide, vecuronium bromide, and potassium chloride, all included in Chart D of Oklahoma's Execution Protocol.

depressurizations do not report any feelings of suffocation, choking, or gagging. Doctor A testified that a person in a nitrogen-induced hypoxic state would lose consciousness quickly, and the heart would cease to beat within a few minutes. At present, however, no State has implemented the death penalty through nitrogen hypoxia, although it is an approved method of execution in Oklahoma.

Since Oklahoma would be the first State to conduct executions by nitrogen hypoxia, it is the recommendation of the Multicounty Grand Jury that further research, including a best practices study, be conducted to determine how to carry out the sentence of death by this method. To that end, the Multicounty Grand Jury recommends the Department retain experts to advise the State regarding the best method for carrying out executions by nitrogen hypoxia with the goal of developing a nitrogen hypoxia protocol. However, while the Department begins its study into nitrogen hypoxia as a viable method of execution, the State of Oklahoma should still seek to carry out executions by lethal injection and improve upon its current protocol.

- a. The Execution Protocol lacked controls to ensure the proper execution drugs were obtained and administered.
  - i. The Execution Protocol was vague and poorly drafted.

With the exception of retaining qualified medical personnel, the execution process was a procedural failure, from drafting to implementation. The Protocol, drafted after the Lockett

\* \* \*



*The Report of the*

## Oklahoma Death Penalty Review Commission

The Oklahoma Death Penalty Review Commission is an initiative of The Constitution Project®, which sponsors independent, bipartisan committees to address a variety of important constitutional issues and to produce consensus reports and recommendations. The views and conclusions expressed in these reports, statements, and other material do not necessarily reflect the views of members of its Board of Directors or its staff. For information about this report, or any other work of The Constitution Project, please visit our website at [www.constitutionproject.org](http://www.constitutionproject.org) or e-mail us at [info@constitutionproject.org](mailto:info@constitutionproject.org).

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1) The execution protocol should be revised again to clearly define terms and duties.<sup>180</sup>

2) ODOC should consider adding potassium acetate to the protocol.<sup>181</sup>

3) The protocol should require verification of execution drugs at every step.<sup>182</sup> Passage of Senate Bill 884 will put ODOC in a position to register with the OBNDD and store execution related drugs on-site.<sup>183</sup> ODOC should require the drugs be ordered in writing and specifically forbid drug substitution.<sup>184</sup> Recognizing ODOC's confidentiality interests, the grand jury recommended "[i]f necessary, legislation should be sought exempting from disclosure the order form and related documents that could be used to identify the pharmacist, wholesaler, and/or physician taking part in the acquisition of execution drugs."<sup>185</sup>

4) Administrators should not serve in dual roles.<sup>186</sup> For example, the warden should not have both administrative contact with condemned prisoners in the thirty-five days leading up to the execution, as required by the protocol, and later take an active role in the execution.<sup>187</sup> ODOC should follow state laws requiring the documentation of purchases and inven-

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<sup>180</sup> *Id.* at 101.

<sup>181</sup> *Id.*

<sup>182</sup> *Id.*

<sup>183</sup> *Id.*

<sup>184</sup> *Id.*

<sup>185</sup> *Id.*

<sup>186</sup> *Id.* at 102.

<sup>187</sup> *Id.*

tories while safeguarding the privacy of those participating in execution of the death penalty.<sup>188</sup>

5) An independent third party, bound by confidentiality, should be responsible for conducting the post execution Quality Assurance Review.<sup>189</sup> Individuals involved in the execution process must be thoroughly trained on the execution protocol.<sup>190</sup> Individuals must be free to “question anything that appears out of the ordinary” and “anything they observe that does not seem right.”<sup>191</sup> To increase accountability, ODOC should consider appointing an ombudsman to be on-site during executions and available to execution team members who need anonymity to feel comfortable raising concerns.<sup>192</sup>

#### IV. Recent Developments Regarding Alternative Methods of Execution

In the face of the declining administration of the death penalty, due in large part to de facto moratoriums resulting from problems with executions and lethal injection litigation, several states—including Oklahoma, Utah, and Tennessee—have passed legislation authorizing the use of other methods of execution, both old and new. In March 2015, Utah brought back the firing squad.<sup>193</sup> In September 2014, Tennessee passed legislation making use of the electric chair

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<sup>188</sup> *Id.*

<sup>189</sup> *Id.* at 104.

<sup>190</sup> *Id.* at 105.

<sup>191</sup> *Id.*

<sup>192</sup> *Id.*

<sup>193</sup> Brady McCombs, *Utah Brings Back the Firing Squad, so How Does It Work?*, ASSOCIATED PRESS, Mar. 24, 2015, <https://www.yahoo.com/news/utahs-firing-squad-does-071036815.html>.

compulsory if drugs used for the state's lethal injection protocol could not be obtained.<sup>194</sup> In Oklahoma, State Question 776—a voter referendum on the November 2016 ballot—passed overwhelmingly.<sup>195</sup> The measure allows for the state to designate any method of execution if the current method is found unconstitutional.<sup>196</sup>

These measures, however, may be largely symbolic. Whether electrocution, lethal gas, or death by firing squad offers states alternatives that are viable or sustainable for the practical administration of the death penalty is being debated across the country. States switched to lethal injection from the electric chair or the gas chamber in large part because it was significantly less expensive, but states also moved away from those methods because they were prone to gruesome spectacle.<sup>197</sup>

Since 2006, only seven out of 444 executions in the U.S. used methods other than lethal injection—six by electrocution and one by firing squad.<sup>198</sup> Between 2006

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<sup>194</sup> Ed Payne & Mariano Castillo, Tennessee to Use Electric Chair When Lethal Drugs Unavailable, CNN (Sept. 8, 2014), <http://www.cnn.com/2014/05/22/us/tennessee-executions>.

<sup>195</sup> 66.36% of voters supported State Question 776, while 33.64% voted against the measure. See Oklahoma Election Results, Oklahoma Board of Elections, [https://www.ok.gov/elections/support/20161108\\_seb.pdf](https://www.ok.gov/elections/support/20161108_seb.pdf) at p.29 (2016).

<sup>196</sup> *State Question that Protects the Death Penalty in Oklahoma Passes Overwhelmingly*, KFOR-TV (Nov. 8, 2016), <http://kfor.com/2016/11/08/state-question-that-protects-the-death-penalty-in-oklahoma-passes-overwhelmingly/>.

<sup>197</sup> STUART BANNER, *THE DEATH PENALTY: AN AMERICAN HISTORY* (2002).

<sup>198</sup> See *Searchable Execution Database*, DEATH PENALTY INFO. CTR., <http://www.deathpenaltyinfo.org/views-executions> (under “Year” filter by “2006” through “2017”) (last visited Mar. 8, 2017).

and 2013, Virginia electrocuted four individuals—all of whom chose the method over lethal injection—and South Carolina and Tennessee performed one execution each by electrocution.<sup>199</sup> Utah is the only state that has performed executions by firing squad. It has used the method three times in its history, most recently in 2010.<sup>200</sup>

In April 2015, Oklahoma’s governor signed legislation authorizing execution by nitrogen gas as a backup method in the event that lethal injection drugs cannot be obtained or lethal injection is declared unconstitutional. Electrocution would be authorized if nitrogen gas were disallowed. The legislation also allows for execution by firing squad as a method of last resort if all other methods are barred.<sup>201</sup>

A member of the Oklahoma House of Representatives arranged for several researchers from East Central University to research the question of whether nitrogen hypoxia could serve as an “effective and

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<sup>199</sup> See *id.* (under “Year” filter by “2006” through “2013” and under “Method” filter by “Electrocution” and “Firing Squad”) (last visited Mar. 8, 2017).

<sup>200</sup> *Descriptions of Execution Methods: Firing Squad*, DEATH PENALTY INFO. CTR., <http://www.deathpenaltyinfo.org/descriptions-execution-methods?scid=8&did=479#firing> (last visited Mar. 8, 2017).

<sup>201</sup> See Sandra Davidson & Michael Barajas, *Masking the Executioner and the Source of Execution Drugs*, 59 ST. LOUIS L.J. 45, 88 (2014) (“Oklahoma law says that firing squads will only be used if both lethal injection and electrocution are declared constitutionally infirm.”); Austin Sarat, *The Trouble with Oklahoma’s New Execution Technique*, POLITICO, Apr. 4, 2015, <http://www.politico.com/magazine/story/2015/04/oklahoma-death-penalty-gas-chamber-117156>; *Methods of Execution*, DEATH PENALTY INFO. CTR., <http://www.deathpenaltyinfo.org/methods-execution?scid=8&did=245#ok> (last visited Mar. 6, 2017).

humane alternative” to the methods of execution currently authorized by Oklahoma law.<sup>202</sup> The researchers found that executions by nitrogen hypoxia would be humane, not require the assistance of medical professionals, be simple to administer, and not depend on the cooperation of the prisoner. They also found that nitrogen is readily available for purchase and availability would not be a problem. Based on these findings, the study recommended that “inhalation of nitrogen be offered as an alternative method of administering capital punishment in the state of Oklahoma.”<sup>203</sup> However, ODOC has not promulgated a protocol for execution by nitrogen hypoxia.<sup>204</sup>

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<sup>202</sup> Michael P. Copeland et al. *Nitrogen Induced Hypoxia as a Form of Capital Punishment* at 2, <https://localtvkfor.files.wordpress.com/2015/03/nitrogen-hypoxia.pdf> [hereinafter *Nitrogen Induced Hypoxia*]. State Rep. Mike Christian, who introduced the bill, told *The Huffington Post* that death by nitrogen asphyxiation was “revolutionary” and that “it’s cheaper than lethal injection, which he estimates costs around \$500 per execution.” See Jake Godin, *Nitrogen Backup Plan Is Another Okla. Execution First*, NEWSY, Apr. 18, 2015, at <http://www.newsny.com/videos/nitrogen-backup-plan-is-another-okla-execution-first>. The investigation into nitrogen gas is the first known instance of a state official in Oklahoma seeking scientific and medical research into a method of execution prior to selecting that method.

<sup>203</sup> However, the authors of the Report acknowledged the lack of scientific literature addressing the effectiveness of nitrogen for the purpose of carrying out executions. The available data was limited to experiments involving human subjects breathing nitrogen until they became unconscious, documented suicides involving nitrogen, and research into high altitude pilot training. *Nitrogen Induced Hypoxia*, *supra* note 202, at 4.

<sup>204</sup> A collateral recommendation of the multicounty grand jury convened to review the execution of Charles Warner was that ODOC should retain experts to advise the State on the newly-enacted alternative to lethal injection, nitrogen hypoxia. *Grand*

## V. Conclusion and Recommendations

Recent problems with executions—in both Oklahoma and other death-penalty jurisdictions—have resulted in greater public scrutiny of execution protocols. Absent implementation of the following recommended measures or similar reforms, the efficacy, transparency, and humaneness of Oklahoma’s execution procedures will likely remain in question, and, thus, arguably constitutionally infirm. The Commission’s recommendations fall under two broad categories: first, the established execution protocol; and second, transparency and accountability in adherence to that protocol.

### Recommendation 1:

Oklahoma should adopt the most humane and effective method of execution possible, which currently appears to be the one-drug (barbiturate) lethal injection protocol. Oklahoma should develop a process for continuous review of its execution protocol to ensure that the state is using the most humane and effective method possible.

Because variations on the three-drug protocol—in Oklahoma and elsewhere—have failed to provide a reliable, humane, and effective method of execution, and because one-drug protocols have not demonstrated comparable failings and appear to present fewer problems, Oklahoma policymakers should strongly consider replacing Oklahoma’s present three-drug protocol with a one-drug protocol. Currently, the one-drug protocol appears to be the “best practice.”

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*Jury Report, supra* note 5 at 76. Further, “[i]t is the recommendation of the Multi-county Grand Jury that further research, including a best practices study, be conducted to determine how to carry out the sentence of death by this method.” *Id.* at 77.



Oklahoma policymakers should continue to investigate humane and effective means for carrying out executions, particularly with respect to lethal injection.

Recommendation 2:

The Oklahoma Department of Corrections should revise its execution protocol to provide clear direction to department personnel involved in preparing for and carrying out executions. These revisions should, at minimum, provide comprehensible definitions for potentially ambiguous terms within the protocol and specify who within the department's chain of command has the authority and responsibility to perform critical steps in the execution process.

This recommendation echoes the first recommendation of the May 2016 report of the multicounty grand jury (*Grand Jury Report*), which was convened in October 2015 to study the Oklahoma Department of Corrections (ODOC) execution protocol. In its 105-page report, the grand jury ultimately recommended that the execution protocol be revised again. In identifying systemic problems with executions in Oklahoma, the *Grand Jury Report* noted that ODOC's execution protocol "in place for the [Charles] Warner execution and the scheduled [Richard] Glossip execution failed to define key terms and failed to clearly assign duties in some instances."<sup>205</sup> The Commission understands that ODOC is presently revising its execution protocol and hopes that it will include these suggestions regarding clear definitions and delineation of authority and responsibilities.

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<sup>205</sup> *Id.* at 101.

## Recommendation 3:

With respect to lethal injection as an execution method, the Oklahoma Department of Corrections should amend its written execution protocol to require verification—at the point of acquisition and at all stages of the execution process—that the proper drug(s) for carrying out the execution have been obtained and will be used in any execution. The protocol should prohibit drug substitutions not specified within the protocol itself and should require that all drug purchases be in writing. If necessary to protect the confidentiality of suppliers, the Legislature should amend Oklahoma law to exempt the order form and related documents from disclosure.

This recommendation tracks recommendations in the *Grand Jury Report*. First, the report recommends the new protocol “require verification of execution drugs at every step.”<sup>206</sup> Further, the recommendations advise that administrators of the ODOC execution protocol should be “fully focused” on performing their duties, “including any new safeguards put in place to verify that proper drugs are received.”<sup>207</sup> The *Grand Jury Report* also recommends that ODOC “should follow laws regarding the documentation of purchases and inventories while still safeguarding the privacy of those participating in execution of the death penalty.”<sup>208</sup> The Commission fully supports these recommendations by the grand jury.

To be sure, the Commission believes that pharmacists and those involved in executions may have impor-

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<sup>206</sup> *Id.* at 101.

<sup>207</sup> *Id.* at 103.

<sup>208</sup> *Id.*

tant confidentiality interests that should be protected. These interests, however, should be balanced against the public interest in governmental accountability, which demands ODOC policies and protocols to be appropriately performed and properly documented.

Recommendation 4:

All government personnel involved in carrying out an execution, as well as those individuals contracted with the government to provide services related thereto, should be thoroughly trained and evaluated on all relevant aspects of the Oklahoma Department of Corrections' execution protocol.

This recommendation tracks the *Grand Jury Report* recommendation related to training: "Individuals involved in the execution process must be thoroughly trained on the Execution Protocol."<sup>209</sup> As that investigation detailed, "*most* Department employees profoundly misunderstood the [ODOC Execution] Protocol."<sup>210</sup> This recommendation includes the appointment of an independent ombudsman, who would be onsite during executions.<sup>211</sup>

Recommendation 5:

The director of the Oklahoma Department of Corrections (ODOC) should deliver to the governor, at least 48 hours prior to any scheduled execution, a written, signed certification that the director has confirmed that all aspects of the execution protocol have been followed, including: ensuring that all personnel who will participate in the upcoming execution have been adequately trained and prepared; ensuring

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<sup>209</sup> *Id.* at 105.

<sup>210</sup> *Id.*

<sup>211</sup> *Id.* at 105-06.

that the necessary equipment and facilities that will be used are adequate and satisfy the standards promulgated within ODOC's execution protocol; and ensuring that any drugs that will be used have been obtained pursuant to and are consistent with ODOC's execution protocol.

In addition to the post-execution review recommended in the *Grand Jury Report*, this Commission believes a *pre-execution* review—before an irreversible error can occur—should be conducted. During that review, the ODOC director should ensure and certify in writing to the governor that all individuals involved in the ODOC execution protocol are adequately trained and prepared. The *Grand Jury Report* emphasizes such training should be “something more than repeated dry-runs and walk-throughs. Each person involved in the IV Team and Special Operations Team should know the Protocol, the drugs to be used, and the order in which they are to be administered. They should also know that no other chemical may be substituted unless specifically authorized in the policy and protocol (and with proper advance notice to the offender).”<sup>212</sup> We agree and believe similar principles should guide a review *before* an execution is to take place.

Recommendation 6:

In the event that lethal injection will be used to carry out the execution of a condemned inmate, the inmate should be provided written notice as to which drug(s) will be used at least 20 days prior to the scheduled execution.

The Commission believes that a condemned inmate is entitled to know which drugs will be used in their

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<sup>212</sup> *Id.* at 105.

execution. While Oklahoma statute prohibits disclosure of information identifying the source of execution drugs, information should still be provided to the condemned inmate regarding the name, safety, and efficacy of the drugs—e.g., explaining that the drugs are approved by the U.S. Food and Drug Administration or, if compounded, that the drugs have been tested and the results provided to the prisoner—without violating statute, either under seal or through document redaction.

Recommendation 7:

Following any execution, an independent third party should conduct a thorough quality assurance review to determine whether state laws, regulations, and protocols were properly followed before, during, and immediately after the execution. It is important that the independent third party be required to maintain the confidentiality of any sources for information. The independent third party's findings should be communicated in a timely fashion to the Oklahoma Department of Corrections, the Oklahoma Legislature, and the governor's office, while also being made available to the public.

This recommendation is based on the fifth recommendation of the *Grand Jury Report*, which calls for an independent third party to perform a review to ensure that ODOC's execution protocol has been properly performed.<sup>213</sup> The independent third party should ensure that the review is robust and not merely cosmetic, and that adherence is safeguarded by independent oversight.

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<sup>213</sup> *Id.* at 104-105.

UNITED STATES DISTRICT COURT FOR THE  
WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 4:14-CV-08000-BP

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RUSSELL BUCKLEW,  
*Plaintiff,*

v.

GEORGE LOMBARDI, *et al.*  
*Defendants.*

---

DEFENDANT LOMBARDI'S SUPPLEMENTAL  
RESPONSE TO PLAINTIFF'S FIRST SET OF  
INTERROGATORIES

Defendant George A. Lombardi, by and through  
counsel, submits the following supplemental responses  
and objections to Plaintiff's first set of interrogatories:

INTERROGATORIES

\* \* \*

INTERROGATORY NO. 6:

Describe in detail all documents, records, or  
communications related to the viability or feasibility  
of lethal gas as an execution method in Missouri.

ANSWER TO INTERROGATORY NO. 6: Subject to,  
and without waiving the objections included in my  
original answer, I supplement my response as follows:

I served as Department Director for approximately  
8 years between January 2009 and January 2017. In

my position as Director of the Department of Corrections, I did not possess documents or records “related to the viability or feasibility of lethal gas as an execution method in Missouri.” I did have communications “related to the viability or feasibility of lethal gas as an execution method in Missouri” but the communications were held with legal counsel and are protected by attorney/client privilege. I do not recall the specific dates or times of these discussions, and can recall only two discussions.

I served as the Director for the Division of Adult Institutions for approximately 19 years from 1986 until 2005. In my position as Division Director, I possessed records “related to the viability or feasibility of lethal gas as an execution method in Missouri.” However, these records pertained to an evaluation conducted in 1987-1988 to determine whether DOC’s only gas chamber, located at the Missouri State Penitentiary, was functional. Ultimately, DOC abandoned lethal gas and adopted lethal injection after the General Assembly authorized lethal injection as a method of execution in Missouri. A copy of the non-privileged records pertaining to this research into lethal gas are attached. The only document being withheld is a memorandum dated September 1, 1988, from a Department of Corrections Deputy General Counsel to Bill Armontrout, Warden of the Missouri State Penitentiary, on the basis of attorney/client privilege.

Due to the passage of time, I do not recall any specific communications “related to the viability or feasibility of lethal gas as an execution method in Missouri” that occurred during my tenure as Division Director beyond what is memorialized on the attached records.

## INTERROGATORY NO. 20:

Describe in detail any research or review of any method of execution by any DOC employee or agent or any communications between any DOC employee or agent and any other person concerning a method of execution, including execution by lethal injection, lethal gas, firing squad or electrocution, and the feasibility of any of those methods.

ANSWER TO INTERROGATORY NO. 20: Subject to, and without waiving the objections included in my original answer, I supplement my response as follows:

In my position as Department Director, I did not conduct research concerning the feasibility of lethal gas as a method of execution in Missouri and did not direct anyone to do any research concerning the feasibility of lethal gas as a method of execution in Missouri. As discussed in Interrogatory 6, I can recall only two discussions regarding lethal gas. Both communications were with legal counsel and were privileged attorney/client communications. I do not recall the specific dates and times of those communications.

In my position as Division Director, I conducted research concerning the feasibility of lethal gas as a method of execution during the late 1980s. Smoke was used to test the gas chamber. The test revealed that any gas used would have leaked out of the chamber. Documents detailing the research and review of the gas chamber were produced in response to Interrogatory Request 6. Due to the passage of time, I do not recall any specific communications that occurred during my tenure as Division Director beyond what is memorialized on the records provided.



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Respectfully submitted,

JOSHUA D. HAWLEY  
Attorney General

/s/ Michael Spillane

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RESPONSE TO 6 AND 20  
BATES NOS. 9902184-9902193

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[Handwritten] jw. Place in Gas Chamber file MSS

RECEIVED AUG 11 1987

[illegible]

EXECUTIVE ASSISTANT

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES

MISSOURI STATE PENITENTIARY

P.O. BOX 597

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Phone: 314-751-3224

August 10, 1987

TO: JIM SCHULTE, BUSINESS MANAGER

/s/ Bill M. Armontrout

FROM: BILL M. ARMONTROUT, WARDEN

SUBJECT: EQUIPMENT FOR GAS CHAMBER

I want a priority placed on ordering the following equipment for use in the gas chamber. (The safety of the staff depends on the exact gas mask and canisters being ordered and not substituted.)

1. 4 each – full length rubber aprons
2. 4 pair – rubber boots
3. 4 each – sets of long rubber gloves
4. 8 each – sound powered telephone headsets and chargers
5. 6 each – gas masks (Mine Safety Appliance Catalog – ED-15762 for protection against hydrocyanic acid gas [sic])
6. 12 each – replacement canisters for gas mask, #ED-3055 (for use with hydrocyanic acid mask)
7. 12 each – replacement canisters for gas mask, #3051 (for use with ammonia)

Attached is the sound powered communication system to be ordered.

BA/pb

Attachment

cc: Larry Henson

Mark Schreiber

**\*\* AN EQUAL OPPORTUNITY EMPLOYER \*\***

*Services provided on a Nondiscriminatory basis*

# Portables

The MAXON is a portable compact handheld transmitter/receiver that features four channels of operation and five watts of R.F. power. Available in VHF and UHF models, the MAXON is the smallest radio available in this high-power range. Heavy duty aluminum die-cast frame and intrinsically safe models are also available. Compatible with other brands of radio equipment as well as combination two-way and paging systems. Consult our salespeople for your specific application requirements.

All MAXON radio equipment is warranted for a period of 6 months. Our 48-hour turnaround on service will minimize your downtime.

## VHF, UHF, 5WT, 4CH

All MAXON portables feature 5 watt, 4 channel capacity. Include crystals on CH1, CH2, CH3, CH4 require an additional crystal. Flexible antenna. Ni-Cad battery pack, walk-type charger, belt clip and owner's manual. (Leather protective sleeve with CS-0510 and CP-0520 only.)

### VHF

CS-0510 VHF 144 to 174 MHz \$149.75  
 CS-0510HD VHF 144 to 174 MHz \$199.75  
 die-cast aluminum frame \$409.75  
 CP-0510HDT1\* VHF 144 to 174 MHz, intrinsically safe \$459.75

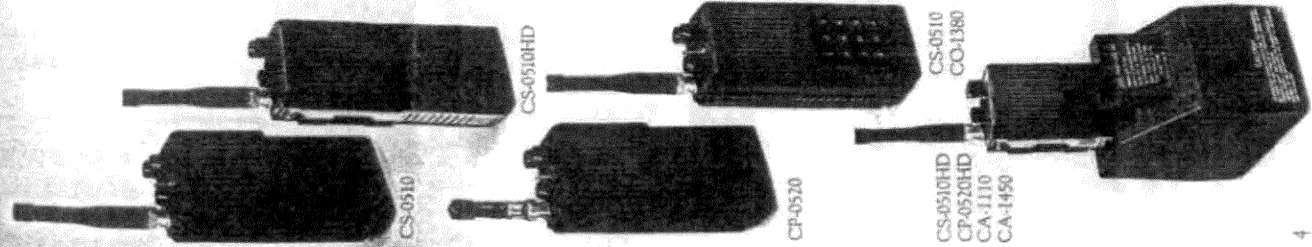
### UHF

CP-0520 UHF 450 to 470 MHz \$199.75  
 CP-0520HD UHF 450 to 470 MHz \$459.75  
 die-cast aluminum frame  
 CP-0520HDT1\* UHF 450 to 470 MHz, intrinsically safe \$509.75

### ACCESSORIES

CA-CRY Crystal (two per channel required) \$15.00  
 CA-PM MAXON privacy module, CTCSS tone squelch \$64.00  
 CA-VHFV VHF flexible antenna \$15.00  
 CA-UHFV UHF flexible antenna \$15.00  
 CA-UHFS UHF stubby antenna \$15.00  
 CA-1450 Ni-Cad battery pack, 450 mAh \$39.75  
 CA-1410 Walk-type charger \$9.75  
 CA-1110 Single unit "rapid" desktop charger \$43.75  
 CA-6110 Six unit "rapid" desktop charger \$239.75  
 CA-1440 Belt clip \$4.75  
 CA-1430 Leather protective sleeve \$7.75  
 CA-1445 Spare swivel belt loop \$10.75  
 CA-1455 Leather holder with swivel belt loop \$29.75  
 CA-1465 Leather holder with swivel belt loop for HD series portable \$34.75  
 CA-1395 Leather holder with swivel belt loop for portables with DTMF key pad \$29.75  
 CO-1380 DTMF key pad, used with telephone interconnect \$125.00  
 AAD-CA Antenna adapter, converts portable to external mobile or base antenna \$6.95

\*Intrinsically safe rating for Classes I, II, III, Division 1, 2, Groups A, B, C, D, E, F and G.



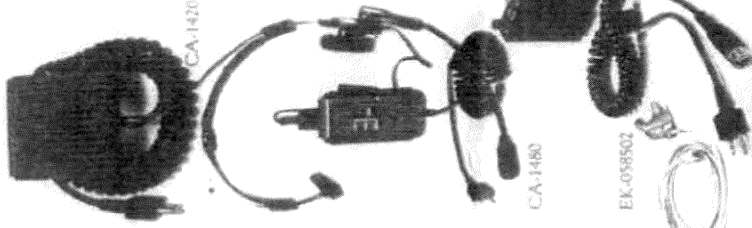
## PAGING CAPABILITY WITH TWO-WAY

CA-1475 Two tone sequential decoder. Required to convert VHF/UHF MAXON portable into selective paging receiver \$99.75

CA-1112 Encoder only module. Required (in addition to CA-1475) when used in conjunction with base station that has tone coded squelch privacy module \$47.75

## HEADSET/SPEAKER MICROPHONE

CA-ERPH Earphone \$5.00  
 CA-1420 Speaker microphone with lavalier clip \$19.75  
 CA-1480 Headset with VOX/PTT module (VOX - activation of microphone for hands-free communication, PTT push to talk for controlled conversation). Requires CA-1410 charger \$79.75  
 CA-1481 Spare headset, can be used as a direct plug-in into microphone jack of portable \$24.75  
 EK-058521 The EK-2000 EAR-MIC combination earphone and microphone allows user to speak and listen through the ear. Complete EAR-MIC package includes control module with PTT interface cable, with jack, ear transducer/microphone with semi-custom fitted ear plug and 9 volt battery \$149.75  
 EK-058502 Spare ear transducer/microphone \$35.00  
 EK-058503-SL Spare ear plug, small-left \$10.00  
 EK-058503-SR Spare ear plug, small-right \$10.00  
 EK-058503-ML Spare ear plug, medium-left \$10.00  
 EK-058503-MR Spare ear plug, medium-right \$10.00  
 EK-058503-LJ Spare ear plug, large-left \$10.00  
 EK-058503-LR Spare ear plug, large-right \$10.00



## JOBCOM

JOBCOM is a complete line of portable two-way radio equipment. From the low cost 1 watt model through the high-power JOBCOM 7, there is a radio available to fit every need at an affordable price.

The most popular radio in this line is the JOBCOM model RF15C. This radio operates with an R.F. power output of 1 watt and provides crystal clear communication at distances up to two miles. The JOBCOM operates on an FM frequency that will penetrate steel and concrete buildings. The RF15C is offered in another model designated the RF15H which is identical to the basic radio, except the RF15H is supplied complete with an earphone/headset unit that permits hands-free voice operated communication.

One of our salespeople will be happy to assist you in the selection of a particular JOBCOM to best suit your application.

Thousands of the JOBCOM series radios have been sold to schools, industry, construction, business and government agencies. All JOBCOM radios are protected by a 6-month warranty on all parts and labor.

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[RECEIVED JUL 27 1987 ENGINEERING OFFICE  
Missouri State Penitentiary]

*PAGECOM*

July 20, 1987

Mr. E Larkins  
Chf Engr  
State of Missouri  
Pw Engrg Dept  
631 State St Box 236  
Jefferson City, MO 65101

Dear Mr. Larkins:

PAGE-COM continues to offer the finest communication equipment at the lowest possible price. With budgetary considerations limiting your equipment purchases, we urge you to investigate our entire line of radio equipment. In many cases your communication dollar will buy significantly more PAGE-COM equipment without sacrificing performance or reliability.

Enclosed is our catalog for your reference. Virtually all of our prices have remained unchanged. New products have been added throughout the catalog.

The Standard HX400 series remains our number one selling portable to city, state and federal agencies. Offering 25 programmable channels with scan and priority channel selection, this unit's reliability has proven to be one of the best in the industry.

PAGE-COM will provide you with service that is second to none. Initial delivery on most products is 7 days or less. PAGE-COM radio equipment is designed to give you years of trouble-free use. However, in the unlikely event that service is required, we provide 48 hour turnaround on all repairs.

If your radio budget is limited, you may want to consider our new rental program. You can get the equipment that you need now without a large capital outlay. Should you decide to purchase the equipment which you are renting, a substantial portion of your rental payment is applied toward the purchase price. All required maintenance is included in the rental program.

You are invited to take advantage of our free two-week trial offer on any of our communication equipment. For more information, or to place your order, contact either John Umphres, John Henry, Pat Collins or myself on our TOLL-FREE number, 1-800-527-1670.

We appreciate this opportunity to present you with our product line and look forward to hearing from you.

Sincerely,

/s/ Greg Mann

Greg Mann  
Vice President

Page-Com Inc  
10935 Alder Circle  
Dallas, Texas 75238  
214/669-8739  
800/527-1670

721

[LOGO]

JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR

GEORGE A. LOMBARDI  
DIRECTOR  
DIVISION OF ADULT INSTITUTIONS

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES  
DIVISION OF ADULT INSTITUTIONS

P.O. BOX 236  
JEFFERSON CITY, MISSOURI 65102  
Phone: 314-751-2389

September 8, 1987

TO: Bill M. Armontrout, Warden/MSP  
/s/ George A. Lombardi  
FROM: George A. Lombardi, Director of Adult  
Institutions  
SUBJECT: Inspection - Gas Chamber

As you and I have discussed on several recent occasions, the probability of using the gas chamber in the future becomes greater each day. If you haven't done so already, I would like for you to have the gas chamber safety inspected at the earliest possible opportunity. Please contact Eaton Metal Products Company in Denver, Colorado, or another professional firm who specializes in inspections of this type. Let me know if you need any assistance with this project.



722

Please advise as soon as the inspection is completed and forward a copy of the inspection results.

GAL/MSS/jc

cc: Gail Hughes

Dale Riley

File

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[LOGO]

JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR

GEORGE A. LOMBADRI  
DIRECTOR  
DIVISION OF ADULT INSTITUTIONS

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES  
DIVISION OF ADULT INSTITUTIONS

P.O. BOX 236  
JEFFERSON CITY, MISSOURI 65102  
Phone: 314-751-2389

November 23, 1987

CONFIDENTIAL

TO: Bill M. Armontrout, Warden/MSP  
/s/ George A. Lombardi  
FROM: George A. Lombardi, Director of Adult  
Institutions  
SUBJECT: Gas Chamber

Regarding the company that recently made an assessment of the gas chamber, could you please advise me of their findings. What recommendations were made in the area of safety. It is my understanding that they were to provide you with three alternative plans consisting of an immediate fix-it-now proposal, a plan for complete renovation, and a proposal directed toward the use of the injection

method of execution. Obviously, since based on projections we may be required to use the existing chamber in the next few months, it is imperative that immediate attention be given to addressing those areas of concern which could affect the safety of staff and witnesses who will be required to be just outside the chamber during an execution. Have the door seals been replaced, and has a new exhaust vent fan been added? Is there time to replace the main hatch door to the chamber?

Please provide me with some answers so appropriate steps can be taken and so I any [sic] relate any necessary information to appropriate parties who may inquire.

GAL/MSS/jc

cc: File

[Handwritten] Bill I NEED THIS ASAP M

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[LOGO]

JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR

GEORGE A. LOMBARDI  
DIRECTOR  
DIVISION OF ADULT INSTITUTIONS

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES  
DIVISION OF ADULT INSTITUTIONS

P.O. BOX 236  
JEFFERSON CITY, MISSOURI 65102  
Phone: 314-751-2389

January 7, 1988

TO: Don Fishback, Fiscal Management  
/s/ George A. Lombardi  
FROM: George A. Lombardi, Director of Adult  
Institutions  
SUBJECT: Gas Chamber Renovation

As you are no doubt aware, serious consideration is being given regarding renovation of the existing gas chamber at MSP. Most probably an execution will take place sometime during 1988. There are some serious concerns regarding the safety and security of the building containing the chamber and of the chamber itself. Every consideration must be given to insure a safe environment for key staff and witnesses at the execution site. In order to accomplish this, it is

essential that immediate preparations be undertaken to correct the most serious deficiencies.

To our knowledge there is only one existing company in the United States that does technical renovation of gas chambers. The company is American Engineering Company, Inc., of Boston, Massachusetts. Last Fall, two engineers with the company conducted an onsite inspection of the existing gas chamber. Numerous recommendations were made. On October 14, 1987, the company submitted a renovation proposal in the amount of \$183,000. Since there is some possibility that the lethal injection system bill might be passed this season, it is felt that total renovation would not be feasible at this time. There are, however, several priority items that should be installed immediately. They are:

Part 5.004 - Install vacuum system. The system will insure positive pressure outside chamber,

Item 7.003 - \$5,525.00

Part 7.007 - Install emergency safety system consisting of five gas detectors; one in chamber, one in ceiling, three in personnel and witness areas.

Item 9.007 - \$26,098.00

As indicated previously, we know of no other company who can do the specialized work required. Warden Bill Armontrout called around the country attempting to locate other sources, and he could not.

Please expedite this request as soon as possible. Should you need additional information, contact either Dale Riley or Mark Schreiber.

727

GAL/MSS/jc

cc: Dale Riley  
Mark Schreiber  
File

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728

[LOGO]

JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR

GEORGE A. LOMBADRI  
DIRECTOR  
DIVISION OF ADULT INSTITUTIONS

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES  
DIVISION OF ADULT INSTITUTIONS

P.O. BOX 236  
JEFFERSON CITY, MISSOURI 65102  
Phone: 314-751-2389

January 15, 1988

TO: Bill Armontrout, Warden/MSP  
/s/ Mark S. Schreiber  
FROM: Mark S. Schreiber, Executive Assistant  
SUBJECT: Gas Chamber Chronological

Several days ago we discussed the proposed renovation of the MSP Gas Chamber. A memo was sent to Don Gerling regarding the requested improvements along with price quotes from American Engineering Inc., as submitted in their report of October 14, 1987. I later informed you that additional information was needed so the request could be sent through OA Purchasing. As of this date, I have been informed by Mr. Don Fishback that the following is needed as soon as possible.

1. A chronological outlining attempts to locate other companies who might do the renovation if any exist.
2. Information that American Engineering Inc. is a sole source for the renovation.
3. Do the price quotes and figures quoted in the 10/14/87 report reflect the actual cost for the items requested.

Please respond as soon as possible so your request can be given priority. Should you need additional, please advise.

MSS:jc

cc: George Lombardi  
Dale Riley  
Don Fishback  
File

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730

[LOGO]

JOHN ASHCROFT  
GOVERNOR

DICK D. MOORE  
DIRECTOR  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES

GEORGE A. LOMBADRI  
DIRECTOR  
DIVISION OF ADULT INSTITUTIONS

BILL M. ARMONTROUT  
WARDEN  
MISSOURI STATE PENITENTIARY

[Handwritten] jw. file in execution file MSS

STATE OF MISSOURI  
DEPARTMENT OF CORRECTIONS  
AND HUMAN RESOURCES  
MISSOURI STATE PENITENTIARY

P.O. BOX 597  
JEFFERSON CITY, MISSOURI 65102-0597  
Phone: 314-751-3224

TO: Mr. Bill Armontrout, Warden

Date: September 1, 1988

/s/ Larry F. Henson,  
FROM: Larry F. Henson, Associate Warden/  
Program Services

SUBJECT: GAS CHAMBER RENOVATION AND  
CONVERSION

On Thursday, September 1, 1988 I met with Dale Riley, Assistant Director, and Mark Schrieber, Administrative Assistant, to discuss the proposed renovation of the Missouri State Penitentiary gas chamber and conversion to use an execution room for the newly approved lethal injection form of execution. It was the feeling of Mr. Riley that we should proceed immediately with the project of making the changes in the current gas chamber which shall be referred to in the future as the execution room. The following are the items that need to be done:

The lethal injection machine should be bought and brought on sight as soon as possible.

The gurney that will sit inside the chamber must be very sturdy and should be in a fixed position to provide stability and should be tall enough there the top of the bed should be at the bottom of the window to provide the witnesses better access in viewing the area.

Mark Schrieber is working with Mr. Ambler to procure a gown type with parachute cloth strength that will provide three (3) strap tie across the upper chest, the lap area, and the upper part of the legs. He is also procuring special straps for the wrists area and the ankle area. They will look more like hospital straps and will look better in use.

The actual remodeling inside the Chamber should include drop ceiling, no lower than 9', paneling in the state witness room and inmate witness room, stick down tile in both of these areas, a new switch box and wiring to carry the electrical load, lighting with a dimmer switch, baseboard heat, the windows will be blocked in and paneling will go over them with two areas left in the state witness room and inmate

witness room to hook air conditioning units in the windows if needed.

It was also decided that we should proceed with removing the two chairs in the gas chamber and store them in case they were needed in the future. This was accomplished as of 12:00 noon this date with Mr. Schrieber present taking pictures to record this event. The removal of the chamber door and the dismantling of the drop system will proceed in the very near future.

All areas mentioned in this letter need to be completed by September 15, 1988 if possible and also a complete update of the execution plan needs to be done once the machine is on hand and the complete operation is understood. Mr. Riley also pointed out that we need to include staff from Potosi in this certification procedure on using the lethal injection machine.

This letter is written to provide everyone with information about the points discussed so we will know that we are proceeding on so that if other concerns come up they can be added.

Elmer Larkins, Chief Engineer, will provide weekly progress reports to Mr. Armontrout, Mr. Henson, and Mr. Rutledge each Friday.

LFW/dlw

cc: Mr. Riley  
Mr. Schrieber  
Mr. Rutledge  
Mr. Larkins  
File

**\*\* AN EQUAL OPPORTUNITY EMPLOYER \*\***

*Services provided on a Nondiscriminatory basis*

**Report on Study of Methods of Execution &  
Recommendations for Procedures**

Submitted by: Louisiana Department of  
Public Safety & Corrections

February 18, 2015

House Resolution 142 of the 2014 Regular Legislative Session was enrolled and signed by the Speaker of the House on June 5, 2014 to study and make recommendations relative to the different forms of execution and the methods of execution to determine the best practices for administering the death penalty in the most humane manner.

The Secretary of the Louisiana Department of Public Safety and Corrections, James Le Blanc, chaired this work and held an organizational meeting on July 22, 2014 to organize a study committee to conduct this work. At that time, he assigned the following individuals to serve on the committee:

Burl Cain, Warden, Louisiana State Penitentiary

William Kline, Executive Counsel, DPS&C Legal Department

Seth Smith, Chief of Operations, DPS&C Office of Adult Services

Stephanie LaMartinere, Assistant Warden, Louisiana State Penitentiary

Bruce Dodd, Deputy Warden, Louisiana State Penitentiary

James Hilburn, Attorney, Shows Cali & Walsh, LLP

Jeff Cody, Attorney, Shows Cali & Walsh, LLP

Angela Whittaker, Executive Mgmt Officer, DPS&C Secretary's Office

The committee met on the following dates:

August 11, 2014: Planning meeting to develop resource and research needs of the group.

September 2, 2014: Report and discussion on research findings.

October 31, 2014: Report and discussion regarding identifying experts and discussion on additional research compiled.

December 4, 2014: Report and discussion regarding research and protocol options and drafting the required written report.

January 8, 2015: Review of research and draft report and consensus on recommendations for protocol options.

January 22, 2015: Review and approval [sic] final report.

\* \* \*

Recommended Protocols:

A. Lethal Injection

We are recommending for consideration a lethal injection protocol that calls for the use of a one drug protocol utilizing 5 gm of Pentobarbital injected intravenously (IVP). This protocol has been used in numerous states, including Texas, as a one drug method. The availability of this drug to Departments of Corrections is however severely hampered and there could be issues obtaining a supply of Pentobarbital or any other drug to be used for lethal injection. Drug suppliers have refused to sell drugs to the prison systems for use in executions and other entities have refused to sell to Louisiana DOC. It is this committees [sic] understanding that suppliers have threatened providers with no

longer supplying the drugs to their businesses if they in turn sell to correctional agencies for the purpose of lethal injection. As a result, suppliers fear the backlash of bad publicity to their businesses if involved in providing the drugs to correctional agencies.

This committee also recommends reconsideration of a bill that combines the language from the original and amended versions of House Bill 328 of the 2014 Legislative Session authored by Representative Lopinto. The attached draft legislation (Appendix A) amending LA R.S. 15:569 outlines what is needed to allow for the recommendations within this report and will provide for the confidentiality of information related to the execution of a death sentence. The amended version of the prior bill stated that “The name, address, qualifications, and other identifying information of any person or entity that manufactures, compounds, prescribed [sic], dispenses, supplies or administers the drugs or supplies utilized in an execution shall be confidential, shall not be subject to disclosure, and shall not be admissible as evidence or discoverable in any action of an kind in any court or before any tribunal, board, agency, or person. The same confidentiality and protection shall also apply to any person who participates in an execution or performs any ancillary function related to an execution and shall include information contained in any department records, including electronic records, that would identify any such person.” Such legislation would provide some security to those tasked to and involved in carrying out the state’s order to execute an individual as punishment for a qualifying crime.

It should also be noted that the U.S. Supreme Court will consider in April whether a multi-drug protocol used in recent lethal injections in other states violates

the Constitution with regard to cruel and unusual punishment.

#### B. Induced Hypoxia via Nitrogen

It is the recommendation of this study group that hypoxia induced by the inhalation of nitrogen be considered for adoption as an alternative method of administering capital punishment in the State of Louisiana.

It is important to note that the recommendation would induce hypoxia, which is a deficiency of oxygen reaching the tissues of the body. In nitrogen induced hypoxia, there is no buildup of carbon dioxide in the bloodstream so the subject passes out when the blood oxygen falls too low. The research reviewed suggests that this method would be the most humane method and would not result in discomfort or cruel and unusual punishment to the subject.

Though the exact protocol and nitrogen delivery device have not been finalized, it has been determined that a Gas Chamber would not be used. Options for the nitrogen delivery device include a mask or a device similar to an oxygen tent house (small clear oxygen tent covering only the head and neck area). Research as to the best method of delivery is ongoing.

Oklahoma has recently filed similar legislation to allow for induced hypoxia (refer to Appendix B). Also, you will find attached the Executive Summary (Appendix C) of the research conducted in Oklahoma that supports this method as a humane method which does not require the assistance of licensed medical professionals. We have also attached the documents (Appendix D) which make up the research used in

Oklahoma by this committee in developing this recommendation. This method is believed to be simple to administer and nitrogen is readily available.

Conclusion:

This committee submits this study response to House Resolution 142 of the 2014 Regular Legislative Session to make recommendations to consider relative to the different forms of execution and the methods of execution upon agreement that the above considerations represent the best practices for administering the death penalty in the most humane manner. There are two sides to the debate on the death penalty. Proponents believe that the death penalty reduces crime and provides safe communities, while also honoring the victim and those left behind who grieve a loss. Opponents believe that the cost of capital punishment doesn't justify the outcome, that it does not deter crime, and that there are social injustices that are not addressed that make justice system inequitable. As a whole, this committee takes no stand on either side of this debate, but submits this response based on the request for this study and the research and materials available to the group.

We close reminding readers that many are directly impacted by the process of capital punishment: the victim, the victim's friends and family; law enforcement; the judiciary, the prosecutor, the defense attorney, the jurors, the public, the offender, the offender's family, and the staff tasked to carry out the protocol, to name just a few. We understand that the decision to act on these recommendations for consideration is an enormous task before you that cannot be taken lightly. We trust that we have provided the information you needed to consider Louisiana's options.

\* \* \*



Nitrogen Induced Hypoxia as a  
Form of Capital Punishment

Michael P. Copeland, J.D.

Thom Parr, M.S.

Christine Papas, J.D., Ph.D.

East Central University

Executive Summary

At the request of Oklahoma State Representative Mike Christian, the authors of this study researched the question of whether hypoxia induced by nitrogen gas inhalation could serve as a viable alternative to the current methods of capital punishment authorized under Oklahoma law. As per the above, this study does not express an opinion on the wider question of whether Oklahoma should continue to administer capital punishment in general. The scope of this study is limited to the assumption that capital punishment will continue to be administered in Oklahoma, and given that assumption, analyzing whether hypoxia via nitrogen gas inhalation would be an effective and humane alternative to the current methods of capital punishment practiced in Oklahoma law.

This study was conducted by reviewing the scientific, technical, and safety literature related to nitrogen inhalation.

*The study found that:*

1. An execution protocol that induced hypoxia via nitrogen inhalation would be a humane method to carry out a death sentence.
2. Death sentence protocols carried out using nitrogen inhalation would not require the assistance of licensed medical professionals.

3. Death sentences carried out by nitrogen inhalation would be simple to administer.

4. Nitrogen is readily available for purchase and sourcing would not pose a difficulty.

5. Death sentences carried out by nitrogen inhalation would not depend upon the cooperation of the offender being executed.

Accordingly, it is the recommendation of this study that hypoxia induced by the inhalation of nitrogen be offered as an alternative method of administering capital punishment in the State of Oklahoma.

The views expressed in this study are solely those of its authors and do not necessarily reflect those of the university at which we are affiliated.

#### Introduction

Nitrogen is an inert gas that at room temperature is colorless, odorless, and tasteless. It is the most common gas in the earth's atmosphere, comprising 78.09% of the air that humans breathe on a regular basis.

When combined with the normal 20.95% oxygen found in the atmosphere, nitrogen is completely safe for humans to inhale. However, an environment overly enriched in nitrogen will lack the appropriate level of oxygen necessary for human survival and will thus lead to hypoxia and rapid death. (U.S. Chemical Safety and Hazard Investigation Board, 2003, p.1).

Nitrogen hypoxia has been suggested as a means of administering capital punishment in the popular media on previous occasions. For example, in 1995 the National Review featured an article by Stuart Creque titled *Killing With Kindness: Capital Punishment by Nitrogen Asphyxiation (1995)*. Creque's article was written in response to a 9th Circuit U.S. District Court

decision that California's gas chamber was an unconstitutionally cruel and unusual punishment. The article suggested nitrogen could provide a simple and painless alternative to the gas chamber that would require no elaborate medical procedures to administer.

The idea of administering capital punishment via nitrogen hypoxia resurfaced more recently in a Tom McNichol Slate magazine article titled *Death by Nitrogen* (2014). The article was inspired by the stay of execution issued by the U.S. Supreme Court for a Missouri man facing execution via lethal injection. Again, the author suggested nitrogen induced hypoxia as a painless alternative to traditional methods of execution, adding that it offered the additional benefits of requiring no medical training to administer and lacked any of the supply issues that exist with lethal injection.

The capital punishment protocols cited that utilize nitrogen to administer a death sentence do not actually rely on the nitrogen itself to bring about death. Nitrogen simply displaces the oxygen normally found in air and it is the resulting lack of oxygen which causes death. Without oxygen present, inhalation of only 1-2 breaths of pure nitrogen will cause a sudden loss of consciousness and, if no oxygen is provided, eventually death. (European Industrial Gases Association, 2009, p. 3).

Since nitrogen has not previously been used for capital punishment there is a lack scientific literature that specifically addresses its performance for that purpose. However, there have been medical experiments which involved human subjects breathing pure nitrogen until they became unconscious. Beyond those experiments, most of the data related to nitrogen

induced hypoxia comes from documented suicides in humans and research in high altitude pilot training.

*Author's Note: in some cases the lay press will inadvertently refer to hypoxia as asphyxiation. This is technically inaccurate in this context, as asphyxia is the inability to breathe in oxygen and the inability to exhale carbon dioxide. Hypoxia is the pathology related to the inability to intake oxygen even though one may still be able to exhale carbon dioxide. As will be seen later, the ability to exhale carbon dioxide is critical to the proposed method of execution, as it prevents the acidosis normally associated with asphyxiation.*

#### Medical Literature

The adult brain uses about 15 per cent of the heart's output of oxygenated blood (Graham, 1977, p.170). Hypoxia is the condition of having a lower-than-normal amount of oxygen in the blood. Anoxia is an extreme form of hypoxia in which there is a complete absence of oxygen in the blood (Brierley, 1977 p.181). If the supply of oxygen in the blood is reduced below a critical level it will result in a rapid loss of consciousness and eventually irreversible brain damage will occur (Graham, 1977, p.170).

A complete immediate global loss of oxygen to the brain, (a scenario in which no residual oxygen in the lungs or blood is delivered to the brain), will result in a loss of consciousness in eight to ten seconds, and a loss of any electrical output by the brain will occur a few seconds later. The heart may continue to beat for a few minutes even after the brain no longer functions (Brierley, 1977 p.182).

Ernsting (1961) performed a study on human volunteers that hyperventilated on pure nitrogen gas. The

subjects performed the test multiple times, varying the length of time they inhaled the nitrogen. When the subjects inhaled nitrogen for eight-to-ten seconds they reported a dimming of vision. When the period was expanded to fifteen-to-sixteen seconds, the subjects reported some clouding of consciousness and impairment of vision. When the tests were expanded to seventeen-to-twenty seconds, the subjects lost consciousness. There was no reported physical discomfort associated with inhaling the pure nitrogen. (p. 295)

Unlike asphyxiation, hypoxia via the inhalation of nitrogen allows the body to expel the carbon dioxide buildup that is normally associated with the respiratory cycle. This helps prevent a condition known as hypercapnia - an accumulation of carbon dioxide in the blood. The result of this buildup of carbon dioxide is respiratory acidosis - a shifting of the pH levels in the blood to become more acidic. This is the pathology many people associate with suffocating. Some of the symptoms of respiratory acidosis are expected to be present in cases of asphyxiation but not expected to be present under pure hypoxia are anxiety and headaches, (Merrick Manuel, 2013).

#### Suicide Data

Perhaps one of the greatest testaments to both the humanity of nitrogen induced hypoxia as well as the ease of administration is its rapidly gaining popularity as a self-selected means of suicide. Suicide by hypoxia using an inert gas is the most widely promoted method of human euthanasia by right-to-die advocates (Howard, M.O. et. al., 2011, P. 61).

The trend toward using an “exit bag” filled with an inert gas such as nitrogen or helium likely started with a publication of *Final Exit: The Practicalities of*

*Self Deliverance and Assisted Suicide for the Dying.* The authors of the publication sought to identify methods of death that were swift, simple, painless, failure-proof, inexpensive, non-disfiguring and did not require a physician's assistance or prescription (Howard, M.O. et. al., 2011. p 61).

This method of suicide is indeed simple. It involves a clear plastic bag fitted over the head, two tanks filling the bag with helium via vinyl tubing, and an elastic band at the bottom of the bag to prevent the bag from slipping off the head. The parts needed to create the bag are inexpensive and available locally without prescription (Howard, M.O. et. al., 2011. p 61-62).

Reports of deaths observed via this method suggest that it is painless. Jim Chastain, Ph.D. President of the Final Exit Network of Florida described the process this way:

In the several events I have observed the person breathes the odorless, tasteless helium deeply about three or four times and then is unconscious, no gagging or gasping. Death follows in 4-5 minutes. A peaceful process.

Derek Humphrey, current chair of the Final Exit advisory board is quoted as saying:

In the approximate 300 cases which have been reported to me there has never been mention of choking or gagging. When I witnessed the helium death of a friend of mine it could not have been more peaceful (Final Exit, 2010).

However, it should be noted that deviations from the above protocols have not always been as successful. When masks were placed over the face (instead of using bags of helium over the head) it has been

reported some problems have occurred. This is typically a result of the mask not sealing tightly to the face, resulting in a small amount of oxygen being inhaled by the individual. This extends the time to become unconscious and extends the time to death. This may result in purposeless movements by the decedent (Ogden et al, 2010. p 174-179).

#### Research on High Altitude Pilot Training

A great deal of research on the effects of hypoxia on human beings comes from aerospace medicine. Pilots that fly at high altitudes are subject to becoming hypoxic if their cabins lose air pressure. Altitude hypoxia has similar effects as the hypoxia one gets from breathing inert gases although it is caused by the inability of the lungs to absorb the oxygen in the air rather than a lack of oxygen in the air.

The Federal Aviation Administration (2003, p. 11) states:

Hypoxia is a lack of sufficient oxygen in the body cells or tissues caused by an inadequate supply of oxygen, inadequate transportation of oxygen, or inability of the body tissues to use oxygen. A common misconception among many pilots who are inexperienced in high-altitude flight operations and who have not been exposed to physiological training is that it is possible to recognize the symptoms of hypoxia and to take corrective actions before becoming seriously impaired. While this concept may be appealing in theory, it is both misleading and dangerous for an untrained crew member. Symptoms of hypoxia vary from pilot to pilot, but one of the earliest effects of hypoxia is impairment of judgment.

Other symptoms can include one or more of the following:

- (1) Behavioral Changes (e.g. a sense of euphoria).
- (2) Poor coordination.
- (3) Discoloration in the fingernails (cyanosis).
- (4) Sweating.
- (5) Increased breathing rate, headache, sleepiness, or fatigue
- (6) Loss or deterioration of vision
- (7) Light-headedness or dizzy sensations and listlessness.
- (8) Tingling or warm sensations.

Indeed, hypoxia has caused several airline accidents which are often fatal. The onset of hypoxia is typically so subtle that it is unnoticeable to the subject. The effects of hypoxia are often difficult to recognize. (Federal Aviation Administration. 2014, Ch. 8-1-2 (A) 5)

Attempts to train pilots to notice hypoxia are conducted using a hyperbaric chamber to simulate high altitudes. Often a trainee will be asked to remove his or her mask and perform simple tasks. At low levels of hypoxia, trainees typically feel little more than euphoria and a sense of confidence. At higher levels of hypoxia, trainees will quickly become unconscious. Time of useful consciousness at altitudes above 43,000 is 5 seconds (Federal Aviation Administration, 2003, p. 13).

### Findings

Based on the review of the literature related to hypoxia induced by inert gases, this study makes the following findings:



1. An execution protocol that induced hypoxia via nitrogen inhalation would be a humane method to carry out a death sentence.
2. Death sentence protocols carried out using nitrogen inhalation would not require the assistance of licensed medical professionals.
3. Death sentences carried out by nitrogen inhalation would be simple to administer.
4. Nitrogen is readily available for purchase and sourcing would not pose a difficulty.
5. Death sentences carried out by nitrogen inhalation would not depend upon the cooperation of the offender being executed.
6. Use of nitrogen as a method of execution can assure a quick and painless death of the offender

Finding 1. An execution protocol that induced hypoxia via nitrogen inhalation would be a humane method to carry out a death sentence.

Rationale:

As an inert gas, nitrogen is odorless, colorless, tasteless and undetectable to human beings. It is 78% of the air we breathe on a daily basis, and thus there is little chance that any subject would have an unusual or allergic reaction to the gas itself.

Because the subject is able to expel carbon dioxide, the anxiety normally associated with acidosis in asphyxiation would not be present.

The literature indicates after breathing pure nitrogen, subjects will experience the following: within eight-to-ten seconds the subjects will experience a dimming of vision, at fifteen-to-sixteen seconds they will experience a clouding of consciousness, and at

seventeen-to-twenty seconds they will lose consciousness. There is no evidence to indicate any substantial physical discomfort during this process.

There is a possibility that subjects will feel euphoria prior to losing consciousness and a slight possibility they will feel a tingling or warm sensation. After the subjects are unconscious, it should be expected some of the subjects will convulse. Most electrochemical brain activity should cease shortly after loss of consciousness, and the heart rate will begin to increase to varying degrees until it stops beating 3 to 4 minutes later. Observed suicides involving inert gas hypoxia are described as peaceful, so long as caution is taken to eliminate the possibility of the subject inadvertently receiving supplemental oxygen during the process. Inert gas hypoxia is considered such a humane and dignified process to achieve death that it is recommended as a preferred method by right -to-die groups.

Finding 2. Death sentence protocols carried out using nitrogen inhalation would not require the assistance of licensed medical professionals.

Rationale:

The administration of a death sentence via nitrogen hypoxia does not require the use of a complex medical procedure or pharmaceutical products. The process itself, as demonstrated by those who seek euthanasia, requires little more than a hood sufficiently attached to the subject's head and a tank of inert gas to create a hypoxic atmosphere.

While a state execution would likely have a more elaborate mechanism to create hypoxia, nothing in the process would require specialized medical knowledge or the use of regulated pharmaceutical products. Accordingly, except for the pronouncement of death,

the assistance of licensed medical professionals would not be required to execute this protocol.

Finding 3. Death sentences carried out by nitrogen inhalation would be simple to administer.

Rationale:

When considering a substitute method of capital punishment it is important to consider more than just what happens if everything goes according to protocol. The likelihood of mishaps must also be considered, as well as the consequences that would flow if those mishaps should occur.

Because the protocol involved in nitrogen induced hypoxia is so simple, mistakes are unlikely to occur. Oxygen and nitrogen monitors may be placed inside the contained environment to insure [sic] the proper mixes of gas are being expelled into the bag and inhaled by the subject.

However, the protocol should be careful to prevent the possibility of oxygen entering into the hood, as that can prolong time to unconsciousness and death, as well as increase the possibility of involuntary movements by the subject.

The risks to witnesses are minimal, as any potential leak of the nitrogen would not be harmful in a normally ventilated environment.

Finding 4. Nitrogen is readily available for purchase and sourcing would not pose a difficulty.

Rationale:

Nitrogen is utilized harmlessly in many fields within United States industries. Nitrogen is used in welding, hospital and medical facilities, cooking, and used in the preparation of liquid nitrogen cocktails.

Nitrogen is used as a process to extend the life of food products such as potato chips. Nitrogen is used in doctor's offices to remove skin tags as well as other procedures. Accordingly, sources of nitrogen to be used for administering a death sentence should be easy to find and readily available for purchase for such purpose.

Finding 5. Death sentences carried out by nitrogen inhalation would not depend upon the cooperation of the offender being executed.

Rationale:

Some forms of capital punishment require the offender to submit or comply to some degree in order to assure an efficient and humane method of execution. With proper protocol and utilizing such devices as a restraint chair, nitrogen inhalation can be administered despite the presence of a non-compliant offender. The use of nitrogen can be used by non-medical personnel and a delivery system can be designed to ensure the execution is carried out without issue.

Conclusion

As per the above, it is the recommendation of this study that hypoxia induced by the inhalation of nitrogen be offered as an alternative method of administering capital punishment in the State of Oklahoma.

\* \* \*

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IGC Doc 44/09/E

HAZARDS OF INERT GASES AND  
OXYGEN DEPLETION

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## 1 Introduction

EIGA is very concerned about the accidents that industrial gas companies and users of inert gases continue to report each year, where the direct cause has been lack of oxygen resulting in asphyxiation. EIGA identified that existing information on the hazards of inert gases was not sufficiently directed at the users who were most at risk. This document sets out the essential information that is necessary to prevent asphyxiation accidents involving inert gases.

## 2 Scope and purpose

It is intended that this document is used as a training package suitable for supervisors, line managers, direct workers and users wherever inert gases are produced, stored, used, or where oxygen depletion could otherwise occur.

This document has 4 parts:

The main document is intended for line managers and supervisors and gives the background of the subject, the typical description of oxygen deficiency accidents and the recommended rescue preparations to be in place in case of accident.

Appendix A is a simplified summary of the main document, designed to be reproduced as a pamphlet for sharing with workers and end users.

Appendix B gives an introduction to rescue considerations from normally accessible rooms, confined spaces or pits and trenches.

Appendix C lists some actual accidents that have taken place in recent years, which can be used as examples to underline the potentially fatal hazards of inert gases.

Appendix D gives an example of a warning sign or poster to highlight the hazards of inert gases and asphyxiating atmospheres.

### 3 Definitions

**Asphyxiation:** the effect on the body of inadequate oxygen, usually resulting in loss of consciousness and/or death. This is also known as suffocation or anoxia.

**Asphyxiant:** any material which reduces the amount of available oxygen either by simple dilution or by reaction.

**Inert gas:** A gas that is not toxic, which does not support human breathing and which reacts little or not at all with other substances. The common inert gases are nitrogen and the rare gases like helium, argon, neon, xenon and krypton.

**Flammable gas:** a gas whose major hazard is flammability. Note that all flammable gases also act as asphyxiants.

**User:** for the purpose of this document this term covers any individuals, companies or other organisations that make use of the products sold by industrial gas companies. Users may be, but are not necessarily, customers.

### 4 General Information about Inert Gases and Oxygen Depletion

In spite of the wealth of information available, such as booklets, films and audio-visual aids, there are still serious accidents resulting in asphyxiation caused by the improper use of inert gases or by oxygen depletion. It is therefore absolutely essential to draw attention to the hazards of inert gases and oxygen depletion. Accidents due to oxygen depleted atmospheres are usually very serious and in many cases fatal.

Although carbon dioxide is not an inert gas, most of the information in this document is applicable as it too will cause oxygen depletion. However, the specific hazards and physiological effects of carbon dioxide are more complex than those of inert gases. This document does not cover these aspects. (See IGC Doc. 67 “CO<sub>2</sub> cylinders at user’s premises” for more details about the additional hazards of carbon dioxide).

#### 4.1 Oxygen is essential for life

Oxygen is the only gas that supports life. The normal concentration of oxygen in the air we breathe is approximately 21 %. Concentration, thinking and decision-making are impaired when the oxygen concentration falls only slightly below this norm. These effects are not noticeable to the affected individual.

If the oxygen concentration in air decreases or, if the concentration of any other gases increase, a situation is rapidly reached where the risks of asphyxiation are significant. For this reason any depletion of oxygen below 21 % must be treated with concern:

Asphyxia - Effect of O<sub>2</sub> Concentration (from NL/77 Campaign against Asphyxiation)

O <sub>2</sub> (Vol %)	Effects and Symptoms
18-21	No discernible symptoms can be detected by the individual. A risk assessment must be undertaken to understand the causes and determine whether it is safe to continue working.
11-18	Reduction of physical and intellectual performance without the sufferer being aware.

8-11	Possibility of fainting within a few minutes without prior warning. Risk of death below 11%.
6-8	Fainting occurs after a short time. Resuscitation possible if carried out immediately.
0-6	Fainting almost immediate. Brain damage, even if rescued.

*WARNING: The situation is hazardous as soon as the oxygen concentration inhaled is less than 18%.*

With no oxygen present, inhalation of only 1-2 breaths of nitrogen or other inert gas will cause sudden loss of consciousness and can cause death.

#### 4.2 Inert gases give no warning

It is absolutely essential to understand that with inert gases such as nitrogen, argon, helium, etc., asphyxia is insidious - there are no warning signs!

- Inert gases are odourless, colourless and tasteless. They are undetectable and can therefore be a great deal more dangerous than toxic gases such as chlorine, ammonia, or hydrogen sulphide, which can be detected by their odour at very low concentrations.
- The asphyxiating effect of inert gases occurs without any preliminary physiological sign that could alert the victim. Lack of oxygen may cause vertigo, headache or speech difficulties, but the victim is not capable of recognizing these symptoms as asphyxiation. Asphyxiation leads rapidly to loss of consciousness—for very low oxygen concentrations this can occur within seconds.

### 4.3 Inert gases act quickly

In any accident where the supply of oxygen to the brain is affected, prompt emergency treatment is critical. Proper medical treatment (resuscitation) if given quickly enough can prevent irreversible brain damage or even death in some instances.

Furthermore, and this is often poorly understood, the emergency rescue procedure to save the victim must be carefully thought out in advance to avoid a second accident, where members of the rescue team can become victims. Unplanned interventions resulting in the fatalities of would-be rescuers are sadly not unusual.

### 4.4 The ambiguity of inert gases

Everyone, particularly customers, must be aware of the ambiguity of the expression “inert gas” (sometimes called “safety gas”, when it is used to prevent fire or explosion), whereby an “inert gas” is often perceived, understood and wrongly taken to be a harmless gas!

### 4.5 Watchfulness with regard to inert gases and oxygen depletion

Considering the hazards mentioned above, it is essential to provide all those who handle or use inert gases (gas company personnel as well as customers) with all the information and training necessary regarding safety instructions. This includes the means of prevention and procedures to be respected to avoid accidents, as well as planned rescue procedures to be implemented in the event of an accident.

## 5 Some typical situations with inert gas and/or oxygen depletion hazards

### 5.1 Confined or potentially confined spaces and enclosures

Confined, restricted or enclosed spaces are particularly dangerous situations where an inert gas may be normally present (inside a process vessel), may have accumulated (from leaks or vents) and/or because the space has not been adequately vented or purged, and/or the renewal of air is poor or ventilation is inadequate.

Examples of such spaces include:

- Confined spaces: tanks, vessels, reservoirs, the inside of “cold boxes” of liquefaction equipment, cold storage rooms, warehouses with fire suppressant atmospheres, etc.
- Enclosures: analyzer or instrument cabinets, small storage sheds, temporary/tented enclosures, or spaces where welding protective gas is used, etc

The precautions required for safe access by personnel will be different in each of these cases as explained in Appendix B.

## 5.2 The use of inert cryogenic liquids

It is to be noted, that the use of inert cryogenic liquids such as nitrogen or helium is accompanied by two primary hazards:

- The fluids are very cold ( $-196^{\circ}\text{C}$  for nitrogen and  $-269^{\circ}\text{C}$  for helium) and can cause serious cold burns on contact with the skin.
- Once vaporised both products will generate a large volume of cold inert gas (e.g. 1 litre of liquid nitrogen will yield 680 litres gaseous product) that will displace ambient air, causing oxygen deficiency and may accumulate in low points.

In processes where cryogenic liquids are handled and vaporisation takes place, special care must be taken to avoid situations where personnel are exposed to oxygen deficiency. These may be in rooms which people regularly enter or work in.

Examples of such spaces include:

- The internal rooms of a building where cryogenic liquid cylinders/dewars are filled and/or stored,
- Laboratory rooms,
- Elevators (lifts) used for transport of dewars,
- Rooms where liquid nitrogen food freezers are operated. (Tunnel, cabinet)
- Rooms where Magnetic Resonance Imaging (MRI) scanner or other liquid helium cooled equipment is used
- Rooms in which cryogenic de-flashing equipment is operated.

Notes: Due to the extremely low temperature of liquid helium a secondary hazard may exist where the product is flowing through hoses or pipes. In this case it is possible for the components of air to liquefy on the outside of the hose/pipe, possibly leading to pooling of liquid containing levels of enriched oxygen. [See Ref. 7].

5.3 Areas near where inert gases are vented or may collect

The risk of asphyxiation can arise, even outdoors, in the vicinity of:

- Gas leaks
- Vent exhausts

- Outlet of safety valves and rupture disks
- Openings of machines in which liquid nitrogen is used for freezing
- Blind flanges
- Near manways/access to vessels or purged enclosures (e.g. ASU cold boxes, electrical enclosures)

Any cold gas or heavier-than-air gas will travel or “flow”—often unseen—and collect even outdoors, in low spaces such as:

- Culverts
- Trenches
- Machine pits
- Basements
- Elevator (lift) shafts

Similarly and just as dangerously lighter-than-air gases (e.g. helium) will rise and collect in unventilated high points such as:

- Behind false ceilings
- Under a roof

#### 5.4 Use of inert gas instead of air

##### Planned Use

In many workplaces, there are often compressed inert gas distribution networks that are used for process applications, safety or instrumentation purposes, e.g. inerting/purging of reactors or using nitrogen as a pressure source to operate pneumatic equipment (such as jackhammers) or as instrument fluids.

Additionally, nitrogen is often used as either a backup to, or substitute for, an instrument air system.



Where it is used as a backup supply in case of instrument air compressor failures it is quite common to find a nitrogen supply connected to an air supply by means of isolation valves. It must be appreciated that most pneumatically operated instruments vent continuously and that the vented nitrogen may accumulate in poorly ventilated control panels/cubicles or plant rooms. This can present a serious asphyxiation risk. Where nitrogen is used temporarily to substitute for compressed air in this way, it must be done under strictly controlled conditions such as a permit to work, and all relevant personnel shall be informed.

#### Improper Use

In situations where piped breathing systems exist there is always the potential for employees, who are insufficiently trained or not familiar with the systems, to connect the breathing apparatus to a nitrogen system with fatal results. Such systems must be clearly marked and ideally the breathing air system should have a dedicated connection type not used elsewhere in the premises.

#### 5.5 Dangers of improper inhalation (abuse) of inert gases

There has been increased of reporting and presentations in TV-programmes on the careless approach and dangerous misuse of breathing in gases such as helium and other inert rare gases. The media reports in particular trivialise the effects of inhaling helium to achieve a very high-pitched voice. Inhalation of helium can lead to unconsciousness, cessation of breathing and sudden death.

[See Ref. 6 for more information]

#### 6 Hazard mitigation and preventive measures

### 6.1 Information, training

All persons who handle or who use inert gases shall be informed of:

- Safety measures that should be adopted when using gases.
- The hazard represented by the release of inert gases in to the working space and the potential for oxygen depletion.
- Procedures to be observed should an accident occur.

This information and training should be systematically and periodically reviewed in order to ensure that it remains up to date and appropriate for the hazards identified.

### 6.2 Proper installation and operation

Equipment for the manufacture, distribution or use of inert gas must be installed, maintained and used in accordance with:

- All applicable regulations.
- The recommendations of the supplier
- Industrial gas industry standards and codes of practice

Newly assembled equipment for inert gas service must undergo a proof test and be leak-checked using suitable procedures.

Each inert gas pipeline entering a building should be provided with an easily accessible isolation valve outside the building. Ideally such valves should be remote activated by push buttons or other safety monitoring equipment.

Discontinued inert gas lines shall be physically disconnected from the supply system when not in use.

At the end of each work period, all valves that isolate the inert gas should be securely closed to avoid possible leakage between work periods.

### 6.3 Identification and safeguarding of potentially hazardous areas

Measures should be taken to identify potentially hazardous areas, or restrict access to them, e.g.

- Warning signs should be displayed to inform of an actual or potential asphyxiation hazard (An example is shown in Appendix D). The warning sign should be associated with measures to prevent unauthorised entry to the areas.
- Temporary or permanent barricades, for example physical lock on vessel manway or barricades around temporary excavations.
- Communication to site personnel to ensure awareness and understanding.

### 6.4 Ventilation and atmospheric monitoring for inert gases and oxygen deficiency

Typically there are three situations where the need for ventilation or atmospheric monitoring must be assessed in order to avoid asphyxiation accidents from inert gases and/or oxygen depletion:

#### 6.4.1 Ventilation/ monitoring of rooms which people regularly enter or work in

Examples in this category would include:

- Rooms containing inert gas pipelines with possible leaks such as compressor houses, control rooms (with control/analyser panels).

- Rooms where inert cryogenic liquid is used or stored (see 5.2 above)

Building/room size, ventilation capacity, system pressures, etc. must be determined for each specific case. The following guidelines can be applied to ventilation system design:

- Ventilation must be continuous while the hazard exists. This can be achieved by interlocking the ventilation system with the process power supply.
- Ventilation system design should ensure adequate air flow around the normal operating areas.
- Good engineering practice indicates a minimum ventilation capacity of 6-10 air changes per hour.
- The use of devices to indicate correct system operation, such as:
  - Warning lights
  - “Streamers” in the fan outlet,
  - Flow switches in the suction channels (monitoring should not rely only upon secondary controls such as “power on” to the fan motor).
- Exhaust lines containing inert gases shall be clearly identified, and should be piped to a safe, well ventilated area outside the building, away from fresh air intakes.
- Consideration should be given to the use of workplace atmospheric monitoring, e.g. personal oxygen analyser or an analyser in the work area, location to be based on assessment of the areas described in 5.3.

- People working in or entering the area shall be aware of action required in event of alarms from atmospheric monitors or loss of ventilation.

#### 6.4.2 Ventilation/ monitoring prior to entry into confined spaces or enclosures

As described in 5.1 above, these spaces would include enclosures or vessels which:

- Are not routinely entered and
- Are known to have contained inert gas or
- May contain inert gas or low concentration of oxygen
- Any vessel not known and verified to contain atmospheric air.

In these cases the following guidelines apply to prepare a safe atmosphere prior to entry:

- Sources of inert gas must be isolated from the space or enclosure by positive blinds or by disconnection of lines. Never rely only on a closed valve.
- The vessel or enclosure must be adequately purged with air (i.e. remove the inert gas and substitute with air).
  - It is necessary to have at least 3 complete air changes within the enclosure involved.
  - Purging shall continue until analysis confirms that the quality of the vessel atmosphere is safe for personnel entry. If there is any doubt that effective purging has taken place, the analysis should be made in the interior of the vessel by taking a sample at several locations by probe, or if this is not

possible, by a competent person using a self contained breathing apparatus.

- The purge system must ensure turbulence for adequate mixing of air and inert gas to take place (to avoid “pockets” of dense or light inert gases remaining or to avoid “channelling” of gases due to inadequate purging).
- Removal of argon or cold nitrogen from large vessels and deep pits can be difficult due to the relatively high density of the gas compared with air. In that case the gas should be exhausted from the bottom of the space.
- Ventilation should never be carried out with pure oxygen, but exclusively with air.
- Another method of removing inert gases is to fill the vessel with water and allow air to enter when the water is drained off.
- Oxygen content of the atmosphere in the enclosure/vessel shall be monitored continuously or repeated at regular intervals.
- Consideration should also be given to the use of personal oxygen monitors.

Where a safe atmosphere cannot be created and confirmed, then the task must only be performed by competent personnel provided with a positive breathing air supply.

#### 6.4.3 Ventilation/monitoring for entry into other spaces where inert gases may be present

This type of confined space is one that has any of the following characteristics:

- Limited opening for entry and exit

- Unfavourable natural ventilation

Examples are listed in sections 5.1 and 5.3 and include;

- Underground works
- Trench/pit deeper than 1 metre
- Small rooms where gases are stored but not designed for continuous worker occupancy.

In the majority of these cases the presence of inert gases is not anticipated when entering such spaces. However, the one essential safeguard in all cases is to sample the atmosphere in the room, enclosure, trench, pit, etc. for oxygen prior to any entry. Where appropriate a continuous fixed point monitoring device should be used.

The fact that an oxygen deficient atmosphere is not normally expected is the greatest danger.

#### 6.4.4 Notes on purging requirements

The guidance for air changes, mentioned in section 6.4.2, is valid where nitrogen is the inert gas involved because its density is very near to that of air and oxygen.

If the gas to be purged has a density very different from the density of air, such as helium, argon or carbon dioxide, etc. the ventilating air may not adequately mix and the purge may be inadequate.

For inert gases of this type the volume of gas to be displaced (air changes) must be at least 10 times that of the volume involved. The preferred method of removal of very dense gases (e.g. argon or cold nitrogen vapour) is to suck out the gas from the bottom of the space.

In the presence of toxic or flammable gases, it is mandatory to perform an additional analysis of the gases present in the confined space, before entry of personnel. For obvious reasons, the measurement of only the oxygen content is not sufficient in this case. All other dangerous toxic or flammable gases must also be analysed.

In the specific case of flammable gases, a nitrogen purge must be used first to prevent any explosion risk and then subsequently purge with ventilating air.

#### 6.5 Testing of oxygen content

Historically, the need to check that an atmosphere is respirable has been considered to be of the greatest importance. In the past, simple means were employed, such as, for example, the lighted candle or the canary bird.

Currently, various types of oxygen analysers are available, which are often reliable and simple and to operate. The selection of the type of apparatus depends on the nature of the work in the place to be monitored (presence of dust, temperature and humidity, multiple detectors, portable equipment, etc.).

- Oxygen analysers are critical equipment and must be properly maintained and calibrated in order to sufficiently reliable [sic]. It is also important to ensure that fixed and portable detectors are properly positioned to measure a representative sample of the atmosphere.
- A simple way check to confirm that an oxygen analyser is operating properly before use is to measure the oxygen content of the open air (21%). This check should be part of the work permit requirements.



- All oxygen analysers should be fitted with an alarm device to indicate possible defects (e.g. low battery).
- The minimum safe oxygen concentration for entry into a space that is being controlled or measured because of the risk is 19.5 % oxygen. There are applications with oxygen concentrations below 19.5 % where entry is permitted provided that further precautions are taken in accordance with proper risk assessment and national regulations (e.g. fire suppression). [See Ref 4]

#### 6.6 Work permit

For certain types of work, safety instructions and a special work procedure must be set up in the form of a work permit, this particularly relates to any form of confined space entry. [See Ref 8]

This procedure is necessary during work carried out by subcontractors in air separation cold boxes, or where vessel entry is required.

It is important that a work permit procedure deals with the detailed information that must be given to involved personnel before the start of work. This information should include contractual conditions together with documented risk assessments, procedures and the training of site workers.

#### 6.7 Lock-out Tag-out procedure

To ensure any sources of inert gas have been properly isolated, the implementation of a stringent, formal lock-out and tag-out procedure is necessary before safe entry into a confined space.

## 6.8 Protection of personnel

The type of work to be performed, the layout of the premises and the assessment of potential rescue scenarios will determine the provision of additional protective measures. This additional protection should include organisational measures and/or safety equipment such as:

- Fixed or personal oxygen monitoring equipment
- The wearing of a harness so that the worker can be easily and rapidly taken out of an enclosed space in the case of an emergency. Preferably, this harness is to be connected to a hoist to facilitate removing the victim. (In practice, it is extremely difficult for one person to lift up another person in the absence of a mechanical aid of some kind.)
- The provision of an alarm system in case of an emergency.
- The wearing of a self contained breathing apparatus (not cartridge masks, which are ineffective in a case of lack of oxygen).
- In the case of work inside a confined space, a standby person should be placed on watch outside the space/vessel.
- Having a self contained breathing apparatus on stand by.
- The wearing of other personal protective equipment such as safety boots, hard hat, goggles or gloves, depending on the hazards of the location and task.

## 7 Confined space entry

The employer has an overriding duty to ensure that tasks in confined spaces with potentially hazardous atmospheres are performed without entry whenever this is practical. Only if it there [sic] is no practical alternative shall people be required to enter confined spaces.

Any entry into a confined space or enclosure with a potentially hazardous atmosphere shall be carefully controlled and have:

- A written method statement for the work to be undertaken with the space.
- A documented risk assessment for performing this task in this particular vessel.
- Formal, stringent lock-out and tag-out procedures.
- An assessment of potential scenarios where rescue may be required.
- An emergency (rescue) plan to deal with any possible accident scenario related to entry in to the enclosure or vessel.
- Rescue personnel and equipment should be available as required by the rescue plan.
- Trained and competent personnel in roles of; entrant, stand-by watch, rescue team (where required) and supervisor/permit issuer.
- A safe work permit issued and signed before entry is allowed.

This document is not a detailed procedure for confined space entry, but focuses on the considerations

which are important where there is an actual or potential hazard from inert gases or oxygen deficiency.

## 8 Rescue and first-aid

Awareness training in the hazards of inert gases and oxygen deficient atmosphere is of vital importance for everyone who might enter a space or who might discover and [sic] affected person in a space with potentially asphyxiant atmosphere, in order to prevent subsequent fatalities as result of “unplanned rescue” attempts.

Training in rescue work is fundamental since quickly improvised rescue without the formality of a procedure, often proves to be ineffective, if not catastrophic, i.e. the rescue worker lacking foresight becomes a second or even a third victim. This is one of the most common causes of multiple fatalities in cases involving asphyxiation.

### 8.1 Basic rules

If a person suddenly collapses and no longer gives any sign of life when working in a vessel, a partially enclosed space, a trench, a pit, a small sized room, etc., it **MUST** be assumed that the person may lack oxygen due to the presence of an inert gas (which is, as mentioned, odourless, colourless and tasteless):

*WARNING: the discoverer must assume that his life is at risk entering the same area!*

The risk is that the rescuer will become the second victim, which obviously must be avoided at all costs. Ideally he should raise an alarm and call for assistance so that a prepared rescue can be carried out.

Rescuers intent on saving a possible asphyxiation victim should only do so if they have the necessary

equipment, have been suitably trained, have proper assistance and support.

## 8.2 Rescue plan elements

The method of rescue will be determined by the access to particular space. If practical a non-entry rescue is preferred. Appendix B lists the considerations which should be given to rescue plans from three different situations:

- Rescue from normally accessible rooms
- Rescue from Confined Spaces
- Rescue from pits, trenches or excavations

In each case the Rescue plan must have elements which address:

- How the alarm is raised
- Identification of possible rescue scenarios (not only for low oxygen effects)
- Any scenarios in the surrounding work place which may or may not require immediate exit from the space (e.g. site evacuation in event of fire elsewhere)
- Stand-by watch trained to keep visual and verbal contact with the entrant and to ensure the entrant exits the space if symptoms of oxygen deficiency are suspected or observed
- Any assistance which may be needed/given from outside the space to help entrant escape from the space, without further entry.
- Re-checking/confirmation of atmosphere prior to rescue

- Manpower and equipment required to move unconscious person from that space
- Provision of first aid/medical treatment (e.g. resuscitation and/or oxygen treatment) inside the space if necessary
- Safe access by rescue and/or medical personnel if necessary
- How to make the space safe/prevent further injury after the rescue.

### 8.3 Equipment

A successful rescue action may need some of the following equipment. The actual needs must be assessed as part of the rescue plan and made available and accessible during the confined space work:

- A portable audible alarm devices [sic], e.g.; personal horn, whistle, klaxon etc. to alert nearby people that assistance is required.
- Telephone or radio at the work site so that an alarm can be raised in event of problems
- A safety belt or harness connected to a line
- Mechanical aid such as pulley, hoist, to extract the victim.
- Possibly a source of air or oxygen to ventilate the confined space, such as:
  - A compressed air hose connected to the plant compressed air network,
  - A ventilation device.
- Additional oxygen monitors for rescue team for re-checking conditions inside the space

- Positive pressure breathing air supply. This may be an externally fed breathing air system or self-contained breathing apparatus (SCBA).

*WARNING: Cartridge masks for toxic gases are not suitable as they do not replenish missing oxygen.*

- A resuscitation kit supplied with oxygen for the victim. In general, such a kit includes a small oxygen cylinder, a pressure regulator, an inflatable bag, and a mask to cover both the nose and mouth of the victim.
- Stretcher to carry injured person out of the space, away from work place and/or to ambulance.

It should be noted that any equipment identified as necessary to carry out an emergency rescue from a confined space should be defined on the basis of a full risk assessment and the emergency plan developed from it. Where this equipment is not available, a rescue should not be undertaken.

#### 8.4 Rescue training

Where an emergency plan considers that a rescue is to be performed, it is recommended that there is an annual programme of training including practical rescue drills. It is also a good practice to consider a rescue exercise before start of confined space work.

#### 8.5 First Aid

Where there is a potential hazard from inert gases/oxygen deficiency it is advisable to have personnel available who are formally qualified to give first aid and/or perform resuscitation in the event of an accident. The simplest first aid treatment for someone suffering from effects of oxygen deficiency is to bring

the affected person into fresh air—as long as it safe to do so!

In most countries additional training is required so that first aiders are qualified to provide Oxygen as medical treatment for anoxia and other conditions.

## 9 Conclusions

There are two essential points to remember related to oxygen deficiency accidents involving inert gases:

- Accidents resulting from oxygen deficiency due to inert gases happen unexpectedly and the reactions of personnel may be incorrect. To avoid this, all personnel who may work with, or may be exposed to, inert gases must have routine awareness training in respect of the hazards of these gases.
- Accidents involving asphyxiant atmospheres are always serious, if not fatal. It is absolutely necessary to carry out both regular and periodic awareness training sessions for all personnel, as well as rescue drills.

## 10 References

[1] CGA document SB-2 2007 Oxygen-Deficient Atmospheres

[2] EIGA Asphyxiation campaign documents 2003—including Dangers of Asphyxiation leaflet; Oxygen Deficiency training presentation and Newsletter 77/xx

[3] Oxygen deficiency hazards. Video tape EIGA, 1997

[4] EIGA Position Paper PP-14: Definitions of Oxygen Enrichment/Deficiency Safety Criteria—August 2006.



[5] US Chemical Safety and Hazard Investigation Board website Video Room [www.csb.gov](http://www.csb.gov)

[6] EIGA position Paper PP-24: Abuse of Gases

[7] IGC Doc 004 Fire Hazards of Oxygen and Oxygen Enriched Atmospheres

[8] IGC Doc 040 Work Permit Systems

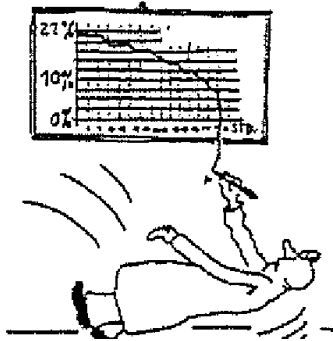
## Appendix A: Summary for operators

## 1 Why do we need oxygen?

**OXYGEN IS ESSENTIAL FOR LIFE  
WITHOUT ENOUGH OXYGEN WE CANNOT LIVE**

When the natural composition of air is changed, the human organism can be affected or even severely impaired.

If gases other than oxygen are added or mixed with breathing air, the oxygen concentration is reduced (diluted) and oxygen deficiency occurs.



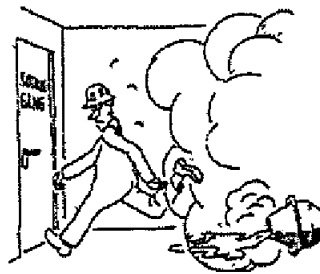
If oxygen deficiency occurs due to the presence of inert gases (e.g. nitrogen, helium, argon, etc.) a drop in physical/mental efficiency occurs without the person's knowledge; at about 11 % oxygen concentration in air (instead of the normal 21 % concentration) fainting occurs without any prior warning.

Below this 11 % concentration there is a very high risk that death due to asphyxiation will occur within a few minutes, unless resuscitation is carried out immediately!

See also EIGA Safety Newsletter NL/77 Campaign against Asphyxiation

## 2 Causes of oxygen deficiency

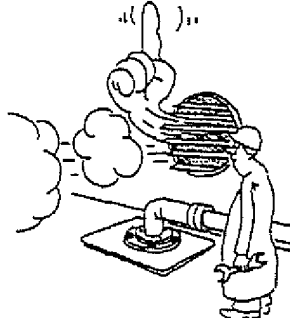
a) When liquefied gases (such as liquid nitrogen, liquid argon, or liquid helium) evaporate, one litre of liquid produces approximately 600 to 850 litres of gas. This enormous gas volume can very quickly lead to oxygen deficiency unless there is adequate ventilation.



b) In the event of gases other than oxygen leaking out of pipe work, cylinders, vessels, etc., oxygen deficiency must always be expected. Checks should be made periodically for possible leaks.

Spaces with limited or inadequate ventilation (e.g. vessels) must not be entered unless air analysis has been made, safe conditions are confirmed and a work permit has been issued.

c) If work has to be carried out in the vicinity of ventilation openings, vent pipes or vessel man ways for example, personnel must be prepared to encounter gases with low oxygen concentration or without oxygen at all, being discharged from these openings.



d) Oxygen deficiency will always arise when plant and vessels are purged with nitrogen or any other inert gases.

### 3 Detection of oxygen deficiency

#### HUMAN SENSES CANNOT DETECT OXYGEN DEFICIENCY

Measuring instruments give an audible or visual alarm of oxygen concentration and can indicate the oxygen content.

These instruments should always be tested in the open air before use.

If the presence of toxic or flammable gases is possible, specific instruments should be used.



#### 4 Breathing equipment

Breathing equipment must be used in situations where oxygen deficiency has to be expected and which cannot be remedied by adequate ventilation.

Cartridge gas masks necessary for use in the presence of toxic gases (such as ammonia, chlorine, etc.) are useless for this purpose.

Recommended types of breathing equipment are:

- Self contained breathing apparatus using compressed air cylinders;
- Full-face masks with respirator connected through a hose to a fresh air supply.

**NOTE:**

- It should be born in mind that when wearing these apparatus, particularly with air filled cylinders, it might sometimes be difficult to enter manholes.
- Periodic inspection of the correct functioning of the equipment shall be carried out in accordance with local regulations.
- Users shall be trained and shall practice handling of the equipment regularly.

#### 5 Confined spaces, vessels, etc.

Any vessel or confined space where oxygen deficiency is expected and which is connected to a gas source shall be disconnected from such a source:

By the removal of a section of pipe; or by inserting a blanking plate before and during the entry period.

Reliance on the closure of valves alone might be fatal.

A space or vessel should be thoroughly ventilated, and the oxygen content shall be measured periodically before and during entry period.

If the atmosphere in such a vessel or space is not breathable, a qualified person shall use breathing equipment.

Permission to enter such a space shall be given only after the issue of an entry permit signed by a responsible person.

As long as a person is in a vessel or confined space, a watcher shall be present and stationed immediately outside of the confined entrance.

He shall have a self-contained breathing apparatus readily available.

The person inside the confined space to facilitate rescue shall wear a harness and rope. The duty of the watcher should be clearly defined. A hoist may be necessary to lift an incapacitated person.



## 6 Emergency Measures

In the event of a person having fainted due to oxygen deficiency, he can only be rescued if the rescue personnel are equipped with breathing apparatus enabling them to enter the oxygen deficient space without risk.

Remove the patient to the open air and administer oxygen without delay from an automatic resuscitator if available or supply artificial respiration. Guidelines and instructions for resuscitation can be obtained from the European Resuscitation Council (Internet Homepage: [www.erc.edu](http://www.erc.edu) ).

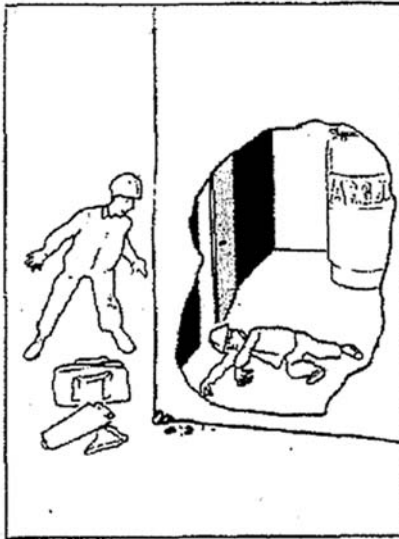
Continue until patient revives or advised to stop by qualified medical personnel.

Appendix B1: Rescue considerations from normally accessible rooms

Planned Rescue Scenario:

If work is undertaken on inert gas or cryogenic liquid systems within an enclosed room it is suggested that:

- The entrant carries a personal oxygen monitor in addition to any fixed systems as the oxygen concentration may vary within the room if ventilation is absent or inadequate for the leak rate.
- The atmosphere within the space is checked before entry



- A stand-by watch is posted outside the space, to keep visual and verbal contact with the entrant and to ensure the entrant leaves the room unaided in case of early symptoms of oxygen deficiency



- The stand-by watch can raise an alarm by telephone or radio on [sic] event of problems
- The stand-by watch has Self Contained Breathing Apparatus (SCBA) ready so that he can safely enter the enclosed room to go to the assistance of, or to extract the victim if necessary.
- Unless a plan is in place so that the entrant can be safely removed by the standby-watch alone, then the rescue team should have been warned of the confined space entry work in progress, and be ready with Self Contained Breathing Apparatus (SCBA) and other equipment so that they can safely enter the Confined space to go to the assistance of, or to extract the victim if necessary.
- Plans have been made to obtain treatment/assessment from qualified medical personnel for the victim as soon as possible after he is retrieved from the room.



#### Unplanned Rescue Scenario:

If a person is found collapsed in a room where there is a potential inert gas leak / oxygen deficient atmosphere, then the discoverer must assume that his life is at risk entering the same area. He should raise an alarm and call for assistance so that a prepared rescue can be carried out.

ONLY if the collapsed person can be reached, from outside the room should any consideration be given to extracting the victim from the space and bringing him out to fresh air and medical attention.

IF the victim has collapsed as a result of an oxygen deficient atmosphere and been there for any length of time it is very likely that he is dead and the discoverer's life is risked in vain.

## Appendix B2: Rescue considerations from Confined Spaces

### Planned Rescue Scenario:

If work is undertaken within a Confined Space such as a vessel or a difficult access space, with potential inert gas/ oxygen deficient atmosphere, it is essential that:

- The atmosphere within the space is made safe, ventilated and checked before entry
- The entrant carries a personal oxygen monitor.
- If practical the entrant wears a body harness with life line, so that he can be removed from the space by persons outside. A hoist or other mechanical aid may be needed



- A stand-by watch is posted outside the space, to keep visual and verbal contact with the entrant and to ensure the entrant exits the Confined Space if symptoms of oxygen deficiency are suspected or observed

- The stand-by watch can raise an alarm to call a trained rescue team by telephone or radio on event of problems
- The rescue team should have been warned of the confined space entry work in progress, and be ready with Self Contained Breathing Apparatus (SCBA) and other equipment so that they can safely enter the Confined space to go to the assistance of, or to extract the victim if necessary.
- The stand-by watch should never enter the Confined Space.
- Plans have been made to obtain treatment/assessment from qualified medical personnel for the victim as soon as possible after he is retrieved from the room.



#### Unplanned Rescue Scenario:

All Confined Spaces shall be closed or barricaded to prevent unauthorised access. There should be no possibility for uncontrolled entry into the Confined Space, so the “unplanned rescue” situation should not occur!

If however a person is found collapsed in a Confined Space where there is a potential inert gas / oxygen deficient atmosphere, then the discoverer must assume that his life is at risk entering the same area. He must raise an alarm and call for assistance so that a prepared rescue can be carried out.

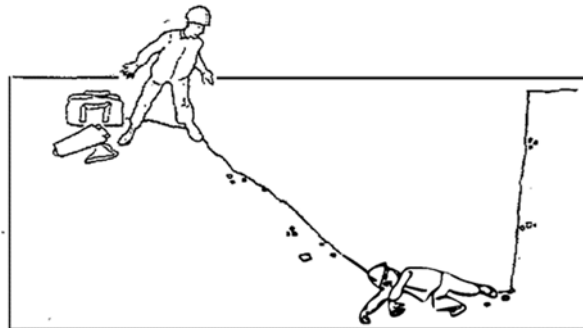
IF the victim has collapsed as a result of an oxygen deficient atmosphere and been there for any length of time it is very likely that he is dead and the discoverer's life is risked in vain.

### Appendix B3: Rescue considerations from pits, trenches

#### Planned Rescue Scenario:

If work is undertaken in an excavation, trench, pit, or other open spaces with potential inert gas / oxygen deficient atmosphere, it is strongly recommended that:

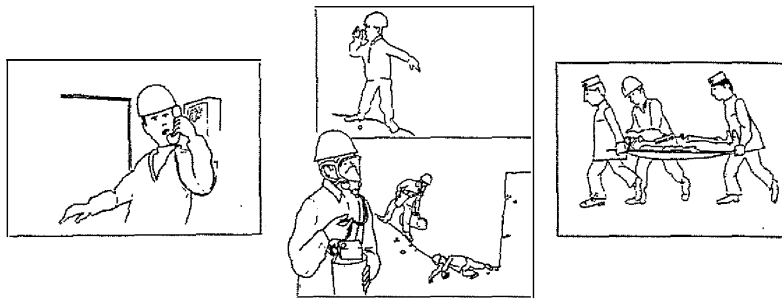
- The atmosphere within the space is checked before entry
- The entrant carries a personal oxygen monitor, as the oxygen concentration may vary within the space if there is limited fresh air circulation.



- A stand-by watch is posted outside the space, to keep visual and verbal contact with the entrant and to ensure the entrant exits the area unaided if symptoms of oxygen deficiency are suspected or observed.
- The stand-by watch can raise an alarm to call a trained rescue team by telephone or radio on [sic] event of problems.
- The stand-by watch has Self Contained Breathing Apparatus (SCBA) ready IF it is practical for him enter the enclosed room to go to

the assistance of, or to extract the victim alone.  
OR

- The rescue team should have been warned of the confined space entry work in progress, and be ready with Self Contained Breathing Apparatus (SCBA) and other equipment so that they can safely enter the space to extract the victim if necessary
- Plans have been made to obtain treatment/assessment from qualified medical personnel for the victim as soon as possible after he is retrieved from the room.



#### Unplanned Rescue Scenario:

If a person is found collapsed in a trench, pit or other space where there is a potential inert gas leak / oxygen deficient atmosphere, then the discoverer must assume that his life is at risk entering the same area. He should raise an alarm and call for assistance so that a prepared rescue can be carried out.

IF the victim has collapsed as a result of an oxygen deficient atmosphere and been there for any length of time it is very likely that he is dead and the discoverer's life is risked in vain.

In addition it will often require several people to remove a victim from these kinds of spaces.

### Appendix C: Accidents involving oxygen deficiency

The following list highlights real accidents recorded by EIGA, some of them very recent. The list illustrates how essential it is to regularly draw the attention of our personnel, as well as that of our customers, to the hazards of inert gases and oxygen deficiency.

1. A new pipeline in a trench was being proof tested with nitrogen. A charge hand entered the trench to investigate the cause of an audible leak. He was overcome by nitrogen and died.

2. A workman was overcome by lack of oxygen after entering a large storage tank, which had been inerted with nitrogen. Two of his workmates, who went to his aid, without wearing breathing equipment, were also overcome and all three died.

3. A man was overcome on entering a steel tank which had been shut up for several years. The atmosphere inside the tank was no longer capable of supporting life due to removal of oxygen from the air by the rusting of steel.

4. A worker from a contractor company had to carry out welds inside a vessel. The vessel had been under a nitrogen blanket, but was ventilated with air before work started. In order to be on the safe side, the welder was asked to wear a fresh air breathing mask. Unfortunately a fellow worker connected the hose to a nitrogen line and the welder died from asphyxiation.

*This accident happened because the nitrogen outlet point was not labelled and had a normal air hose connection.*

5. Welding work with an argon mixture was performed inside a road tanker. During lunchtime the welding torch was left inside the tank, and as the valve



was not properly closed, argon escaped. When the welder re-entered the tank, he lost consciousness, but was rescued in time.

*Equipment that is connected to a gas source, except air, must never be left inside confined spaces during lunch breaks, etc. Merely closing the valves is not a guarantee against an escape of gas. If any work with inert gas is carried out in vessels, etc. take care with adequate ventilation or the use of proper breathing equipment.*

6. A driver of a small-scale liquid nitrogen delivery service vehicle was making a delivery. He connected his transfer hose to the customer-installed tank, which was situated in a semi-basement. After he had started to fill, one of the customer's employees told him that a cloud of vapour was forming around the tank. The driver stopped the filling operation and returned to the area of the tank to investigate. On reaching the bottom of the stairs, he collapsed, but fortunately he was seen by one of the customer's staff that managed to put on breathing apparatus, go in and drag the man to safety. The driver fully recovered.

Unknown to the driver, the bursting disc of the storage tank had failed prior to the start of his fill and as soon as he started filling, nitrogen escaped in the vicinity of the storage tank. The oxygen deficient atmosphere overcame him when he went down to investigate without wearing his portable oxygen monitor, which would have warned him of the oxygen deficiency. The installation had been condemned and was no longer being used. Not only was the tank situated in a semi-basement, but the relief device was also not piped to a safe area.

7. During a routine overhaul of an air separation plant, a maintenance technician had the task of changing the filter element on a liquid oxygen filter. The plant was shut down and a work permit was issued each day for each element of work. In spite of these precautions, the technician collapsed when he inadvertently worked on the filter after it had been purged with nitrogen. The fitter collapsed apparently asphyxiated by nitrogen. All efforts to revive him failed.

8. At a cryogenic application, the equipment pressure relief valve located on the equipment inside the building opened because the pressure in the storage tank outside increased above the setting of the equipment pressure relief valve. Personnel about to enter the room the next morning were warned by the frosted appearance and did not enter.

9. A customer was supplied with 2 low temperature-grinding machines, which were located in the same area in the factory. The customer installed a joint nitrogen extraction system between the two machines. One machine was switched off for cleaning while the other machine was left running. One of the operators who had entered the unit for cleaning fell unconscious and was asphyxiated before help arrived. The linked extraction system had allowed exhausted nitrogen from the operating machine to flow into the unit to be cleaned.

10. A driver was fatally asphyxiated during commissioning of a nitrogen customer station. The customer station tank was located in a pit that was not recognized as a confined space by the design team, distribution operation team or the driver. The driver was sent to do the commissioning by himself.

During the commissioning the driver made a mistake in opening the liquid supply line valve, instead of the gas vent valve, for purging and cool down of the tank. It is believed he did not immediately notice the valving error partially due to a modified manifold that allowed gas to vent from an uncapped drain in the liquid supply line. When the driver opened the valve gas started venting as would normally occur except from the wrong location. Once he noticed that liquid rather than gas venting, he went into the pit to correct the valving error. At this point he walked into a nitrogen rich/oxygen deficient atmosphere.

11. A group of workers were routinely working at the in-feed end of a tunnel freezer. As the temperature of the tunnel was approaching the desired set point, a new operator noticed that there was a cloud of N<sub>2</sub> gas coming out at exit end of the freezer. He suddenly increased the speed of the scroll fan in order to remove the gas from exit to product entrance. The exhaust and scroll fans were running on manual mode. As a result, the N<sub>2</sub> cloud moved to product entrance and five workers who were working around the loading table passed out. Fortunately, there were no serious injuries and all of them returned to work after taking a rest.

12. On an ASU still in commissioning phase three painters from a sub-subcontractor were working on a ladder to complete external painting works on nitrogen/water tower. To complete the painting of top tower section a wooden plank was put across the exhaust section to atmosphere. One painter climbed on the plank, surrounded by the nitrogen stream, and fell off inside the tower. The two other painters rushed from the ladder to the plank to rescue their team mate. Both collapsed into the tower as well. The three painters died before they could be rescued.

13. An experienced contractor was used to purge a natural gas pipeline, 0.5m diameter 10 km long, with nitrogen before start-up. When one contractor employee and two customer employees entered the remotely located chamber, they were asphyxiated and later found dead in the chamber. Two blind flanges were leaking and the oxygen monitor was not used.

14. A customer nitrogen tank, volume 10 m<sup>3</sup>, on a PSA plant was to be inspected by the competent body. The inspector entered the tank and lost consciousness immediately. Two persons from the gas company participating in the inspection managed to bring the inspector out without entering the tank. The inspector recovered.

15. A liquid CO<sub>2</sub> tank was installed. The tank should be purged with air but mistakenly the hose was connected to nitrogen. The tank manhole was situated 4 m above ground. For reasons unknown, a contract employee brought a ladder, entered the tank and was asphyxiated. Previously that morning employees had been told not to enter the tank before the atmosphere was officially checked.

16. Employee stepped into a control cubicle where the instrument air was temporarily replaced with N<sub>2</sub> during shutdown. The green light outside the door was on indicating safe atmosphere. As soon as he stepped into the cubicle his personal O<sub>2</sub> monitor alarmed indicating 18% O<sub>2</sub> or less. After exiting safely he opened the door and when O<sub>2</sub> level was OK, checked the fan. The ventilation fan was not running. The light was wrongly wired.

17. The perlite in a storage tank under erection had to be emptied by a contractor company, familiar with this job. During this work one of the workers fell down

in the perlite, depth approximately 3m, and was asphyxiated.

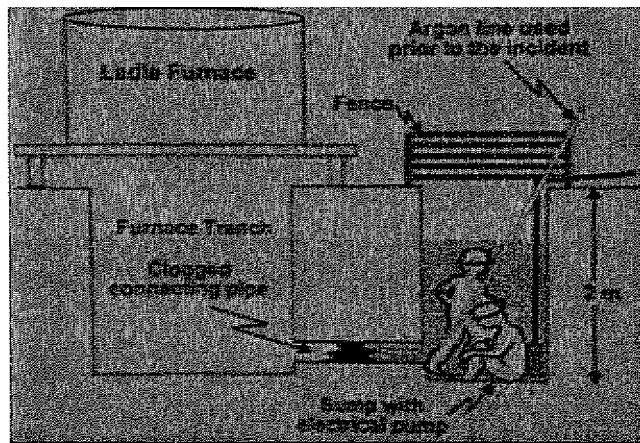
18. During the cleaning and painting maintenance of the internal and external surfaces of a water tank, one operator suffered anoxia due to nitrogen being used to purge the vessel instead of air. Two employees tried to rescue the victim and fainted. These two operators were rescued and transported to hospital for intensive care however the original operator died.

19. During the installation of a new LIN phase separator on LIN pipe work at a customer site, a technician went into the roof space. His personal oxygen-monitoring device began to alarm immediately, indicating low oxygen levels. The technician left the roof space immediately and informed the customer. Later in the same week, the customer owned food-freezing machinery was operating, and a project engineer measured concentrations far below 19% in the production room. He left the room, asked all subcontractors to stop work and leave the room, and informed the customer. Investigation showed that the customer had not connected the exhaust ducting to the food-freezing machine that they owned and installed. The exhaust pipes ended in the attic space, not being extended to the atmosphere. Customer had “bridged” the alarm/trip output so LIN supply would not be shut off by low O<sub>2</sub> concentrations.

20. An experienced site employee wanted to take some photographs to add to a report concerning production problems relating to problems with leaks in the argon condenser. In the control room he asked a Contractor to accompany him to take photographs of equipment in the cold box. One hour later the two men were found unconscious in a manhole access to the cold

box. Emergency authorities were called and declared the two men dead.

21. Two people on a customer's site were asphyxiated and died whilst attempting to unblock a pipe, using Argon gas in a confined space. The use of Argon gas in this application is not authorised. The incident took place in a sump 2 metres below ground level, which is used to drain water from a



22. An air compressor that provided instrument air to an acetylene plant and for breathing air failed. A back-up nitrogen supply from a liquid cylinder was connected to the piping system to replace the function of the air compressor. An operator put on a full respiratory face mask to load Calcium Carbide into the hopper and inhaled nitrogen. He died.

800

Appendix D: Hazard of inert gases sign



DANGER OF DEATH  
Potential Asphyxiating  
Atmosphere

# Safety Bulletin

U.S. Chemical Safety and Hazard Investigation Board



## HAZARDS OF NITROGEN ASPHYXIATION

No. 2003-10-B | June 2003

### Introduction

Every year people are killed by breathing "air" that contains too little oxygen. Because 78 percent of the air we breathe is nitrogen gas, many people assume that nitrogen is not harmful. However, *nitrogen is safe to breathe only when mixed with the appropriate amount of oxygen.*

These two gases cannot be detected by the sense of smell. A nitrogen-enriched environment, which depletes oxygen, can be detected only with special instruments. If the concentration of nitrogen is too high (and oxygen too low), the body becomes oxygen deprived and asphyxiation occurs.

This Safety Bulletin is published to bring additional attention to the continuing hazards of nitrogen asphyxiation.<sup>1</sup>

- Nitrogen is widely used commercially. It is often used to keep material free of contaminants (such as oxygen) that may corrode equipment, present a fire hazard, or be toxic.
- Nitrogen asphyxiation hazards in industry resulted in 80 deaths from 1992 to 2002. These incidents occurred in a variety of facilities, including industrial plants, laboratories, and medical facilities; almost half involved contractors.

<sup>1</sup> In 1998, the U.S. Chemical Safety Board (CSB) investigated a nitrogen asphyxiation incident that occurred in Fahnville, Louisiana. As part of that investigation, CSB reviewed the prevalence of asphyxiation incidents.

inadvertent use of nitrogen rather than breathing-air delivery systems.

This bulletin focuses only on the hazard of asphyxiation, though nitrogen also presents cryogenic and high-pressure hazards.

### Commercial Uses of Nitrogen

One of the most important commercial uses of nitrogen is as an inerting agent to improve safety. Nitrogen is inert under most conditions (i.e., it does not react with or affect other material).

It is often used to keep material free of contaminants, including oxygen—which can corrode equipment or present a fire and explosion hazard when in contact with flammable liquids or combustible solids. In such cases, a flow of nitrogen is maintained in a vessel to keep oxygen out.

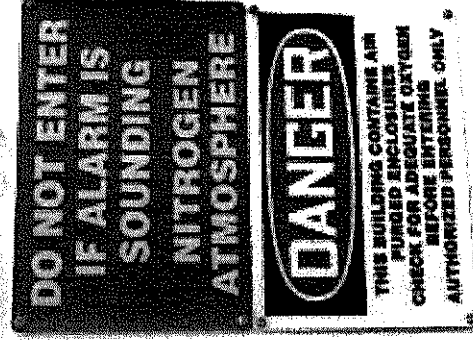
Nitrogen is also used to purge air from equipment prior to introducing material, or to purge flammable or toxic material prior to operating equipment for maintenance.

In industrial and commercial settings where a nitrogen-enriched environment may present a hazard, such as when using supplied air or working in or around spaces that are confined,

- Good practices and awareness of hazards minimize the risk of nitrogen asphyxiation (Figure 1).

Many incidents reviewed by CSB were caused by inadequate knowledge of the hazard or

\* Figure 1. Sign warning of nitrogen hazard.





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precautions must be taken to ensure that sufficient oxygen is provided to personnel.

- \* Nitrogen is safe to breathe only when mixed with the appropriate amount of oxygen.

## Effects of Oxygen-Deficient Atmosphere

Nitrogen is not a "poison" in the traditional sense. It presents a hazard when it displaces oxygen, making the atmosphere hazardous to humans. Breathing an oxygen-deficient atmosphere can have

CSB Safety Bulletins offer advisory information on good practices for managing chemical process hazards. Case studies provide supporting information. Safety Bulletins differ from CSB Investigation Reports in that they do not comprehensively review all the causes of an incident.



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serious and immediate effects, including unconsciousness after only one or two breaths. The exposed person has no warning and cannot sense that the oxygen level is too low.

The Occupational Safety and Health Administration (OSHA) requires employers to maintain workplace oxygen at levels between 19.5 and 23.5 percent. As shown in the table on page 3, the human body is adversely affected by lower concentrations.

As the oxygen concentration falls below 16 percent, the brain sends commands to the breathing control center, causing the victim to

- \* In industrial and commercial settings where a nitrogen-enriched environment may present a hazard, . . . precautions must be taken to ensure that there is sufficient oxygen in the atmosphere.

breathe faster and deeper. As the oxygen level continues to decrease, full recovery is less certain. An atmosphere of only 4 to 6 percent oxygen causes the victim to fall into a coma in less than 40 seconds. Oxygen must be administered within minutes to offer a chance of survival. Even when a victim is rescued and

resuscitated, he or she risks cardiac arrest.

- \* Nitrogen . . . presents a hazard when it displaces oxygen.

## Statistics on Nitrogen Asphyxiation

From reported data for the United States, CSB identified 85 nitrogen asphyxiation incidents that occurred in the workplace between 1992 and 2002. In these incidents, 80 people were killed and 50 were injured.<sup>2</sup>

### Profile of Affected Industries and Activities

Of the 85 incidents reported, 62 percent occurred in chemical plants and refineries, food processing and storage facilities, metal and manufacturing operations, and other industrial, maritime, and manufacturing sites, including nuclear plants.

Approximately 13 percent of the incidents involved maintenance

<sup>2</sup> Data sources for the CSB review include regulatory agencies, media reports, technical publications, and contacts with safety personnel; however, only those incidents that were reported and accessible are represented. Although the summary data reported above are not all-inclusive, the numbers clearly indicate that nitrogen asphyxiation presents a serious hazard in the workplace. Statistical analysis is based on available, limited information.

**Effects of Oxygen Deficiency on the Human Body**

Atmospheric Oxygen Concentration (%)	Possible Results
20.9	Normal
19.0	Some unnoticeable adverse physiological effects
16.0	Increased pulse and breathing rate, impaired thinking and attention, reduced coordination
14.0	Abnormal fatigue upon exertion; emotional upset, faulty coordination, poor judgment
12.5	Very poor judgment and coordination, impaired respiration that may cause permanent heart damage, nausea, and vomiting
<10	Inability to move, loss of consciousness, convulsions, death

SOURCE: Compressed Gas Association, 2001.

\* CSB identified 85 nitrogen asphyxiation incidents that occurred in the workplace between 1992 and 2002 . . . 80 people were killed and 50 were injured.

activities, such as railcar and tank truck cleaning, painting, maintenance, and repair. These incidents are categorized as "maintenance" because incident reports do not include enough information on the type of industrial setting; they could have occurred at manufacturing sites, which would increase the 62 percent estimate above.

Likewise, trenches and manholes — not specifically

identified as being in manufacturing facilities — account for about 14 percent of the incidents. The remainder of the incidents occurred in laboratories and miscellaneous industries, such as medical and transportation.

The data show that employees and contractors alike are victims of asphyxiation. Of the 85 incidents reviewed, 42 involved contractors, including construction workers;

\* Of the 85 incidents reviewed, 42 involved contractors, including construction workers; these 42 incidents account for over 60 percent of the fatalities.

\* . . . 130 workplace fatalities and injuries occurred from breathing nitrogen-enriched air. Over 60 percent of these victims were working in or next to a confined space.

these 42 incidents account for over 60 percent of the fatalities.

**Causal Information**

From the CSB data, a combined total of 130 workplace fatalities and injuries occurred from breathing nitrogen-enriched air. Over 60 percent of these victims were working in or next to a confined space.<sup>3,4</sup>

One characteristic of a confined space is its capability to contain an atmosphere that may be totally different from outside air.

Confined spaces in manufacturing sites typically include equipment such as reactors, vessels, tanks, and boilers. Other such spaces are railcars, trenches, and areas accessible by manholes.

<sup>3</sup> "Next to a confined space" means that a person's breathing zone is affected by the atmosphere emanating from the space. The person may be standing in the immediate area but not actually in the space.

<sup>4</sup> According to OSHA, a confined space can be entered to perform work, has limited means of egress, and is not designed for continuous employee occupancy. A "permit-required confined space" includes a space that contains or has the potential to contain a serious safety or health hazard, such as a hazardous atmosphere.

### Failure to Detect Oxygen-Deficient Atmosphere

Failure to detect an oxygen-deficient (nitrogen-enriched) atmosphere was a significant factor in several incidents.

In the data evaluated for this study, 67 of the 85 incidents involved circumstances where personnel were in or around a confined area — such as a railcar, room, process vessel, or tank (Figure 2) — and nitrogen was initially present in high levels or later collected in the area. These incidents accounted for 62 fatalities and 33 injuries. In each of the 67 incidents, personnel failed to detect elevated levels of nitrogen and take appropriate precautions.

When fatalities and injuries occurred in “open areas” (including areas with ventilation, laboratories, buildings, and outside in the vicinity of equipment), the hazard of asphyxiation was not expected and personnel were typically caught off guard. In some cases, personnel unknowingly created a nitrogen-enriched atmosphere by mistakenly using nitrogen instead of air to

flush equipment prior to entry. In either situation, inadequate knowledge of the hazard and failure to detect additional nitrogen resulted in a fatal concentration of gas.

\* **When fatalities and injuries occurred in “open areas” . . . the hazard of asphyxiation was not expected and personnel were typically caught off guard.**

### Mix-Up of Nitrogen and Breathing Air

Confusing nitrogen gas with air and problems with breathing-air delivery systems accounted for 12 of the 85 incidents, and approximately 20 percent of fatalities.

The data provide examples of workers inadvertently using nitrogen instead of air because of interchangeable couplings on lines and poor or non-existent labeling.

In one incident, a worker mistakenly used nitrogen instead of air to purge a confined space. An inert atmosphere was unexpected and undetected. One worker was killed, and a colleague also died while attempting rescue. In another case, workers inadvertently connected the hose for their breathing-air respirator to a pure nitrogen line.

\* **In one incident, a worker mistakenly used nitrogen instead of air to purge a confined space . . . In another case, workers inadvertently connected the hose for their breathing-air respirator to a pure nitrogen line.**

### Fatalities and Injuries During Attempted Rescue

One of the most difficult issues concerning hazardous atmosphere emergencies is the human instinct to aid someone in distress. Approximately 10 percent of fatalities from the CSB data were due to attempts to rescue injured persons in confined spaces.

\* Figure 2. Confined area.



\* Approximately 10 percent of fatalities from the CSB data were due to attempts to rescue injured persons in confined spaces.

### **Asphyxiation Hazards Outside Industry and Effect on General Public**

Asphyxiation hazards may also be present outside industry, especially among people who use breathing air, such as firefighters, divers, and medical patients. Statistics on these types of incidents are difficult to collect and are not included in this bulletin, though one such case is summarized below.

## **Selected Case Studies**

### **Failure to Recognize Asphyxiation Hazards Near Confined Spaces**

#### *Employee Dies After Partially Entering a Nitrogen-Purged Tank*

Two coworkers and the victim were cleaning filters in a hydrogen purifying tank. The tank was partly purged with nitrogen to remove internal dust particles.

The victim used a lift to access the external area of the upper tank, which was fitted with a manway.

As he leaned into the tank opening, his coworkers noticed that he was not responding to their communication. They found the victim unconscious, and he later died as a result of oxygen deficiency.

#### *Employee Overcome While Testing Atmosphere*

An operator was conducting a flammable gas test on a tower feedline that discharged into a low-pressure flare gas header. The test was required for a hot work permit to take flash photos.

The chief operator issued a work permit that required a supplied-air respirator. Two contractor pipefitters wore respirators and removed the safety valve. The operator, however, wore no respiratory protection. After climbing the scaffold, he was overcome by nitrogen gas from the open flare line before he could complete atmospheric sampling.

The operator backed away, turned, and slumped to his knees. He was disoriented and briefly lost consciousness. An investigation concluded that the incident was due to elevated levels of nitrogen gas that had inadvertently entered the flare system.

### **Inadequate Monitoring of Atmosphere**

#### *Contractor Asphyxiated Inside Tank Car*

White mineral oil in a tank car at an oil refinery was offloaded by injecting nitrogen gas into the car. An employee of a railcar cleaning company was asphyxiated while cleaning the nitrogen-filled tank car.

### **Corrupt Breathing Air Supply**

#### *Two Laborers/Painting Contractors Asphyxiated*

Two painting contractors were abrasive-blasting tubes inside a boiler at a chemical plant. They each wore supplied-air respirators connected to a 12-pack cluster of compressed air cylinders. Another subcontractor monitored the work outside the confined space.

Work proceeded normally throughout the night shift; however, at 3:00 am, the attendant got no response after repeatedly sounding the air horn. When another contractor employee was sent into the boiler to assess the situation, he found the two men lying on opposite ends of the scaffolding.

When the plant health, safety, and environmental department tested the compressed air 12-pack, they found that it contained less than 5 percent oxygen. The "air" had been manufactured with too low a

concentration of oxygen. (Note: This fatal incident prompted OSHA to issue a safety alert on the batch of breathing air.)

**Mix-Ups Between Nitrogen and Air**

*Three Employees Asphyxiated in Coating Tank*

The atmosphere inside a coating tank was tested and ventilated the day before work was to be performed. On the following day, a contractor entered the tank to clean it and collapsed. Two plant employees entered to attempt rescue, but they were also overcome.

The tank had been ventilated with what was thought to be compressed air but was actually nitrogen. The atmosphere was not tested prior to beginning work. All three men were asphyxiated.

*Employee Killed by Overexposure to Pure Nitrogen*

A contractor planned to use an air-powered hammer to chip residue from a furnace in an aluminum foundry. He wore an airline respirator. Of two compressed gas lines with fittings, one was labeled "natural gas" and the other had an old paper tag attached with "air" handwritten on it. However, this line actually contained pure nitrogen.

A splitter diverted one part of the gas stream to the air hammer and the other part to the airline respirator. Once the respirator was in place, the worker breathed pure nitrogen and was asphyxiated.

*Four Killed and Six Injured in Nursing Home*

A nursing home routinely ordered large pure oxygen compressed gas cylinders for residents with respiratory system diseases. The supplier mistakenly delivered one cylinder of pure nitrogen with three cylinders of oxygen; a nursing home maintenance employee mistakenly accepted the nitrogen tank.

Another maintenance employee took this cylinder, which had a nitrogen label partially covering an oxygen label, to connect it to the oxygen supply system. The tank was fitted with nitrogen-compatible couplings. The employee removed a fitting from an empty oxygen cylinder and used it as an adapter to connect the nitrogen tank to the oxygen system. Four deaths and six injuries occurred as a result of pure nitrogen being delivered to the patients.

**Good Practices for Safe Handling of Nitrogen**

**Implement Warning Systems and Continuous Atmospheric Monitoring of Enclosures**

The atmosphere in a confined space or small enclosed area may be unfit for breathing prior to entry, or it may change over time, depending on the type of equipment or work being performed. Recognizing this hazard, good practice calls for continuous monitoring of a confined space to detect oxygen-deficient, toxic, or explosive atmospheres. The entire confined space should be monitored – not just the entry portal.

\* **The atmosphere in a confined space or small enclosed area may be unfit for breathing prior to entry, or it may change over time . . .**

Warning and protection systems include flashing lights, audible alarms, and auto-locking entryways to prevent access. Such devices, if properly installed and

maintained, warn workers of hazardous atmospheres. Personal monitors can measure oxygen concentration and give an audible or vibration alarm for low oxygen concentrations.

- \* **Good practice calls for continuous monitoring of a confined space to detect oxygen-deficient, toxic, or explosive atmospheres.**

Personnel should be trained on how to properly respond and evacuate in the event of failure of the system.

### **Implement System for Safe Rescue of Workers**

Rescue may be necessary in the event of continuous monitoring, ventilation failure, or another emergency condition. The ability to immediately retrieve immobilized workers is a critical component of confined space entry preplanning.

- \* **It is essential to maintain continuous forced draft fresh-air ventilation before the job begins through to completion.**

### **Ensure Ventilation With Fresh Air**

Because the atmosphere of a confined space or small/enclosed area often changes during the course of work, it is essential to maintain continuous forced draft fresh-air ventilation before the job begins through to completion. Areas with the potential to contain elevated levels of nitrogen gas should be continuously ventilated prior to and during the course of the job.

Ventilation is also required in rooms and chambers into which nitrogen may leak or vent. In a few of the study cases, people who were simply working close to the nitrogen-containing confined space, room, or enclosure were asphyxiated.

Systems must be in place to properly design, evaluate, and maintain ventilation systems. A warning system will alert workers of a dangerous atmosphere.

or legs. The attendant and rescue personnel should be available at all times. Rescuers must have an effective system to communicate with personnel inside enclosures. No one should enter a dangerous atmosphere without proper personal protective equipment.

The last measure of defense requires personnel to actually enter the confined area to retrieve the victim. This approach should be used only when personnel are appropriately trained, have donned rescue equipment, and have dependable breathing air.

Approximately 10 percent of fatalities from the survey data occurred to personnel attempting rescue. These deaths could have been prevented if a reliable retrieval system was in place. Such a system would also prevent many entry worker fatalities because it provides for quickly removing the worker from a dangerous atmosphere to a safe one.

### **Ensure Uninterrupted Flow and Integrity of Breathing Air**

Breathing air must be supplied when workers enter environments where oxygen is or may become deficient. Workers may use either a self-contained breathing apparatus (SCBA) or an airline respirator, which consists of a long hose connecting a breathing air supply to the respirator or hood.

Because a worker using an airline respirator does not control the

One method is to attach a body harness and lifeline to personnel entering confined areas. This procedure also benefits potential rescuers because they do not have to enter the confined area to retrieve the victim. However, when a worker enters a pipeline, some furnaces, ducts, or other narrow-diameter confined spaces, pulling on a line attached to a body harness may cause the person to bunch up and become stuck inside.

Depending on the situation, wristlets or anklets attached to a lifeline and a retrieval mechanism allow the confined space attendant to pull the person out by the arms

\* **Breathing air must be supplied when workers enter environments where oxygen is or may become deficient.**

source of supply, air may suddenly or inadvertently be interrupted. For example, a power failure may stop an air compressor, the air supply may simply run out, or the supply hose may become twisted or obstructed (e.g., by a vehicle). When supplied air is used, facility management systems must protect against interruption of airflow and provide alternate sources of power for the compressors.

A comprehensive management system includes the following:

- Continuous monitoring of air supply.
- Routine inspection and replacement of supplied-air hoses.
- Restriction of vehicular traffic in the area of supply hoses.

When using supplied air, a worker should carry a small backup cylinder (escape pack) – attached to a different supplied-air system – with enough breathing air to last 5 to 10 minutes.

Breathing air is manufactured either by purifying and compressing air or by mixing nitrogen and oxygen to the appropriate ratio. A breathing-air compressor and its hoses should be specifically manufactured for

and dedicated to breathing-air systems. The compressor should have a moisture trap, an oil trap, and a carbon monoxide sensor and alarm. When breathing air is manufactured by mixing nitrogen and oxygen, the pressure of the cylinders during filling must be known to ensure that the correct amounts are mixed. The final product must be tested to ensure its integrity.

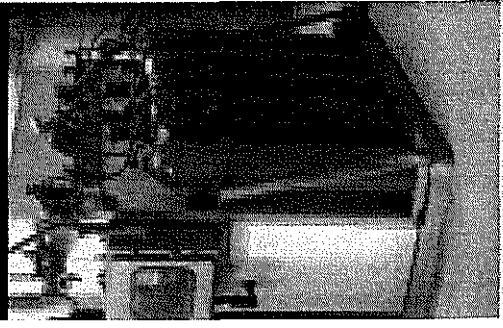
**Prevent Inadvertent Mix-Up of Nitrogen and Breathing Air**

To prevent interchanging compressed nitrogen with compressed industrial grade air or compressed breathing-quality air, specific fittings should be used for each cylinder. Cylinders for nitrogen, industrial grade air, and breathing-quality air have distinct, incompatible fittings that cannot be cross-connected.

\* **Personnel should understand that the fittings are *intended* to be incompatible to ensure safety.**

Personnel should understand that the fittings are *intended* to be incompatible to ensure safety. Cylinders should be clearly labeled; typical cylinders are shown in Figure 3. Labels on piping systems, compressors, and

\* Figure 3. Compressed gas cylinders.



fittings are additional reminders of which gas is contained inside. Color coding also helps to identify systems.

**Develop and Implement Comprehensive Training Programs**

The good practices for safe handling of nitrogen, described above, are effective only if personnel are trained on the importance of the following:

- Use of ventilation systems, retrieval systems, and atmospheric monitoring equipment—both how to use them and how to determine when they are not working properly.
- Dangers of nitrogen-enriched atmospheres and the systems to

prevent interchanging breathing air and nitrogen.

- Implementing good hazard communication, which includes safe handling of air and nitrogen delivery systems.
  - Mandatory safety practices and procedures for entry into confined spaces, such as permits, providing an attendant, monitoring, ventilating, rescue, and contractor oversight.
  - Precautions when working around equipment that may contain elevated levels of nitrogen.
  - The reason for special fittings on compressed gas cylinders.
  - Proper use of air supply equipment.
- Training should cover new and revised procedures for confined space entry, and establish measurements for employee proficiency. Contractors as well as employees should be trained.

**\* Contractors as well as employees should be trained.**

## References and Additional Information

- American National Standards Institute (ANSI)/ American Society of Safety Engineers (ASSE), 2003. *Safety Requirements for Confined Spaces*, Z117.1-2003.
- ANSI/ ASSE, 2003. *Criteria for Accepted Practices in Safety, Health, and Environmental Training*, Z490.1-2001.
- ANSI, 2002. *Standards on Signage and Labeling*, Z535 Series.
- Compressed Gas Association, Inc., 2002. *Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections*, V-1, 10th edition.
- Compressed Gas Association, Inc., 2001. *Safety Bulletin, Oxygen-Deficient Atmospheres*, SB-2, 4th edition.
- Compressed Gas Association, Inc., 1999. *Handbook of Compressed Gases*, 4th edition, Kluwer Academic Publishers.
- Federal Aviation Administration (FAA), 2003. *NASA Physiology Training*, [www.faa.gov/avt/cmo/coa/PH-TR.html](http://www.faa.gov/avt/cmo/coa/PH-TR.html).
- Finkel, Martin H., 2000. *Guidelines for Hot Work in Confined Spaces; Recommended Practices for Industrial Hygienists and Safety Professionals*, ASSE.
- Harris, Michael K., Lindsay E. Booher, and Stephanie Carter, 1996. *Field Guidelines for Temporary Ventilation of Confined Spaces*, American Industrial Hygiene Association (AIHA).
- Kletz, Trevor, 1995. *What Went Wrong? Case Histories of Process Plant Disasters*, Gulf Publishing Company.
- Institution of Chemical Engineers (IChemE), 2003. *Accident Data Base*, [she@icheme.org.uk](mailto:she@icheme.org.uk).
- Martin, Lawrence, 1997. "Effects of Gas Pressure at Depth: Nitrogen Narcosis, CO and CO<sub>2</sub> Toxicity, Oxygen Toxicity, and 'Shallow-Water' Blackout," *Scuba Diving Explained, Physiology and Medical Aspects of Scuba Diving*, Best Publishing Company.
- McManus, Neil, 1999. *Safety and Health in Confined Spaces*, Lewis Publishers/ CRC Press.
- National Institute for Occupational Safety and Health (NIOSH), 2002. "State FACE Investigations of Fatal Confined-Space Incidents," *Traumatic Occupational Injury*, [www.cdc.gov/niosh/face](http://www.cdc.gov/niosh/face), Oct-Nov 2002.
- Occupational Safety and Health Administration (OSHA), 2003. *Safety and Health Topics: Confined Spaces*, [www.osha.gov/SLTC/confinedspaces/index.html](http://www.osha.gov/SLTC/confinedspaces/index.html).



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OSHA, 2002. *Accident Investigation Summary Index Page*, [www.osha.gov](http://www.osha.gov), Oct-Nov 2002.

OSHA, 1994. "Permit-Required Confined Spaces," *Federal Register*, 29 CFR 1910.146, May 1994.

Rekus, John F., 1994. *Complete Confined Spaces Handbook*, Lewis Publishers/CRC Press.

Safety Engineering, 2002. *Daily Incident Alert Archives*, [www.safteing.net](http://www.safteing.net), Oct-Nov 2002.

The Bureau of National Affairs, Inc. (BNA), 1998. *Occupational Safety and Health Reporter*, Vol. 27, No. 46, April 22, 1998.

BNA, 1996. *Occupational Safety and Health Reporter*, Vol. 25, No. 47, May 1, 1996.

U.S. Air Force, 2003. *Hypoxia*, [www.batnet.com/mfwright/hypoxia.html](http://www.batnet.com/mfwright/hypoxia.html).

U.S. Chemical Safety and Hazard Investigation Board (USCSB), 2002. *Incident Data Base*, [www.csb.gov](http://www.csb.gov), Oct-Nov 2002.

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**Salus Populi Est Lex Suprema  
People's Safety is the Highest Law**

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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Case No. 4:14-CV-8000-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE LOMBARDI, *et al.*,

*Defendants.*

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Hon. Beth Phillips

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MOTION FOR LEAVE TO FILE SUPPLEMENT  
TO PLAINTIFF'S SUGGESTIONS IN OPPOSITION  
TO DEFENDANTS' MOTION FOR  
SUMMARY JUDGMENT

Plaintiff Russell Bucklew, by and through counsel Cheryl A. Pilate, hereby seeks leave to file a two-page supplement to Plaintiff's Suggestions in Opposition to Defendants' Motion for Summary Judgment. The supplement must be filed separately because it concerns preservation of Plaintiff's objection regarding discovery of the three depositions of M3, which were taken during prior litigation and which are protected from disclosure by protective orders. Plaintiff's co-counsel at the Sidley firm have not had access to those depositions and, under the terms of the protective orders, may not view their contents.

The proposed supplemental pleading is brief, just two pages, and adheres to the terms of the protective orders by not including material from any of M3's depositions. Given the subject matter of portions of the summary judgment briefing, Plaintiff believes it is prudent to preserve his objection and assert this ground as a further basis for denying summary judgment. The proposed supplemental pleading is attached as Exhibit 1.

Wherefore, for all of the reasons stated above, Plaintiff respectfully requests that he be granted leave to file the attached supplemental pleading.

Respectfully submitted,

/s/ Cheryl A. Pilate

Cheryl A. Pilate, Mo. Bar #42266

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IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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Case No. 4:14-CV-8000-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE LOMBARDI, *et al.*,

*Defendants.*

---

Hon. Beth Phillips

---

SUPPLEMENT TO PLAINTIFF'S SUGGESTIONS  
IN OPPOSITION TO DEFENDANTS' MOTION  
FOR SUMMARY JUDGMENT

Plaintiff Russell Bucklew, by and through counsel Cheryl A. Pilate, files this Supplement to his Suggestions in Opposition to Defendants' Motion for Summary Judgment for the purpose of stating an additional ground to deny Defendant's [sic] Motion and to preserve his objection to this Court's denial of Plaintiff's request for discovery of the prior depositions of the execution team doctor, M3. Three depositions of M3 were obtained during the litigation of two prior lethal injection lawsuits, *Ringo v. Lombardi*, Case No. 09-4095-BP (W.D. Mo.) and *Zink v. Lombardi*, Case No. 12-4209-BP (W.D. Mo.). This Court denied Plaintiff's discovery request regarding the M3 depositions in its Order granting in part and denying in part Plaintiff's Motion to Compel. (Doc. 183, Doc. 169). This Court

stated that such discovery was neither necessary nor appropriate. Mr. Bucklew respectfully disagrees with the Court's assessment, as testimony in the M3 depositions relates to numerous issues raised in the summary judgment briefing.

Mr. Bucklew was a plaintiff in the *Ringo* and *Zink* cases, and undersigned counsel was his attorney. The deposition of M3 in *Ringo* was conducted by telephone on September 24, 2010, and the two depositions of M3 in *Zink* were similarly conducted by telephone, on July 11, 2013, and January 16, 2014. The deposition transcripts were deemed "confidential" and placed under the protective orders in those cases, but were otherwise fully available to be used by counsel in representing their clients in *Ringo* and *Zink*.

Throughout the present litigation, undersigned counsel has been in possession of all three deposition transcripts of M3, but has been unable to use them on behalf of her client because of the protective orders entered in the *Ringo* and *Zink* cases. The district court's Order in this case denied access to all of the M3 depositions, and undersigned counsel has therefore been unable to share them with her co-counsel.

Undersigned counsel Cheryl Pilate has prepared the present pleading without the involvement of co-counsel from the Sidley firm. Counsel believes that the M3 deposition transcripts would provide relevant, admissible evidence bearing on numerous allegedly undisputed facts raised by defendants, as well as providing additional support for facts asserted by Plaintiff. In addition, testimony from M3's depositions is directly relevant to arguments raised throughout Section IV of Plaintiff's Suggestions in Opposition to Defendants' Motion for Summary Judgment. Throughout M3's depositions, he testified on a variety of subjects relating to the manner

of carrying out executions, the potential risks involved, and specific relevant aspects of his background.

Mr. Bucklew respectfully asserts that he has been greatly prejudiced in preparing his response to Defendant's [sic] Motion for Summary Judgment by the Court's denial of access to the transcripts of M3's depositions. For this reason, as well as those stated in his Suggestions in Opposition, summary judgment should be denied.

Respectfully submitted,

/s/ Cheryl A. Pilate

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IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 14-8000-CV-W-BP

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RUSSELL BUCKLEW,  
*Plaintiff,*

v.

GEORGE A. LOMBARDI, *et al.,*  
*Defendants.*

---

ORDER DENYING MOTION FOR LEAVE  
TO FILE SUPPLEMENTAL SUGGESTIONS  
IN OPPOSITION

This is a civil rights lawsuit, brought by a condemned inmate. Plaintiff contends that the State's method of execution as applied to him violates the Eighth Amendment. Defendants filed a Motion for Summary Judgment. Plaintiff will be filing a response; Plaintiff seeks leave, (Doc. 193), to also file "Supplemental Suggestions in Opposition" in order to preserve objections to the Court's limits on discovery. Plaintiff's motion is DENIED because his objections are preserved without the filing of the Supplemental Suggestions and there is no need to risk confusing the Record in this manner.

IT IS SO ORDERED.

/s/ Beth Phillips  
BETH PHILLIPS, JUDGE  
UNITED STATES DISTRICT COURT

DATE: May 16, 2017

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 14-8000-CV-W-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE A. LOMBARDI, *et al.*,

*Defendants.*

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ORDER AND OPINION GRANTING  
DEFENDANTS' MOTION FOR  
SUMMARY JUDGMENT

Pending is Defendants' Motion for Summary Judgment, which seeks summary judgment on the Eighth Amendment Claim presented in Count I<sup>1</sup> of the Fourth Amended Complaint. Defendants contend that the undisputed facts demonstrate (1) they are entitled to judgment as a matter of law on the merits, (2) Plaintiff's claim is barred by the statute of limitations, and (3) Plaintiff's claim is barred by principles of claim preclusion.<sup>2</sup> As discussed below, the Court

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<sup>1</sup> Counts II and III were previously dismissed by the Court. (Doc. 63.)

<sup>2</sup> Defendants also contend the Court should dismiss the case because it lacks jurisdiction. (Doc. 182, pp. 9-10.) The argument has been presented before, and the Court rejects it for the reasons previously stated. (See Doc. 101.) To the extent that Defendants' argument has shifted to contend that the Court lacks jurisdiction because the Record now proves that Plaintiff will not suffer a



agrees that the undisputed facts in the Record establish that Plaintiff cannot prevail on his Eighth Amendment claim, and for that reason the motion, (Doc. 181), is GRANTED.<sup>3</sup>

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redressable injury, the Court rejects this argument as well. Defendants' argument relates to Plaintiff's ability to prove his claim, not to the Court's jurisdiction, and crediting Defendants' argument would essentially require dismissal (without prejudice) for lack of jurisdiction anytime a plaintiff fails to prove his claim. It "is important not to conflate the injury and traceability requirements of a standing analysis with the plaintiff's ultimate burden of proof as to the issues of damages and causation at a trial on the merits," *Brown v. Medtronic, Inc.*, 628 F.3d 451, 457 (8th Cir. 2010), and this observation applies equally when the merits are considered at the summary judgment stage.

<sup>3</sup> The Court does not address the statute of limitations or claim preclusion arguments. These issues were not addressed before the first appeal, and the Court of Appeals declined to address them in the first instance. *Bucklew v. Lombardi*, 783 F.3d 1120, 1122 n.1, 1128-29 (8th Cir. 2015) (en banc). Following remand Defendants sought dismissal on these grounds, but the Court denied the request without prejudice because the Record was not yet sufficiently developed and various legal complexities (some of which had been identified by the Court of Appeals, 783 F.3d at 1122 n.1) had not been addressed. The Court's Order explained some of the difficulties involved in determining whether these doctrines apply. (Doc. 63, pp. 9-13.) The Supreme Court has since discussed the doctrine of claim preclusion when an as-applied challenge follows an unsuccessful facial challenge. *Whole Woman's Health v. Hellerstedt*, 136 S. Ct. 2292, 2305 (2016). In reasserting these arguments Defendants have not addressed any of these factual or legal issues; they have merely cited general principles without explaining how they apply in this unique situation, and cited to the same facts that were earlier deemed to be incomplete and therefore insufficient. Given the Court's ruling on the merits there is no need to further delay resolution of this case to provide Defendants another opportunity to address these issues.

## I. BACKGROUND

### A. Procedural History

Plaintiff Russell Bucklew was convicted in state court of first degree murder, kidnapping, burglary, forcible rape, and armed criminal action. He was sentenced to death for the murder and various terms of years on the other crimes. *State v. Bucklew*, 973 S.W.2d 83 (Mo. 1998) (en banc), *cert. denied*, 525 U.S. 1082 (1999). His requests for postconviction relief and habeas relief were denied. *Bucklew v. State*, 38 S.W.3d 395 (Mo.) (en banc), *cert. denied*, 534 U.S. 964 (2001); *Bucklew v. Luebbbers*, 436 F.3d 1010 (8th Cir.), *cert. denied*, 549 U.S. 1079 (2006).

Plaintiff filed this suit in May 2014. The Court dismissed the case, but the dismissal was reversed and the case was remanded. *Bucklew v. Lombardi*, 783 F.3d 1120, 1128 (8th Cir. 2015) (en banc). After the Mandate was issued, Bucklew filed a series of Amended Complaints. The latest – the Fourth Amended Complaint – is the operative pleading, and as noted earlier Count I is the only remaining count. Count I asserts an Eighth Amendment challenge, contending that Missouri’s method of execution is unconstitutional as applied to Plaintiff because of his unique medical condition.

### B. Facts

Plaintiff suffers from a congenital condition known as cavernous hemangioma. The disease causes clumps of weak, malformed blood vessels and tumors to grow throughout his body, including his head, face, neck and throat. The tumors are very susceptible to rupture. The disease also affects Plaintiff’s circulatory system, resulting in (among other effects) compromised peripheral veins in his hands and arms. The

tumors in his throat also make it difficult for him to breathe, and that difficulty is exacerbated when he is in a supine position. Plaintiff's condition is incurable, and surgery to alleviate the tumors is not possible due to the risk of severe bleeding.

Missouri's death penalty protocol has not been succinctly described, but the parties implicitly agree (and the Record demonstrates, (*e.g.*, Doc. 182-1, pp. 135-36; Doc. 197-1; Doc. 182-7, pp. 7-9)),<sup>4</sup> that it involves the intravenous administration of pentobarbital in dosages sufficient to cause unconsciousness and eventually death. In terms of the IV's placement, the protocol provides as follows:

Medical personnel shall determine the most appropriate locations for intravenous (IV) lines. Both a primary IV line and a secondary IV line shall be inserted unless the prisoner's physical condition makes it unduly difficult to insert more than one IV. Medical personnel may insert the primary IV line as a peripheral line or a central venous line (*e.g.*, femoral, jugular, or subclavian) provided they have appropriate training, education and experience for that procedure. The secondary IV line is a peripheral line.

(Doc. 182-1, p. 1.) The parties seem to agree that because of the cavernous hemangioma Plaintiff's peripheral veins cannot be used in this process because of the risk that they will rupture (assuming that an IV could be placed in them in the first place). However, the portion of the protocol quoted above confirms that a central line in the femoral vein may be used instead of inserting an IV in the peripheral veins.

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<sup>4</sup> All page numbers are those generated by the Court's CM/ECF system.

With respect to the risk of Plaintiff's femoral vein rupturing, Plaintiff's expert, (Dr. Joel Zivot), testified that the femoral vein is large and capable of "tak[ing] a fair amount of fluid" when the central line is properly placed, and the risk of that vein rupturing is "unlikely." (Doc. 182-1, p. 26.) Dr. Zivot also denied having any reason to believe that Plaintiff's medical condition made his femoral vein more susceptible to rupture than might otherwise be expected, and confirmed that his testimony about the risk of Plaintiff's veins rupturing was limited to Plaintiff's peripheral veins. (Doc. 182-1, pp. 70-71, 77-78.) Plaintiff also concedes that there is no evidence in the Record establishing that Plaintiff has any problem with his veins *other* than his peripheral veins, including his femoral vein. (Doc. 197, p. 9.) Finally, the Record confirms that Plaintiff's medical condition will not affect the flow of chemicals in his bloodstream once they are introduced through the femoral vein, or otherwise affect his expected response to the pentobarbital. (*E.g.*, Doc. 182-1, pp. 65-66, 213-14, 219.)

An execution is typically conducted with the prisoner lying on his back. The procedure for inserting a central line is also usually performed with the person in the supine position. The Record establishes that Plaintiff has difficulty breathing while in that position because the tumors can cause choking or an inability to breathe. Sometimes the tumors bleed, thereby exacerbating the sensation. When required to be on his back, Plaintiff can "adjust" his breathing so that he can remain in that position; for instance, Plaintiff was able to lie on his back for approximately one hour while undergoing an MRI. However, there are factual disputes as to (1) Plaintiff's ability to adjust his breathing once the pentobarbital begins to take effect, (Doc. 181-1, pp. 81-82), and (2) how quickly the

pentobarbital will deprive Plaintiff of the ability to sense that he is choking or unable to breathe. On the latter point Dr. Zivot testified that it could be fifty-two to 240 seconds before the pentobarbital induces a state in which Plaintiff could no longer sense that he is choking or unable to breathe. (*E.g.*, Doc. 182-1, pp. 84-88.) Defendants point out that their expert, Dr. Joseph Antognini, opined that Plaintiff would be unconscious within twenty to thirty seconds and at that point would be incapable of experiencing pain. (Doc. 182-1, pp. 198-99; Doc. 182-5, pp. 60-62.) However, the Court cannot resolve this dispute between the experts on summary judgment.

Defendants also invite the Court to analyze the study Dr. Zivot relied upon to find that fifty-two seconds of awareness is the worst case scenario because that is when brain death occurs. (Doc. 200, p. 15.) Dr. Zivot addressed this issue in his deposition, explaining that the study's use of the term "brain death" was a "misnomer" because the study marked "brain death" before measurable brain activity terminated; he then indicated that pain might be felt until measurable brain activity ceases. (Doc. 182-1, pp. 83-86.)<sup>5</sup> The Court also cannot resolve this factual dispute on summary judgment. Therefore, construing the Record in Plaintiff's favor reveals that it could be fifty-two to 240 seconds before the pentobarbital induces a

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<sup>5</sup> This may be a generous interpretation of Dr. Zivot's testimony. However, (1) the Record must be construed in the light most favorable to Plaintiff and (2) the Court is not required to resolve the elements of Plaintiff's claim in any particular order. Therefore, the Court deems it appropriate to adopt this interpretation of Dr. Zivot's testimony in order to frame the discussion about Plaintiff's proffered alternative method of execution.

state in which Plaintiff could no longer sense that he is choking or unable to breathe.<sup>6</sup>

## II. DISCUSSION

A moving party is entitled to summary judgment on a claim only upon a showing that “there is no genuine issue of material fact and that the moving party is entitled to a judgment as a matter of law.” *See generally Williams v. City of St. Louis*, 783 F.2d 114, 115 (8th Cir. 1986). “[W]hile the materiality determination rests on the substantive law, it is the substantive law’s identification of which facts are critical and which facts are irrelevant that governs.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Thus, “[o]nly disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment.” *Wierman v. Casey’s Gen. Stores*, 638 F.3d 984, 993 (8th Cir. 2011) (quotation omitted). In applying this standard, the Court must view the evidence in the light most favorable to the non-moving party, giving that party the benefit of all inferences that may be reasonably drawn from the evidence. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587-88 (1986); *Tyler v. Harper*, 744 F.2d 653, 655 (8th Cir. 1984), *cert. denied*, 470 U.S. 1057 (1985). A party opposing a motion for summary judgment may not simply deny the allegations, but must point to evidence in

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<sup>6</sup> Defendants also suggest that the execution could be performed with Plaintiff in a different position, but there is no evidence whether this has an effect on the procedure as a whole or the procedure for inserting a central line specifically. In light of the Record’s silence on these matters, Defendants have not provided the Court with a basis for granting summary judgment based on the possibility of performing the execution with Plaintiff in a sitting (or other) position.

the Record demonstrating the existence of a factual dispute. Fed. R. Civ. P. 56(c)(1); *Conseco Life Ins. Co. v. Williams*, 620 F.3d 902, 909-10 (8th Cir. 2010).

In *Glossip v. Gross*, the Supreme Court determined “what a prisoner must establish to succeed on an Eighth Amendment method-of-execution claim.” 135 S. Ct. 2726, 2737 (2015). “[D]ecisions in this area have been animated in part by the recognition that because it is settled that capital punishment is constitutional, it necessarily follows that there must be a constitutional means of carrying it out.” *Id.* at 2732-33. Moreover, “because some risk of pain is inherent in any method of execution, we have held that the Constitution does not require the avoidance of all risk of pain.” *Id.* at 2733. In light of these observations, a prisoner alleging that a particular form of execution is cruel and unusual within the meaning of the Eighth Amendment must first establish that the method to be utilized “presents a risk that is sure or very likely to cause serious illness and needless suffering, and give rise to sufficiently imminent dangers.” *Id.* at 2737 (quotations and emphasis deleted). The prisoner must then “identify a known and available alternative method of execution that entails a lesser risk of pain, a requirement of all Eighth Amendment method-of-execution claims.” *Id.* at 2731. The alternative must be “feasible, readily implemented, and in fact significantly reduce[ ] [the] substantial risk of severe pain.” *Id.* at 2737; *see also Bucklew*, 783 F.3d at 1128. The Court has discretion to decide the order in which it will address these two components of Plaintiff’s claim. *Bucklew*, 783 F.3d at 1128.

#### A. Risk of Serious Illness or Needless Suffering

Defendants contend that the uncontroverted facts demonstrate that Plaintiff is not sure or likely to

experience a serious injury or needless suffering. Plaintiff contends that he has demonstrated a serious risk that he will experience needless pain and suffering because (1) the weakness in his peripheral veins precludes using them to administer the pentobarbital, and (2) he will choke or otherwise be unable to breathe for an extended period of time before the pentobarbital takes full effect. The Court concludes that the Record establishes that (1) the use of Plaintiff's femoral vein does not present any risk of serious illness or needless suffering, and (2) the Record does not permit a conclusive determination regarding the risk that Plaintiff will choke and be unable to breathe for a period of time that would violate the Eighth Amendment.

*1. Use of Plaintiff's Femoral Vein*

As discussed in Part I.B, there is an apparent consensus that an IV cannot be safely inserted in Plaintiff's peripheral veins. However, the execution protocol allows a central line to be inserted in Plaintiff's femoral vein, and the Record establishes that this can be done without the risk of complications attributable to Plaintiff's congenital condition. The Court also notes that Plaintiff's legal argument does not discuss Defendant's evidence that his femoral vein can be used to administer the execution drugs. (Doc. 197, pp. 34-43.) Plaintiff discusses the use of his femoral vein only in the portion of his Opposition that addresses the facts in the Record, and even in that context he does not present any legal arguments based on those facts. Nonetheless, the Court will briefly discuss these factual issues.

Generally speaking, Plaintiff addresses the potential difficulty in locating the femoral vein and the fact that medical personnel might require multiple



attempts to locate it.<sup>7</sup> This, he posits, will increase his stress, thereby increasing his breathing rate and making it more likely that he will choke. Plaintiff also suggests that if the procedure is not performed properly the drugs might be injected in an artery instead of the vein. (Doc. 197, pp. 18-20.) However, Plaintiff does not quantify these risks, nor (as stated) does he explain how these facts independently establish that the current protocol presents a risk of serious illness or needless suffering. The possibility that Plaintiff might experience increased stress (or, more precisely, more stress than the situation might otherwise produce) is particularly speculative, as are the effects of that extra stress. Moreover, on several occasions the Court has observed that Plaintiff cannot predicate his Eighth Amendment claim on the bare possibility that a medical procedure might be performed incorrectly.

The uncontroverted facts demonstrate that the lethal injection protocol can be implemented by using Plaintiff's femoral vein, and that doing so will not create a substantial risk of serious injury or needless suffering. Therefore, the fact that Plaintiff's peripheral veins cannot be used will not support the first component of Plaintiff's claim.

## *2. Plaintiff's Obstructed Airway*

As discussed in Part I.B, the facts construed in Plaintiff's favor would permit a factfinder to conclude

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<sup>7</sup> To the extent Plaintiff contends that there is no evidence demonstrating that Plaintiff's femoral veins are unaffected by his disease, this argument does not change the Court's opinion. If there is no evidence that will establish any problems with the use of Plaintiff's femoral vein, then there is no reason to have a trial on the issue. Without evidence, it is a foregone conclusion that Plaintiff cannot prevail on this issue.

that for as long as four minutes Plaintiff could be aware that he is choking or unable to breathe but be unable “adjust” his breathing to remedy the situation. In seeking summary judgment Defendants have not contended that such a situation would not satisfy *Glossip* (and the Court does not hold whether it does or does not); Defendants’ sole argument is that Plaintiff would likely experience this sensation for twenty to thirty seconds or, at worst, fifty-two seconds. As discussed before, this is a factual dispute that the Court cannot resolve on summary judgment, and would have to be resolved at trial. Therefore, solely for purposes of further discussion, the Court presumes that there is a substantial risk that Plaintiff will experience choking and an inability to breathe for up to four minutes.

#### B. Alternative Measures

Plaintiff contends that death through nitrogen gas-induced hypoxia will significantly reduce the risks of severe pain and suffering. Defendants do not argue that this method of execution is not feasible or readily implemented. Instead, Defendants argue that the Record demonstrates this method of execution will not reduce Plaintiff’s risk of pain and suffering. Plaintiff disputes this point and further contends that he is not required to identify an alternative method of execution.

The Court addresses Plaintiff’s second point first. He contends that *Glossip* does not apply because that case involved a facial challenge and he presents an as-applied challenge. The Court disagrees. First, *Glossip* set forth the requirements for an Eighth Amendment challenge to an execution method. The Supreme Court did not distinguish between facial and as-applied challenges, and it did not provide a basis for

interpreting *Glossip* as creating such a distinction. To the contrary, the Supreme Court specified that the need to “identify a known and available alternative method of execution that entails a lesser risk of pain [is] a requirement of *all* Eighth Amendment method-of-execution claims.” *Glossip*, 135 S. Ct. at 2731 (emphasis supplied). Second, the Eighth Circuit clearly directed that Plaintiff must (1) identify at the pleading stage and (2) eventually prove that there is an alternative that will significantly reduce the risk. *Bucklew*, 783 F.3d at 1128. This is the law of the case, and the Court must adhere to it. Third, the Eighth Circuit has explicitly rejected Plaintiff’s argument in other cases. *Williams v. Kelley*, 854 F.3d 998, 1001 (8th Cir.), *cert. denied*, 137 S. Ct. 1284 (2017) (citing *Johnson v. Lombardi*, 809 F.3d 388, 391 (8th Cir.), *cert. denied*, 136 S. Ct. 601 (2015)). For these reasons, the Court concludes Plaintiff is required to prove that there is a feasible and readily available alternative that will significantly reduce the risk of suffering that lethal injection will present.

The Court agrees with Defendants that the facts in the Record do not present a triable dispute on this issue. Given the risk of suffering that the Court identified as potentially supported by the Record, (*see* Part II.A.2, *supra*), the question is whether (1) the use of nitrogen gas will cause Plaintiff to become unaware of his choking and breathing difficulties sooner than he would under the current protocol, and (2) whether that difference in time is sufficient to permit the Court to find that nitrogen gas will make a “significant” difference in Plaintiff’s suffering. Put another way: a finder of fact might conclude that if pentobarbital is used, there is a four minute period of time during which Plaintiff would experience significant suffering. Given that, could a finder of fact conclude that the use

of nitrogen gas will significantly reduce that period of awareness?

Defendants point to their expert's supplemental report, wherein he states that "the use of lethal gas does not hold any advantage compared to lethal injection with respect to pain and suffering. Both methods would result in minimal pain and suffering." (Doc. 182-1.) This requires Plaintiff to identify facts in the Record that create a factual dispute necessitating a trial, but Plaintiff has not identified any such facts. Dr. Zivot would not address the issue in his deposition, (Doc. 182-1, pp. 38-40), and Plaintiff does not contend that Dr. Zivot's testimony creates a factual dispute. Plaintiff instead relies on Dr. Antognini's deposition, but the Court has reviewed the cited testimony and finds nothing that supports Plaintiff's position.<sup>8</sup> Dr. Antognini was asked to compare the use of pentobarbital to nitrogen gas, but his answer does not indicate that there are any differences between them. (Doc. 182-5, pp. 58-59.) To the contrary, he stated:

You know, you get – you can get suffering from hypoxia, you know, because somebody can be awake and realize that they're not getting enough oxygen. So depending on – on how it's used, you might get more suffering from nitrogen gas than you would from Pentobarbital. Or you might get less suffering, you know, it depends on how you would use it, I guess.

(Doc. 182-5, p. 59.) As relevant to the claim at issue, Dr. Antognini specifically stated that he believed there

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<sup>8</sup> Plaintiff also attempts to create factual disputes about the Missouri Department of Corrections' efforts to research the viability and effects of executing prisoners with nitrogen gas, but the issue is not relevant under the governing legal principles.

would be no difference in the “speed” of lethal gas as compared to pentobarbital. (*Id.*) Plaintiff points to Dr. Antognini’s indication that nitrogen gas would “quickly” cause unconsciousness, (Doc. 182-5, p. 59), but this is unavailing for two reasons. First, Dr. Antognini said the same thing about pentobarbital; in his opinion, both would “quickly” cause unconsciousness. Thus, this opinion does not support the proposition that nitrogen hypoxia would cause unconsciousness sooner than pentobarbital. Second, the premise for Plaintiff’s claim is that there is a period between unconsciousness and brain death during which he will experience pain. Therefore, establishing the speed with which unconsciousness will be achieved does not support Plaintiff’s claim; he must identify evidence establishing how quickly nitrogen-induced hypoxia will cause brain death so that any such evidence can be contrasted with Dr. Zivot’s testimony that Plaintiff might be aware that he is choking for up to four minutes. There is no evidence suggesting that nitrogen hypoxia will be faster than pentobarbital, so there is no factual dispute to resolve. In the absence of evidence contradicting Defendants’ expert and supporting Plaintiff’s theory, there is not a triable issue.

Plaintiff also points to the fact that Louisiana and Oklahoma have approved the use of nitrogen gas in their death penalty protocols. This evidence might be relevant in establishing the feasibility or ready availability of this method of execution, but it does not establish whether nitrogen gas will significantly reduce the risk of suffering Plaintiff has described. Plaintiff cites a report from Oklahoma for the proposition that “high altitude pilots who train to recognize the symptoms of nitrogen hypoxia in airplane depressurizations do not report any feelings of suffocation, choking or gagging.” (Doc. 197, p. 48 n.6 (citing Doc.

192-14, p. 78).) Assuming this is competent evidence that can be considered on summary judgment, Plaintiff is not trained to recognize the symptoms of nitrogen hypoxia and it is unlikely that the pilots who were trained to recognize the symptoms of hypoxia also suffered from cavernous hemangioma. Plaintiff additionally refers to a report from Louisiana, which itself cites other materials for the proposition that nitrogen hypoxia allows a person to expel carbon dioxide buildup and thereby reduce suffocation caused by respiratory acidosis. (Doc. 197, p. 48 n.6 (citing Doc. 192-17, p. 19).) Assuming again that this is competent evidence, Plaintiff's theory is that he will experience suffocation due to his tumors, not due to respiratory acidosis. Finally, none of this evidence purports to compare the effects of nitrogen gas hypoxia to the effects of pentobarbital, particularly as related to the speed with which brain death will occur. Therefore, this anecdotal evidence does not conflict with Dr. Antognini's testimony and therefore does not create a factual dispute.<sup>9</sup>

The Record establishes that the use of nitrogen gas will not act faster than pentobarbital. Therefore, nitrogen gas will not significantly reduce the risk of suffering Plaintiff faces if he is executed under Missouri's current protocol.

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<sup>9</sup> Plaintiff has also provided a "Preliminary Draft" of a document prepared at the request of an Oklahoma State Representative. (Doc. 199-12, pp. 15-28.) The authors' qualifications to opine on medical matters are not established. The report bears the instruction "Do Not Cite." The report generally discusses the feasibility and effectiveness of using nitrogen gas in executions, but it does not purport to answer the questions relevant to the case. For these reasons, this report also does not create a factual dispute.

III. CONCLUSION

For the reasons set forth above, Defendants' Motion for Summary Judgment on Count I is GRANTED.

IT IS SO ORDERED.

/s/ Beth Phillips  
BETH PHILLIPS, JUDGE  
UNITED STATES DISTRICT COURT

DATE: June 15, 2017

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 14-8000-CV-W-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE A. LOMBARDI, *et al.*,

*Defendants.*

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ORDER DENYING PLAINTIFF'S REQUEST  
FOR ACCESS TO DEPOSITIONS TAKEN  
IN OTHER CASES

This is a civil rights lawsuit brought by a condemned inmate. The Fourth Amended Complaint presented three claims that generally challenged various aspects of the State's execution procedures. Counts II and III were dismissed on January 29, 2016, (Doc. 63), and summary judgment was granted to Defendants on Count I on June 15, 2017. (Doc. 202.) One of Plaintiff's attorneys (Ms. Cheryl Pilate) has now informally requested permission to share certain depositions with other attorneys representing Plaintiff. These depositions record testimony from individuals personally involved in the process for carrying out executions for the State and have been identified as M2 and M3. The depositions were taken in other cases and are subject to Protective Orders issued in those cases. Ms. Pilate has access to the depositions of M2 and M3 because she represented Plaintiff in those other cases. She



advises that she wants to share the depositions with the other attorneys now representing Plaintiff so that together they can “effectively develop their arguments that denial of access [to the depositions] constitutes a due process violation.” Defendants contend that this issue was addressed previously, and the Court should adhere to its decision that the depositions need not be shared because they contain no information related to Count I. The Court agrees with Defendants.

The Court previously held that information about the execution team’s qualifications was irrelevant to the issues presented in Count I. (Doc. 183, pp. 2-5.) The Court reached this decision because “[a]ccording to Count I, the only way to significantly diminish the pain and suffering resulting from lethal injection is to execute Plaintiff with lethal gas.” (Doc. 183, p. 3.) Therefore, “the substantial risk of serious harm that forms the basis for Count I does not depend on the execution team’s training and experience. For instance, while Count I alleges that the execution protocol will cause him to hemorrhage, cough, choke and suffocate, thereby suffering an ‘excruciating execution,’ it does not allege that this risk is due to the execution team’s training or expertise. Count I also does not allege that more or different training will decrease these risks.” (Doc. 183, p. 4.)

Thus, the Court did not bar Ms. Pilate’s ability to share the depositions solely because they were subject to Protective Orders in other cases. The Court focused on whether the depositions were relevant to any of the issues in the case. After concluding they were not, there was no justification for considering whether to allow access to the depositions. The Court’s decision was the functional equivalent of a determination that the material sought was not “relevant to any party’s

claim or defense and proportional needs of the case,” Fed. R. Civ. P. 26(b)(1), and there is no basis for reaching a different conclusion now that the Court has disposed of all the claims in the case.

IT IS SO ORDERED.

/s/ Beth Phillips  
BETH PHILLIPS, JUDGE  
UNITED STATES DISTRICT COURT

DATE: July 17, 2017

IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI

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Case No. 4:14-CV-8000-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE LOMBARDI, *et al.*,

*Defendants.*

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Hon. Beth Phillips

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NOTICE OF FILING OF DISCOVERY  
DISPUTE SUMMARIES

Plaintiff Russell Bucklew, by and through his counsel, hereby submits for the record the attached one-page discovery dispute summaries that had previously been submitted directly to the district court by counsel for Plaintiff and counsel for Defendants. The court subsequently ruled on the discovery dispute by issuing a written Order (Doc. 214) rather than by holding a teleconference with counsel, as had been originally planned. Plaintiff submits the attached one-page summaries (Exhs. 1 and 2) for the purpose of having a complete record on this issue. Defendants do not oppose the filing of the one-page summaries in the Court's ECF file.

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Respectfully submitted,

/s/ Cheryl A. Pilate

Cheryl A. Pilate, Mo. Bar #42266

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Brief Summary of Plaintiff Bucklew's Request to  
Allow Counsel Cheryl Pilate To Share the Previous  
Depositions of M3 with Co-Counsel

Plaintiff seeks this Court's order allowing counsel Cheryl Pilate to share the three depositions of the execution team doctor, M3, with her co-counsel at the Sidley firm. These depositions were taken in *Ringo v. Lombardi*, Case No. 09-4095 (M3 depo. 9/24/10) and in *Zink v. Lombardi*, Case No. 12-4209 (M3 depositions. 7/11/13 and 1/16/14). Mr. Bucklew was one of the plaintiffs in both of those actions, and Ms. Pilate was his counsel. Those depositions are relevant to Plaintiff's claims in the present case, and allowing counsel to share those depositions among themselves would allow them to more effectively develop and present their argument that Mr. Bucklew's ability to prove his Eighth Amendment claim has been greatly hindered by his counsel's inability to use the M3 depositions.

To be clear, the present request is only to allow all counsel to view the depositions. This Court has already ruled that those depositions may not be used in this case, which means their contents cannot be referenced and they cannot be cited or relied upon. Mr. Bucklew has asserted that the denial of access to the depositions constitutes a due process violation. If all of Mr. Bucklew's counsel are able to review the depositions, Plaintiff believes they will be able to more effectively develop their arguments that denial of access constitutes a due process violation. To date, Mr. Bucklew's counsel at the Sidley firm have never seen any of the depositions and have no idea of their contents. Although Ms. Pilate knows the contents, she has been unable to discuss them with her co-counsel or to explain, even in general terms, why lack of access to them has impaired Plaintiff's ability to litigate his due process claim.

The issue raised by Defendants, that granting access to counsel would potentially compromise M3's identity, is a red herring. Those depositions, particularly the one taken in *Ringo*, have been used, referenced and relied upon by multiple counsel representing various plaintiffs throughout the litigation of both the *Ringo* and *Zink* cases and during related litigation for stays of execution. Counsel have always abided by the protective orders in those cases. For instance, when M3's deposition was filed in the *Ringo* case, it was, of course, filed under seal. (*Ringo*, Doc. 211, Exh. 5, filed 1/21/2011). In the *Zink* case, the court entered an order allowing the parties to make use of the depositions of M2 and M3 that were taken in *Ringo*. (*Zink*, Doc. 113, 7/23/2013). At no time has M3's identity ever been discovered, nor has there been a hint in any of the prior cases that any information in those depositions could be used to discern M3's identity.

Counsel in this case have scrupulously abided by the protective order, and there is simply no risk that M3's identity may be compromised by granting counsel access to these depositions.

Counsel Cheryl Pilate is aware of information in the M3 depositions that is directly relevant to the claims in this case. But because of the Court's orders, she has been unable to discuss with her co-counsel why that information is relevant, even in very broad terms. This restriction has greatly hindered the ability of Plaintiff to assert his present due process claim, which is raised in the Motion to Alter or Amend Judgment filed on July 13, 2017. To allow counsel to better refine and target their due process arguments, counsel requests that this Court permit the sharing of the M3 depositions among all of Mr. Bucklew's counsel.

*Bucklew v. Lombardi*, 14-CV-8000 BP

Defendants' Memorandum re: protected depositions in earlier cases

During the July 10, 2017 phone conference, Plaintiff's counsels originally represented that they were not seeking permission to file M3 and M2 depositions, which are subject to protective orders in *Zink* and *Ringo* cases, to the Missouri Supreme Court in opposing the setting of an execution date for Bucklew, and referred to Defendants' counsel's concern that Plaintiff's counsel would seek to do just that as a "red herring." Nevertheless, Plaintiff's counsel, who participated in the *Zink* and *Ringo* litigation, specifically asked this Court for permission to share this protected material with her co-counsel in the *Bucklew* case for *unspecified* reasons. But this Court has already rejected that request in this case and should do so again.

During the motion to compel litigation, Plaintiff's counsel asked this Court to permit Plaintiff's original counsel to share the protected material with co-counsel. As this Court explained "[s]pecifically, Plaintiff wants information about the team member's training and experience, as well as access to depositions of team members that are the subject of protective orders in those other cases." Document 183 at 2. Defendants' [sic] opposed the request. The Court denied Plaintiff's request stating "Plaintiffs' request for additional details about team members and *access to their depositions from other cases is denied.*" *Id.* at 5. Nothing relevant to that order has changed since this Court issued it.

Missouri Revised Statute 546.720 protects the identities of execution team members and documents that could reveal their identities, and defines the material as privileged and protected from disclosure by law.

Depositions of M2 and M3 discussing their practices and experience fall within the universe of privileged material under §546.720 prohibiting disclosure. This Court has already held that both M3's and M2's depositions contain enough information to allow a reader to "figure out" their identities and that there is no way to redact the depositions that will preserve their identities. *Ringo v. Lombardi*, 09-4095 Doc. 317 at 11. This Court has also held that if their identities are revealed they are subject to a substantial risk of harassment and invasion of privacy, and the State's ability to perform government functions would be compromised. *Id.* at 10. This Court's protective orders should not be modified to broaden the universe of persons who have access to the depositions from the now completed litigation in *Ringo* and *Zink*.



IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF MISSOURI  
WESTERN DIVISION

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Case No. 14-8000-CV-W-BP

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RUSSELL BUCKLEW,

*Plaintiff,*

v.

GEORGE A. LOMBARDI, *et al.*,

*Defendants.*

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ORDER AND OPINION DENYING PLAINTIFF'S  
MOTION TO ALTER OR AMEND JUDGMENT

On June 15, 2017, the Court granted summary judgment to Defendants on the sole remaining claim from the Fourth Amended Complaint. (Doc. 202.) In that claim, Plaintiff asserted that the State's execution protocol as applied to him would violate the Eighth Amendment's proscription against cruel and unusual punishment. Plaintiff has now filed a Motion to Alter or Amend Judgment pursuant to Rule 59(e). "Rule 59(e) motions serve the limited function of correcting manifest errors of law or fact or to present newly discovered evidence." *United States v. Metropolitan St. Louis Sewer Dist.*, 440 F.3d 930, 933 (8th Cir. 2006). Plaintiff does not seek to present newly discovered evidence. Instead, he contends the Court (1) overlooked certain facts, (2) applied the wrong legal standard, and (3) limited discovery in a manner that deprived him of a fair opportunity to support his claims. The Court

discusses each of these issues below and concludes the motion, (Doc. 210), should be DENIED.

## I. BACKGROUND

Placing Plaintiff's arguments in context requires a summary of the law governing Plaintiff's claim and the basis for the Court's June 15 Order. As the Court explained,

a prisoner alleging that a particular form of execution is cruel and unusual within the meaning of the Eighth Amendment must first establish that the method to be utilized presents a risk that is sure or very likely to cause serious illness and needless suffering, and give rise to sufficiently imminent dangers. The prisoner must then "identify a known and available alternative method of execution that entails a lesser risk of pain, a requirement of all Eighth Amendment method-of-execution claims. The alternative must be feasible, readily implemented, and in fact significantly reduce the substantial risk of severe pain.

(Doc. 202, p. 6 (quotations and citations omitted).) The current execution protocol calls for "the intravenous administration of pentobarbital in dosages sufficient to cause unconsciousness and eventually death." (Doc. 202, p. 3.) Plaintiff suffers from a congenital medical condition known as cavernous hemangioma, which "causes clumps of weak, malformed blood vessels and tumors to grow throughout his body, including his head, face, neck and throat." (Doc. 202, p. 2.) He alleges that his condition makes it difficult to breathe and that after the pentobarbital takes effect he will experience a choking sensation even after he is unconscious because he will be unable to control his breathing.

In granting Defendants' summary judgment the Court concluded that the Record, construed in the light most favorable to Plaintiff, demonstrated that there is a risk that Plaintiff will experience choking and an inability to breathe for fifty-two to 240 seconds – the time between unconsciousness and brain death. (Doc. 202, pp. 4-5, 8-9.) The Court then considered whether Plaintiff's proposed alternative – nitrogen gas – would “cause Plaintiff to become unaware of his choking and breathing difficulties sooner than he would under the current protocol, and (2) whether that difference in time is sufficient to permit the Court to find that nitrogen gas will make a ‘significant’ difference in Plaintiff's suffering.” (Doc. 202, p. 10.) The Court reviewed the evidence in the Record and determined that the uncontroverted facts demonstrated that hypoxia induced by nitrogen gas “will not act faster than pentobarbital. Therefore, nitrogen gas will not significantly reduce the risk of suffering Plaintiff faces if he is executed under Missouri's current protocol.” (Doc. 202, p. 12.)

## II. DISCUSSION

### A. Factual Matters

Plaintiff contends that the Court erred by failing to contrast the effect of him being in a supine position under the State's current execution protocol evidence with his ability to be seated if he is executed with nitrogen gas. As the Court noted, Plaintiff has difficulty breathing, “and that difficulty is exacerbated when he is in a supine position.” (Doc. 202, p. 3.) However, there is no evidence in the Record establishing that (1) Plaintiff must be in a supine position after the IV is inserted, or, more importantly, that (2) sitting while nitrogen gas is administered will make an appreciable difference in Plaintiff's ability to

breathe. As the Court explained, “the premise for Plaintiff’s claim is that there is a period between unconsciousness and brain death during which he will experience pain” because he will be unable to control his breathing and prevent choking. (Doc. 202, p. 11.) Plaintiff does not identify any overlooked evidence establishing that he must remain on his back after the IV is inserted.

He also does not identify any overlooked evidence that there is a significant difference in his ability to breathe when he is unconscious and sitting as compared to when he is unconscious and lying down. To the contrary, as the Court explained, there is no evidence in the Record establishing that nitrogen gas will cause brain death sooner than pentobarbital, which means that with nitrogen gas Plaintiff could be aware that he is choking for up to four minutes, just as the Record (construed in Plaintiff’s favor) suggests would be the case with pentobarbital. (Doc. 202, p. 11.) Thus, even if he could not sit upright after the IV is inserted, there is no evidence suggesting this would cause suffering that would be alleviated through the use of nitrogen gas.

Plaintiff also contends the Court misinterpreted an Interim Report from a Grand Jury in Oklahoma, which heard testimony from a professor that “high altitude pilots who train to recognize the symptoms of nitrogen hypoxia in airplane depressurizations do not report any feelings of suffocation, choking, or gagging.” (Doc. 192-14, p. 78.) The Court noted this information and observed that “[a]ssuming this is competent evidence that can be considered on summary judgment, Plaintiff is not trained to recognize the symptoms of nitrogen hypoxia and it is unlikely that the pilots who were trained to recognize the symptoms of hypoxia

also suffered from cavernous hemangioma.” (Doc. 202, p. 12.) Plaintiff argues that the Court misapprehended the point of this information, which was to establish that even pilots trained to recognize nitrogen hypoxia do not report choking or suffocation, so it is unlikely that Plaintiff would notice such effects. With this explanation, Plaintiff is correct that his lack of training is not relevant. However, Plaintiff has not overcome the Court’s concerns that a professor’s testimony to a grand jury about what pilots have reported is not competent medical evidence about the effects of nitrogen hypoxia. Relatedly, it remains unlikely that the pilots suffered from cavernous hemangioma, so their anecdotal reports are not sufficient to satisfy Plaintiff’s burden.

Plaintiff’s claim required evidence establishing that nitrogen hypoxia produces a shorter time between unconsciousness and brain death than would pentobarbital. There is no such evidence in the Record. There is, however, evidence that the time between unconsciousness and brain death (whatever that interval is) would be the same under both execution methods. Accordingly, there is no basis in fact for altering the Court’s judgment.

#### B. Interpretation and Application of the Legal Standard

Plaintiff contends the Court has “imposed an impossible standard on Plaintiff” because his unique medical condition makes it impossible for him to produce the “side-by-side comparison between the length of time required to produce unconsciousness by lethal injection versus lethal gas.” (Doc. 210, p. 5.) He also believes he was “penalize[d] . . . because his expert would not opine on how to kill Plaintiff with lethal gas.” (*Id.*) While Plaintiff argues against the legal standard

utilized by the Court, he does not contend that it was wrong. That is, Plaintiff does not argue that the Court failed to follow the governing standard as set forth in such cases as *Glossip v. Gross*, 135 S. Ct. 2726 (2015), and *Bucklew v. Lombardi*, 783 F.3d 1120 (8th Cir. 2015) (en banc), and thus has not demonstrated that the Court committed legal error.

### C. Discovery Issues

Early in the discovery process, the Court issued an Order Regarding the Scope of Discovery. (Doc. 105.) Plaintiff contends that his “ability to prove his Eighth Amendment claim has been crippled by” limits on access to information about and from members of the execution team. (Doc. 210, p. 6.) The Court addressed the issue in the order regarding the scope of discovery, as well as at other times, (e.g., Doc. 183; Doc. 214), and further discussion of the issue is unnecessary.

### III. CONCLUSION

For these reasons, Plaintiff’s motion for relief pursuant to Rule 59(e) is DENIED.

IT IS SO ORDERED.

/s/ Beth Phillips

BETH PHILLIPS, JUDGE

UNITED STATES DISTRICT COURT

DATE: August 21, 2017

UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

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Case 17-3052

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RUSSELL BUCKLEW,  
*Bucklew-Appellant,*

vs.

ANNE PRECYTHE, *et al.*,  
*Defendants-Appellees.*

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*On Appeal from the United States District Court  
for the Western District of Missouri  
Case 4:14-CV-08000-BP*

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OPENING BRIEF FOR APPELLANT  
RUSSELL BUCKLEW

\* \* \*

*Angioma*, Angioma Alliance (last updated Aug. 26, 2016), *available at* <http://www.angiomaalliance.org/pages.aspx?content=62>. Cavernous hemangioma in the oral cavity typically affects the lips, tongue, buccal mucosa, and palate, and, is exceedingly rare, with a prevalence rate of less than 1% of those with cavernous hemangioma (.002% of the general population). Wang, Minhua, MD et al., *Cavernous Hemangioma of the Uvula: Report a Rare Case with Literature Review*, North American Journal of Medicine and Science, Vol 8, 1 at 56 (June 2015). A case like Bucklew’s involving the uvula “is extremely rare.” *Id.*

Because of his condition, Bucklew's uvula is grossly enlarged and his airway is severely compromised. (ADD002-03; APP0404 at ¶III.A; APP0407 at ¶V.A.1.) Further, the tumors in his airway are "very susceptible to rupture." (ADD002-03; APP0405 at ¶III.F; APP0352 at 101:3-21; APP0356 at 114:17-115:2.) The tumors in Bucklew's airway, including his grossly swollen uvula, make it difficult for him to breathe, a difficulty exacerbated when Bucklew is forced to lie supine. (ADD003; APP0408 at ¶V.B.1-2, 7; APP0411 at ¶VI.H; APP1062-63; *see* APP0354 at 106:7-107:13.) When Bucklew is in a fully supine position, his uvula is pulled, by force of gravity, back into his airway thereby effectively blocking airflow. (*See* APP0408 at ¶V.B.1.) To prevent suffocation while in the supine position, Bucklew must consciously monitor and mechanically adjust his breathing in order to shift his swollen uvula and permit airflow.

\* \* \*

Bucklew has demonstrated a genuine issue of material fact regarding whether he will be required to lie supine for the duration of the Execution Procedure. The District Court's resolution of this dispute was reversible error.

2. There Is Ample Evidence That Bucklew's Suffering Will Substantially Increase During An Execution In The Supine Position.

There can be no doubt that Bucklew's suffering will substantially increase during an execution in which he is forced to remain supine. Ample evidence in the record demonstrates that even under the best circumstances—sleeping in his own bed—Bucklew cannot comfortably or safely recline in a fully supine



position. (APP0408 at ¶V.B.1.) Rather, he is forced to prop himself up at an incline using extra pillows while lying on his side so that gravity will pull his uvula to one side of his airway allowing air to pass through the other side while he sleeps. (*Id.*) Defendants argue that because Bucklew was able to lie flat for an MRI in December 2016, there is no reason why he could not lie flat during the execution procedure. (APP0260; APP0359-61.) However, this assumes that there is an apt comparison between a medical MRI procedure and the Execution Procedure. There is not.

First, unlike in the MRI, during the Execution Procedure Bucklew would be forced to lie flat while a medical professional of unknown skill or qualification carves into his upper thigh near his groin in order to visualize the femoral vein to

\* \* \*

reduce[s] a substantial risk of severe pain” posed by the state’s existing execution method); (ADD008 (requiring Bucklew to “quantify the risks” of harm)).

The District Court ignored the fact that M2’s and M3’s training and experience can have a dramatic impact on the extent to which the Execution Procedure, as applied to Bucklew, will lead to substantial suffering—and thus this evidence can have a substantial impact on *whether an alternative will substantially reduce that severe level of suffering*. See *supra* pp. 9-11 (describing the discretionary authority M2 and M3 have to carry out the Execution Procedure as they see fit). Bucklew’s execution will not be like every other execution; indeed, given the rarity of Mr. Bucklew’s condition, it may well be like *no* other execution the medical technicians have ever trained for or carried out.

There is evidence that implementing the State's Execution Procedure will be difficult and unusual given Bucklew's severe medical condition. There is evidence that Bucklew will be forced to lie supine, resulting in choking, gagging, hemorrhaging, and ultimately suffocation on his own blood. *See supra* pp. 5, 8, 10. In addition, the District Court acknowledged that the State's Execution Procedure will require the medical team to obtain IV access through the femoral vein by way of an invasive and outdated cut-down procedure. *Supra* pp. 7-9. Yet the District Court denied Bucklew discovery into the training and experience of the medical personnel that would disclose whether the person who will administer

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UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

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Case 17-3052

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RUSSELL BUCKLEW,  
*Bucklew-Appellant,*

vs.

ANNE PRECYTHE, *et al.*,  
*Defendants-Appellees.*

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*On Appeal from the United States District Court  
for the Western District of Missouri  
Case 4:14-CV-08000-BP*

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REPLY BRIEF FOR APPELLANT  
RUSSELL BUCKLEW

\* \* \*

Bucklew lacked sufficient information to assert this claim until Dr. Zivot examined his medical records in April 2014. Just a few weeks thereafter, he filed this lawsuit asserting his as-applied challenge. His claim is timely and not barred by prior litigation.

The statute of limitations for Bucklew’s Section 1983 as-applied challenge is five years. *See Johnson v. Lombardi*, C.A. No. 2:15-cv-4237-DGK, 2016 WL 5852868, at \*5 (W.D. Mo. Sept. 30, 2016); Mo. Rev. Stat. § 516.120(4). “The limitations clock . . . [does not] begin ticking” until “the plaintiff can file suit and obtain relief” on the particular claim in question. *Johnson*,

2016 WL 5852868, at \*5 (quotation omitted). Bucklew filed his as-applied challenge on May 9, 2014. So unless he could have asserted and potentially obtained relief on his as-applied challenge as far back as May 8, 2009, his claim is timely.

Defendants rely only on Bucklew's 2008 petition for expert funding as evidence that he could have and should have brought his as-applied challenge sooner. But the 2008 petition was simply a request for funding so that Bucklew could investigate his medical condition *to uncover facts that might support a proper claim*. ECF No. 182-15 at 1. It is true, as Defendants observe, that Bucklew in 2008 (1) knew he had a hemangioma and (2) that it was a "high flow" condition. (Appellee Br. at 40.) But that Bucklew knew he had a disease and

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UNITED STATES COURT OF APPEALS,  
EIGHTH CIRCUIT

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No. 17-3052

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RUSSELL BUCKLEW,  
*Plaintiff-Appellant,*

v.

ANNE L. PRECYTHE, DIRECTOR OF THE  
DEPARTMENT OF CORRECTIONS, *et al.*,  
*Defendants-Appellees.*

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Submitted: February 2, 2018

Filed: March 6, 2018

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OPINION

Before WOLLMAN, LOKEN, and COLLOTON,  
Circuit Judges.

LOKEN, Circuit Judge

The issue is whether the Eighth and Fourteenth Amendments, as applied, bar Missouri officials from employing a procedure that is authorized by Missouri statute to execute Russell Bucklew.

In March 2006, Bucklew stole a car; armed himself with pistols, handcuffs, and a roll of duct tape; and followed his former girlfriend, Stephanie Ray, to the home of Michael Sanders, where she was living. Bucklew knocked and entered the trailer with a pistol in each hand when Sanders's son opened the door.

Sanders took the children to the back room and grabbed a shotgun. Bucklew began shooting. Two bullets struck Sanders, one piercing his chest. Bucklew fired at Sanders's six-year-old son, but missed. As Sanders bled to death, Bucklew struck Ray in the face with a pistol, handcuffed Ray, dragged her to the stolen car, drove away, and raped Ray in the back seat of the car. He was apprehended by the highway patrol after a gunfight in which Bucklew and a trooper were wounded.

A Missouri state court jury convicted Bucklew of murder, kidnaping, and rape. The trial court sentenced Bucklew to death, as the jury had recommended. His conviction and sentence were affirmed on direct appeal. *State v. Bucklew*, 973 S.W.2d 83 (Mo. banc 1998). The trial court denied his petition for post-conviction relief, and the Supreme Court of Missouri again affirmed. *Bucklew v. State*, 38 S.W.3d 395 (Mo. banc 2001). We subsequently affirmed the district court's denial of Bucklew's petition for a federal writ of habeas corpus. *Bucklew v. Luebbers*, 436 F.3d 1010 (8th Cir. 2006). The Supreme Court of Missouri issued a writ of execution for May 21, 2014. Bucklew filed this action under 42 U.S.C. § 1983, alleging that execution by Missouri's lethal injection protocol, authorized by statute, would constitute cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments as applied to him because of his unique medical condition. Bucklew appeals the district court's<sup>1</sup> grant of summary judgment in favor of the state defendants because Bucklew failed to present adequate evidence to establish his claim under the governing standard established by the Supreme Court in *Baze v.*

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<sup>1</sup> The Honorable Beth Phillips, United States District Judge for the Western District of Missouri.

*Rees*, 553 U.S. 35, 128 S.Ct. 1520, 170 L.Ed.2d 420 (2008), and *Glossip v. Gross*, — U.S. —, 135 S.Ct. 2726, 192 L.Ed.2d 761 (2015). Reviewing the grant of summary judgment *de novo*, we affirm.

## I.

Missouri’s method of execution is by injection of a lethal dose of the drug pentobarbital. Two days before his scheduled execution in 2014, the district court denied Bucklew’s motion for a stay of execution and dismissed this as-applied action *sua sponte*. On appeal, a divided panel granted a stay of execution, *Bucklew v. Lombardi*, 565 Fed. Appx. 562 (8th Cir. 2014); the court en banc vacated the stay. Bucklew applied to the Supreme Court for a stay of execution, and the Court issued an Order granting his application “for stay pending appeal in the Eighth Circuit.” This court, acting en banc, reversed the *sua sponte* dismissal of Bucklew’s as-applied Eighth Amendment claim and remanded to the district court for further proceedings. *Bucklew v. Lombardi*, 783 F.3d 1120, 1128 (8th Cir. 2015) (“*Bucklew I*”). On the same day, the en banc court affirmed the district court’s dismissal on the merits of a facial challenge to Missouri’s lethal injection protocol filed by several inmates sentenced to death, including Bucklew. *Zink v. Lombardi*, 783 F.3d 1089, 1114 (8th Cir.), *cert denied*, — U.S. —, 135 S.Ct. 2941, 192 L.Ed.2d 976 (2015).<sup>2</sup>

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<sup>2</sup> “The doctrine of res judicata or claim preclusion bars relitigation of a § 1983 claim if the prior judgment was a final judgment on the merits rendered by a court of competent jurisdiction, and if the same cause of action and the same parties or their privies were involved.” *Baker v. Chisom*, 501 F.3d 920, 925 (8th Cir. 2007), *cert denied*, 554 U.S. 902, 128 S.Ct. 2932, 171 L.Ed.2d 864 (2008). As Bucklew was a plaintiff in *Zink*, any facial

Our decision in *Bucklew I* set forth in considerable detail the allegations in Bucklew’s as-applied complaint regarding his medical condition. 783 F.3d at 1124-26. Bucklew has long suffered from a congenital condition called cavernous hemangioma, which causes clumps of weak, malformed blood vessels and tumors to grow in his face, head, neck, and throat. The large, inoperable tumors fill with blood, periodically rupture, and partially obstruct his airway. In addition, the condition affects his circulatory system, and he has compromised peripheral veins in his hands and arms. In his motion for a stay of execution in *Bucklew I*, Bucklew argued:

Dr. Joel Zivot, a board-certified anesthesiologist . . . concluded after reviewing Mr. Bucklew’s medical records that a substantial risk existed that, because of Mr. Bucklew’s vascular malformation, the lethal drug will likely not circulate as intended, creating a substantial risk of a “prolonged and extremely painful execution.” Dr. Zivot also concluded that a very substantial risk existed that Mr. Bucklew would hemorrhage during the execution, potentially choking on his own blood—a risk

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challenge to the current method of execution in this case is precluded. Defendants argue that Bucklew’s as-applied challenge is also precluded because it could have been raised in *Zink*. See *Brown v. St. Louis Police Dep’t*, 691 F.2d 393, 396 (8th Cir. 1982). Like the district court, we decline to address this complex issue. See *Bucklew I*, 783 F.3d at 1122 n.1; cf. *Whole Woman’s Health v. Hellerstedt*, — U.S. —, 136 S.Ct. 2292, 2305, 195 L.Ed.2d 665 (2016). We likewise decline to address defendants’ claim that Bucklew’s as-applied challenge is barred by the applicable statute of limitations. See *Boyd v. Warden, Holman Corr. Facility*, 856 F.3d 853, 874-76 (11th Cir. 2017).



greatly heightened by Mr. Bucklew's partially obstructed airway.

\* \* \*

[The Department of Corrections has advised it would not use a dye in flushing the intravenous line because Dr. Zivot warned that might cause a spike in Bucklew's blood pressure.] Reactionary changes at the eleventh hour, without the guidance of imaging or tests, create a substantial risk to Mr. Bucklew, who suffers from a complex and severe medical condition *that has compromised his veins*.

\* \* \*

The DOC seems to acknowledge they agree with Dr. Zivot that Mr. Bucklew's obstructed airway presents substantial risks of needless pain and suffering, but what they plan to do about it is a mystery. Will they execute Mr. Bucklew in a seated position? . . . The DOC should be required to disclose how it plans to execute Mr. Bucklew so that this Court can properly assess whether additional risks are present. . . . Until Mr. Bucklew knows what protocol the DOC will use to kill him, and until the DOC is required to conduct the necessary imaging and testing to quantify the expansion of Mr. Bucklew's hemangiomas and the extent of his airway obstruction, it is not possible to execute him without substantial risk of severe pain and needless suffering.

Defendants' Suggestions in Opposition argued that Bucklew's "proposed changes . . . with the exception of his complaint about [dye], which Missouri will not use in Bucklew's execution, are not really changes in the method of execution."

*Glossip* and *Baze* established two requirements for an Eighth Amendment challenge to a method of execution. First, the challenger must “establish that the method presents a risk that is *sure or very likely* to cause serious illness and needless suffering, and give rise to sufficiently *imminent* dangers.” *Glossip*, 135 S.Ct. at 2737 (emphasis in original), citing *Baze*, 553 U.S. at 50, 128 S.Ct. 1520. This evidence must show that the pain and suffering being risked is severe *in relation to* the pain and suffering that is accepted as inherent in any method of execution. *Id.* at 2733. Second, the challenger must “identify an alternative that is feasible, readily implemented, and in fact significantly reduces a substantial risk of severe pain.” *Glossip*, 135 S.Ct. at 2737, citing *Baze*, 553 U.S. at 52, 128 S.Ct. 1520. This two-part standard governs as-applied as well as facial challenges to a method of execution. *See, e.g., Jones v. Kelley*, 854 F.3d 1009, 1013, 1016 (8th Cir. 2017); *Williams v. Kelley*, 854 F.3d 998, 1001 (8th Cir. 2017); *Johnson v. Lombardi*, 809 F.3d 388, 390 (8th Cir. 2015); *Bucklew I*, 783 F.3d at 1123, 1127. As a panel we are bound by these controlling precedents. *Bucklew* argues the second *Baze/Glossip* requirement of a feasible alternative method of execution that substantially reduces the risk of suffering should not apply to “an individual who is simply too sick and anomalous to execute in a constitutional manner,” like those who may not be executed for mental health reasons. *See, e.g., Ford v. Wainwright*, 477 U.S. 399, 410, 106 S.Ct. 2595, 91 L.Ed.2d 335 (1986). The Supreme Court has not recognized a categorical exemption from the death penalty for individuals with physical ailments or disabilities. Thus, in the decision on appeal, the district court properly applied the *Baze/Glossip* two-part standard in dismissing *Bucklew*’s as-applied claim.

We concluded in *Bucklew I*, based on a record “which went well beyond the four corners of Bucklew’s complaint,” that the complaint’s allegations, bolstered by defendants’ concession “that the Department’s lethal injection procedure *would be changed* on account of his condition by eliminating the use of methylene blue dye,” sufficiently alleged the first requirement of an as-applied challenge to the method of execution—“a substantial risk of serious and imminent harm that is sure or very likely to occur.” 783 F.3d at 1127. We further concluded the district court’s *sua sponte* dismissal was premature because these detailed allegations made it inappropriate “to assume that Bucklew would decline an invitation to amend the as-applied challenge” to plausibly allege a feasible and more humane alternative method of execution, the second requirement under the *Bazel/ Glossip* standard. *Id.* In remanding, we directed that further proceedings “be narrowly tailored and expeditiously conducted to address only those issues that are essential to resolving” the as-applied challenge. *Id.* at 1128. We explained:

Bucklew’s arguments on appeal raise an inference that he is impermissibly seeking merely to investigate the protocol without taking a position as to what is needed to fix it. He may not be “permitted to supervise every step of the execution process.” Rather, at the earliest possible time, he must identify a feasible, readily implemented alternative procedure that will *significantly* reduce a substantial risk of severe pain and that the State refuses to adopt. . . . Any assertion that all methods of execution are unconstitutional does not state a plausible claim under the Eighth Amendment or a cognizable claim under § 1983.

*Id.* (quotation omitted; emphasis in original).

## II.

On remand, consistent with our directive, the district court first ordered Bucklew to file an amended complaint that adequately identified an alternative procedure. Twice, Bucklew filed amended complaints that failed to comply with this order. Given one last chance to comply or face dismissal, on October 13, 2015, Bucklew filed a Fourth Amended Complaint. As relevant here, it alleged:

106. Based on Mr. Bucklew's unique and severe condition, there is no way to proceed with Mr. Bucklew's execution under Missouri's lethal injection protocol without a substantial risk to Mr. Bucklew of suffering grave adverse events during the execution, including hemorrhaging, suffocating or experiencing excruciating pain.

107. Under any scenario or with any of lethal drug, execution by lethal injection poses an enormous risk that Mr. Bucklew will suffer extreme, excruciating and prolonged pain—all accompanied by choking and struggling for air.

128. In May 2014, the DOC also proposed a second adjustment in its protocol, offering to adjust the gurney so that Mr. Bucklew is not lying completely prone.<sup>3</sup> . . . As a practical matter, no adjustment would likely be sufficient, as the stress of the execution may unavoidably cause Mr. Bucklew's hemangiomas to rupture, leading to hemorrhaging, bleeding in his throat and through

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<sup>3</sup> In their answer to paragraph 128, defendants alleged: "Defendants admit that the Defendants offered to have the anesthesiologist position the angle of the gurney in a proper position." Thus, this fact was established by the pleadings.

his facial orifices, and coughing and choking on his own blood.

129. In order to fully evaluate and establish the risks to Mr. Bucklew from execution by lethal injection, a full and complete set of imaging studies must be conducted.

139. Mr. Bucklew is mindful of the Court's directive to allege a feasible, readily implemented alternative procedure. . . . Mr. Bucklew has complied . . . by researching and proposing execution by lethal gas, which is specifically authorized by Missouri law and which Missouri's Attorney General has stated the DOC is prepared to implement.

150. In adherence with the pleading requirements set forth in *Glossip*, and as stated above, Mr. Bucklew specifically alleges lethal gas as a feasible and available alternative method that will significantly reduce the risk of severe pain to Mr. Bucklew.

In other words, Bucklew took the position that no modification of Missouri's lethal injection method of execution could be constitutionally applied to execute Bucklew. He proposed massive discovery allegedly needed to establish the first *Baze/Glossip* requirement. But his legal theory is that alternative procedures such as adjusting the gurney's position are irrelevant because *no* lethal injection procedure would be constitutional, only a change to the use of lethal gas would be adequate.

Bucklew's as-applied claim focused on two aspects of his medical condition. First, Bucklew's experts initially opined that his peripheral veins are so weak that injection of a lethal dose of pentobarbital would

not adequately circulate, leading to a prolonged and painful execution. The district court concluded that discovery and expert opinions developed on remand refuted this claim. The lethal injection protocol provides that medical personnel may insert the primary intravenous (IV) line “as a central venous line” and may dispense with a secondary peripheral IV line if “the prisoner’s physical condition makes it unduly difficult to insert more than one IV.” Bucklew’s expert Dr. Zivot conceded, and Defendants’ expert, Dr. Joseph Antognini, agreed, that the central femoral vein can circulate a “fair amount of fluid” without serious risk of rupture and that Bucklew’s medical condition will not affect the flow of pentobarbital after it is injected through this vein.

Second, Bucklew’s experts opined that his condition will cause him to experience severe choking and suffocation during execution by lethal injection. When Bucklew is supine, gravity pulls the hemangioma tumor into his throat which causes his breathing to be labored and the tumor to rupture and bleed. When conscious, Bucklew can “adjust” his breathing with repeated swallowing that prevents the tumor from blocking his airway. But during the “twilight stage” of a lethal injection execution, Dr. Zivot opined that Bucklew will be aware he is choking on his own blood and in pain before the pentobarbital renders him unconscious and unaware of pain. Based on a study of lethal injections in horses, Dr. Zivot estimated there could be a period as short as 52 seconds and as long as 240 seconds when Bucklew is conscious but immobile and unable to adjust his breathing; his attempts to breath will create friction, causing the tumor to bleed and possibly hemorrhage. In Dr. Zivot’s opinion, there is a “very, very high likelihood” that Bucklew will suffer “choking complications, including visible

hemorrhaging,” if he is executed by *any* means of lethal injection, including using the drug pentobarbital.

According to Defendants’ expert, Dr. Antognini, pentobarbital causes death by “producing rapid, deep unconscious[ness], respiratory depression, followed by . . . complete absence of respiration, decreased oxygen levels, slowing of the heart, and then the heart stopping.” In contrast to Dr. Zivot, Dr. Antognini opined that pentobarbital would cause “rapid and deep unconsciousness” within 20-30 seconds of entering Bucklew’s blood stream, rendering him insensate to bleeding and choking sensations. Dr. Antognini also challenged Dr. Zivot’s opinion that a supine Bucklew, unable to adjust his breathing, will be aware he is choking on his own blood and in pain from the tumor blocking his airway before the pentobarbital renders him unconscious. Dr. Antognini noted that, between 2000 and 2003, Bucklew underwent general anesthesia eight times, at least once in a supine position. In December 2016, Bucklew lay supine for over an hour undergoing an MRI, with no more than discomfort. The MRI revealed that his tumor had slightly shrunk since 2010.

In granting defendants summary judgment, the district court declined to rely on the first *Glossip/Baze* requirement because these conflicting expert opinions “would permit a factfinder to conclude that for as long as four minutes [after the injection of pentobarbital Bucklew] could be aware that he is choking or unable to breathe but be unable [to] ‘adjust’ his breathing to remedy the situation.” Rather, the court held that Bucklew failed to provide adequate evidence that his alternative method of execution—lethal gas—was a “feasible, readily implemented” alternative that would

“in fact significantly reduce a substantial risk of severe pain” as compared to lethal injection. *Glossip*, 135 S.Ct. at 2737; *Baze*, 553 U.S. at 52, 128 S.Ct. 1520.

### III.

To succeed in his challenge to Missouri’s lethal injection execution protocol, Bucklew must establish both prongs of the *Glossip/Baze* standard. *Glossip*, 135 S. Ct. at 2737. The district court held that Bucklew failed to establish the second prong of *Glossip/Baze* by showing that an alternative method of execution would “in fact significantly reduce a substantial risk of severe pain.” As noted, Bucklew argues the *Glossip/Baze* standard should not apply to an as-applied challenge to a method of execution, an argument our controlling precedents have rejected. He raises two additional issues on appeal.

A. Bucklew first argues the district court erred in granting summary judgment on the second *Glossip/Baze* requirement because he presented sufficient evidence that his proposed alternative method of execution—death through nitrogen gas-induced hypoxia—“would substantially reduce his suffering.” Summary judgment is not appropriate when there are material issues of disputed fact, and the Supreme Court in *Glossip* made clear that this issue may require findings of fact that are reviewed for clear error. *See* 135 S.Ct. at 2739-41 (majority opinion) and 2786 (Sotomayor, J., dissenting). However, whether a method of execution “constitutes cruel and unusual punishment is a question of law.” *Swindler v. Lockhart*, 885 F.2d 1342, 1350 (8th Cir. 1989). Thus, unless there are material underlying issues of disputed fact, it is appropriate to resolve this ultimate issue of law by summary judgment.



Nitrogen hypoxia is an authorized method of execution under Missouri Law. *See* Mo. Stat. Ann. § 546.720. Missouri has not used this method of execution since 1965 and does not currently have a protocol in place for execution by lethal gas. But there are ongoing studies of the method in other States and at least preliminary indications that Missouri will undertake to develop a protocol. Defendants do not argue this is not a feasible and available alternative.

The district court granted summary judgment based on Bucklew's failure to provide adequate evidence that execution by nitrogen hypoxia would substantially reduce the risk of pain or suffering. The court allowed Bucklew extensive discovery into defendants' knowledge regarding execution by lethal gas. But Missouri's lack of recent experience meant that this discovery produced little relevant evidence and no evidence that the risk posed by lethal injection is substantial *when compared to* the risk posed by lethal gas. *See Glossip*, 135 S.Ct. at 2738; *Johnson*, 809 F.3d at 391. Bucklew's *theory* is that execution by nitrogen hypoxia would render Bucklew insensate more quickly than lethal injection and would not cause choking and bleeding in his tumor-blocked airway. But his expert, Dr. Zivot, provided no support for this theory. Dr. Zivot's Supplemental Expert Report explained:

[W]hile I can assess Mr. Bucklew's current medical status and render an expert opinion as to the documented and significant risks associated with executing Mr. Bucklew under Missouri's current Execution Procedure, I cannot advise counsel or the Court on how to execute Mr. Bucklew in a way that would satisfy Constitutional requirements.

Lacking affirmative comparative evidence, Bucklew relied on Dr. Antognini's deposition. In his Expert Report, Dr. Antognini concluded that "the use of lethal gas would not significantly lessen any suffering or be less painful than lethal injection in this inmate." At his deposition, Dr. Antognini was asked:

Q. Why does lethal gas not hold any advantage compared to lethal injection.

A. Well . . . there are a lot of types of gases that could be used . . . . [U]sing gas would not significantly lessen any suffering or be less painful. Because, again, their onset of action is going to be relatively fast, just like Pentobarbital's onset—onset of action.

Q. That's it? Simply because it would happen quickly?

A. Correct.

The district court concluded this opinion provided nothing to compare:

Dr. Antognini specifically stated that he believed there would be no difference in the "speed" of lethal gas as compared to pentobarbital. . . . In the absence of evidence contradicting Defendants' expert and supporting Plaintiff's theory, there is not a triable issue.

On appeal, Bucklew argues the district court should have compared Dr. Zivot's opinion that lethal injection would take up to four minutes to cause Bucklew's brain death with Dr. Antognini's testimony that lethal gas would render him unconscious in the same amount of time as lethal injection, 20 to 30 seconds. But Dr. Antognini's comparative testimony was that both

methods would result in unconsciousness in approximately the same amount of time. Bucklew offered no contrary *comparative* evidence and thus the district court correctly concluded that he failed to satisfy his burden to provide evidence “establishing a known and available alternative that would significantly reduce a substantial risk of severe pain.” *McGehee v. Hutchinson*, 854 F.3d 488, 493 (8th Cir. 2017).

In addition, Bucklew’s claim that he will experience choking sensations during an execution by lethal injection but not by nitrogen hypoxia rests on the proposition that he could be seated during the latter but not the former. He argues there is evidence he will be forced to remain supine during an execution by lethal injection, when his tumor will cause him to sense he is choking on his own blood, whereas he could remain seated during the administration of lethal gas, which would not cause a choking sensation. But this argument lacks factual support in the record. Having taken the position that *any* lethal injection procedure would violate the Eighth Amendment, Bucklew made no effort to determine what changes, if any, the DOC would make in applying its lethal injection protocol in executing Bucklew, other than defendants advising—prior to remand by this court—that dye would not be used.

Based on Bucklew’s argument to the en banc court, we expected that the core of the proceedings on remand would be defining what changes defendants would make on account of Bucklew’s medical condition and then evaluating *that modified procedure* under the two-part *Baze/Glossip* standard. On remand, Director of Corrections Ann Precythe testified that the medical members of the execution team are provided a prisoner’s medical history in preparing for the

execution. Precythe has authority to make changes in the execution protocol, such as how the primary IV line will be inserted in the central femoral vein or how the gurney will be positioned, if the team advises that changes are needed. While Bucklew sought and was denied discovery of the identities of the execution team's medical members, he never urged the district court to establish a suitable fact-finding procedure—for example, by anonymous interrogatories or written deposition questions to the execution team members—for discovery of facts needed for the DOC to define the as-applied lethal injection protocol it intends to use for Bucklew. As Bucklew did not pursue these issues, the pleadings established that defendants have proposed to reposition the gurney during Bucklew's deposition, and Director Precythe testified that she has authority to make this type of change in the execution protocol based on the execution team's advice based on review of Bucklew's medical history, but the record does not disclose whether Bucklew will in fact be supine during the execution,<sup>4</sup> nor does it disclose that a "cut-down" procedure will not be used to place the primary IV line in his central femoral vein, a procedure Dr. Antognini opined was unnecessary. Bucklew simply asserts that, in comparing execution by lethal injection and by lethal gas, we must accept his speculation that

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<sup>4</sup> Dr. Zivot surmised that Bucklew will be required to lie flat during lethal injection based on what he observed at an execution in Georgia. He gave no reason to believe that pentobarbital could not be injected through a femoral vein while Bucklew is seated. He merely opined that "[i]t's more difficult" to administer an anesthetic to someone who is sitting up. Dr. Antognini, in addition to opining that Bucklew would be rendered unconscious and insensate within 20 to 30 seconds of pentobarbital injection, noted that it was not necessary that Bucklew be supine in order to inject pentobarbital in his femoral vein.

defendants will employ these risk-increasing procedures. This we will not do.

Like the district court, we conclude the summary judgment record contains no basis to conclude that Bucklew's risk of severe pain would be substantially reduced by use of nitrogen hypoxia instead of lethal injection as the method of execution. Evidence that "is equivocal, lacks scientific consensus and presents a paucity of reliable scientific evidence" does not establish that an execution is sure or very likely to cause serious illness and needless suffering. *Williams v. Kelley*, 854 F.3d at 1001 (quotation omitted). Therefore, he failed to establish the second prong of the *Glossip/Baze* standard.

B. Bucklew further contends the district court erred in denying his requests for discovery relating to "M2" and "M3," two members of the lethal injection execution team. Bucklew argues he was entitled to discovery of the medical technicians' qualifications, training, and experience because it would "illuminate the nature and extent of the risks of suffering he faces." For example, if M3 was not qualified to safely place his IV in the central femoral vein, this would directly impact the risk of pain and suffering. We review a district court's discovery rulings narrowly and with great deference and will reverse only for a "gross abuse of discretion resulting in fundamental unfairness." *Marksmeier v. Davie*, 622 F.3d 896, 903 (8th Cir. 2010).

Bucklew's argument proceeds from the premise that M2 and M3 may not be qualified for the positions for which they have been hired. But we will not assume that Missouri employs personnel who are incompetent or unqualified to perform their assigned duties. *See Clemons v. Crawford*, 585 F.3d 1119, 1128 (8th Cir.

2009). He further argues that deposition of M2 and M3 is necessary to understand how they will handle a circumstance in case something goes wrong during Bucklew's execution. The potentiality that something may go wrong in an execution does not give rise to an Eighth Amendment violation. *Zink*, 783 F.3d at 1101. "Some risk of pain is inherent in any method of execution—no matter how humane—if only from the prospect of error in following the required procedure . . . . [A]n isolated mishap alone does not give rise to an Eighth Amendment violation." *Baze*, 553 U.S. at 47, 50, 128 S.Ct. 1520. Thus, the district court's ruling was consistent with our instruction in remanding that Bucklew "may not be permitted to supervise every step of the execution process." *Bucklew I*, 783 F.3d at 1128 (quotation omitted). The *Baze/Glossip* evaluation must be based on the as-applied pre-execution protocol, assuming that those responsible for carrying out the sentence are competent and qualified to do so, and that the procedure will go as intended.

### III. Conclusion

Having thoroughly reviewed the record, we conclude that Bucklew has failed to establish that lethal injection, as applied to him, constitutes cruel and unusual punishment under the Eighth and Fourteenth Amendments. Therefore, we affirm the judgment of the district court.

COLLTON, Circuit Judge, dissenting.

Russell Bucklew alleges that the State of Missouri's method of execution by lethal injection violates his rights under the Eighth and Fourteenth Amendments. He seeks an injunction prohibiting an execution by that method. The district court granted summary judgment for the State, but there are genuine disputes of material fact that require findings of fact by the district court before this dispute can be resolved. I would therefore remand the case for the district court promptly to conduct further proceedings.

Bucklew's claim under 42 U.S.C. § 1983 requires him to prove two elements: (1) that the State's method of execution is sure or very likely to cause him severe pain, and (2) that an alternative method of execution that is feasible and readily implemented would significantly reduce the substantial risk of severe pain. *Glossip v. Gross*, — U.S. —, 135 S.Ct. 2726, 2737, 192 L.Ed.2d 761 (2015); *Bucklew v. Lombardi*, 783 F.3d 1120, 1123, 1128 (8th Cir. 2015) (en banc). On the first element, the district court concluded that taking the evidence in the light most favorable to Bucklew, there is a substantial risk under Missouri's lethal injection protocol that Bucklew will experience choking and an inability to breathe for up to four minutes. On the second element, however, the court ruled as a matter of law that Bucklew's suggested alternative method—execution by administration of nitrogen gas—would not significantly reduce the substantial risk that the court identified under the first element. In my view, the district court's reasoning as to the first element is inconsistent with its summary disposition of Bucklew's claim on the second.

On the first element, Bucklew's theory is that he will suffer severe pain by prolonged choking or suffocation

if the State executes him by lethal injection. He contends that when he lies supine on the execution gurney, tumors in his throat will block his airway unless he can “adjust” his positioning to enable breathing. Bucklew argues that if an injection of pentobarbital renders him unable to adjust his positioning while he can still sense pain, then he will choke or suffocate.

In assessing that claim, the district court cited conflicting expert testimony from Bucklew’s expert, Dr. Joel Zivot, and the State’s expert, Dr. Joseph Antognini. Dr. Antognini testified that if the State proceeded by way of lethal injection using pentobarbital, then Bucklew would be unconscious within twenty to thirty seconds and incapable of experiencing pain at that point. R. Doc. 182-5, at 10, 40-41. Dr. Zivot, however, differed: “I strongly disagree with Dr. Antognini’s repeated claim that the pentobarbital injection would result in ‘rapid unconsciousness’ and therefore Mr. Bucklew would not experience any suffocating or choking.” R. Doc. 182-1, at 147. Zivot opined that Bucklew “would likely experience unconsciousness that sets in progressively as the chemical circulates through his system,” and that “during this in-between twilight stage,” Bucklew “is likely to experience prolonged feelings of suffocation and excruciating pain.” *Id.*

In his deposition, Dr. Zivot opined that “there will be points,” before Bucklew dies, “where he’s beginning to experience the effects of the pentobarbital, where his ability to control and regulate and adjust his airway will be impaired, although there will still be the experience capable of knowing that he cannot make the adjustment, and will experience it as choking.” *Id.* at 81. When directed to Dr. Antognini’s opinion that Bucklew would be unaware of noxious



stimuli within twenty to thirty seconds of a pentobarbital injection, Dr. Zivot observed that Antognini's opinion was based on a study involving dogs from fifty years ago and testified that his "number would be longer than that." *Id.* at 85. When asked for his "number," Dr. Zivot pointed to a study on lethal injections administered to horses; he said the study recorded "a range of as short as fifty-two seconds and as long as about two hundred and forty seconds before they see isoelectric EEG." *Id.* at 85-86. Dr. Zivot noted that the "number" that he derived from the horse study was "more than twice as long as" the number suggested by Dr. Antognini. *Id.* at 86. He defined "isoelectric EEG" as "indicative of at least electrical silence on the parts of the brain that the electroencephalogram has access to." *Id.*

The district court observed that "[a]n execution is typically conducted with the prisoner lying on his back," and that the record "establishes that [Bucklew] has difficulty breathing while in that position because the tumors can cause choking or an inability to breathe." The court understood Dr. Zivot to mean that "it could be fifty-two to 240 seconds before the pentobarbital induces a state in which [Bucklew] could no longer sense that he is choking or unable to breathe." Thus, the court concluded that "construing the Record in [Bucklew's] favor reveals that it could be fifty-two to 240 seconds before the pentobarbital induces a state in which [Bucklew] could no longer sense that he is choking or unable to breathe." Again, the court reasoned that "the facts construed in [Bucklew's] favor would permit a factfinder to conclude that for as long as four minutes [Bucklew] could be aware that he is choking or unable to breathe but be unable to 'adjust' his breathing to remedy the situation." On that basis, the court presumed for purposes of the motion for

summary judgment that “there is a substantial risk that [Bucklew] will experience choking and an inability to breathe for up to four minutes.”

The State disputes that there is a genuine dispute of material fact on the first element of Bucklew’s claim, but the district court properly concluded that findings of fact were required. Bucklew pointed to evidence from Missouri corrections officials that prisoners have always laid flat on their backs during executions by lethal injection in Missouri. R. Doc. 182-7, at 10; R. Doc. 182-9, at 1; R. Doc. 182-12, at 29, 91. One official testified that he did not know whether the gurney could be adjusted. R. Doc. 182-12, at 91. Another official believed that the head of the gurney “could” be raised (or that a gurney with that capability could be acquired), and that an anesthesiologist would have “the freedom” to adjust the gurney “if” he or she determined that it would be in the best medical interest of the offender to do so. R. Doc. 182-7, at 14. But the State did not present evidence about how it would position Bucklew or the gurney during his execution. On a motion for summary judgment, the district court was required to construe the evidence in the light most favorable to Bucklew. Under that standard, without undisputed evidence from the State that it would alter its ordinary procedures, the court did not err by concluding that a finder of fact could infer that the State would proceed as in all other executions, with Bucklew lying on his back.<sup>5</sup>

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<sup>5</sup> Bucklew alleged in Paragraph 128 of his complaint that the State had offered to adjust the gurney so that Bucklew is not lying completely prone, but then continued as follows immediately thereafter: “Although the stated intent was to reduce the choking risk to Mr. Bucklew, the DOC has obtained no imaging studies of Mr. Bucklew since 2010, and therefore has no information on

The State argues that the district court erred in discerning a genuine dispute of material fact on the first element because Dr. Zivot did not specify the length of the expected “twilight stage” during which Bucklew would be unable to adjust his positioning yet still sense pain. The State also complains that Dr. Zivot did not specify that Bucklew’s pain awareness would continue for fifty-two seconds or longer until brain waves ceased. There certainly are grounds to attack the reliability and credibility of Dr. Zivot’s opinion, including the imprecision of some of his testimony, his opposition to all forms of lethal injection, his possible misreading of the horse study on which he partially relied, and his inaccurate predictions of calamities at prior executions. But he did opine that Bucklew was likely to “experience prolonged feelings of suffocation and excruciating pain” if executed by lethal injection, R. Doc. 182-1, at 147, and that there “will be points” before Bucklew dies when his ability to regulate his airway will be impaired so that he “will experience it as choking.” *Id.* at 81. The district court did not err in concluding that it could not resolve the dispute between the experts on summary judgment.

On the second element of Bucklew’s claim, the district court concluded as a matter of law that Bucklew failed to show that his proposed alternative method of execution—administration of nitrogen gas—would

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which to base any decisions about the angle of the gurney.” R. Doc. 53, at 43-44. The district court noted the State’s suggestion “that the execution could be performed with [Bucklew] in a different position,” but explained that “there is no evidence whether this has an effect on the procedure as a whole,” and concluded that the State had “not provided the Court with a basis for granting summary judgment based on the possibility of performing the execution with [Bucklew] in a sitting (or other) position.”

significantly reduce the substantial risk of severe pain that the court recognized under the first element. The majority affirms the district court's judgment on this basis. Taking the evidence in the light most favorable to Bucklew, however, a factfinder could conclude that nitrogen gas would render Bucklew insensate more quickly than pentobarbital and would thus eliminate the risk that he would experience prolonged feelings of choking or suffocation. Dr. Antognini testified that a person who is administered nitrogen gas "would be unconscious very quickly," and that the onset of action from lethal gas "is going to be relatively fast, *just like Pentobarbital's onset.*" R. Doc. 182-5, at 58-59 (emphasis added). Given Dr. Antognini's testimony that pentobarbital would render Bucklew insensate within twenty to thirty seconds, the record in the light most favorable to Bucklew supports a finding based on Antognini's testimony that nitrogen gas would relieve Bucklew from any pain of choking or suffocating within twenty to thirty seconds. A trier of fact may accept all, some, or none of a witness's testimony, *United States v. Candie*, 974 F.2d 61, 65 (8th Cir. 1992), and a plaintiff may rely on testimony from the defendant's expert to meet his burden if the testimony is advantageous to the plaintiff. *See IBEW Local 98 Pension Fund v. Best Buy Co., Inc.*, 818 F.3d 775, 782 (8th Cir. 2016). If the factfinder accepted Dr. Zivot's testimony as to the effect of pentobarbital, and Dr. Antognini's uncontroverted testimony as to effect of nitrogen gas, then Bucklew's proposed alternative method would significantly reduce the substantial risk of severe pain that the district court identified in its analysis of the first element.

For these reasons, there are genuine disputes of material fact that preclude summary judgment and require findings of fact by the district court. I would

therefore remand the case for further proceedings. The district court may then promptly make appropriate factual findings about, among other things, how Bucklew will be positioned during an execution, whether his airway will be blocked during an execution, and how pentobarbital (and, if necessary, nitrogen gas) will affect his consciousness and ability to sense potential pain.

\* \* \*

The State contends that we should not reach the merits of Bucklew's claim because several procedural obstacles require dismissal of his complaint. The majority does not rely on these points, and I find them unavailing.

First, the State contends that Bucklew did not raise his present claim in his fourth amended complaint. Bucklew's complaint, however, does allege the essence of his current theory. The complaint asserts that the tumors in Bucklew's throat require "him to sleep with his upper body elevated" because if he lies flat, "the tumor then fully obstructs his airway." *Id.* at 18-19. It continued: "Executions are conducted on a gurney, and the risks arising from Mr. Bucklew's airway are even greater if he is lying flat. Because of the hemangiomas, Mr. Bucklew is unable to sleep in a normal recumbent position because the tumors cause greater obstruction in that position." R. Doc. 53, at 35. Bucklew further alleged that execution by lethal injection "poses an enormous risk that Mr. Bucklew will suffer extreme, excruciating and prolonged pain – all accompanied by choking and struggling for air." *Id.* at 36. The complaint was adequate under a notice pleading regime to raise a claim that the execution procedure would result in an obstructed airway and choking or suffocation.

If necessary, moreover, the district court acted within its discretion by treating the complaint as impliedly amended to include Bucklew's present claim. *See* Fed. R. Civ. P. 15(b)(2). Bucklew clearly notified the State of his contention in his opposition to the State's motion for summary judgment. R. Doc. 192-1, at 1-3, 11-17. Yet rather than communicate surprise and object that the claim was not pleaded, the State addressed Bucklew's contention on the merits. R. Doc. 200, at 4-5. Where a party has actual notice of an unpleaded issue and has been given an adequate opportunity to cure any surprise resulting from a change in the pleadings, there is implied consent to an amendment. *Trip Mate, Inc. v. Stonebridge Cas. Ins. Co.*, 768 F.3d 779, 784-85 (8th Cir. 2014).

Second, the State argues that the five-year statute of limitations bars Bucklew's claim, because he was aware of his claim in 2008 and did not file his complaint until May 9, 2014. A claim under § 1983 accrues when a plaintiff has "a complete and present cause of action" and "can file suit and obtain relief." *Wallace v. Kato*, 549 U.S. 384, 388, 127 S.Ct. 1091, 166 L.Ed.2d 973 (2007) (quoting *Bay Area Laundry & Dry Cleaning Pension Trust Fund v. Ferbar Corp. of Cal.*, 522 U.S. 192, 201, 118 S.Ct. 542, 139 L.Ed.2d 553 (1997)). Bucklew asserts that he did not have knowledge of his present claim, and therefore could not have filed suit and obtained relief, until his medical condition progressed and he was examined by Dr. Zivot in April 2014. As evidence that Bucklew could have brought his claim earlier, the State relies on a 2008 petition that Bucklew submitted to the Missouri Supreme Court. The petition sought funding for an expert witness to investigate the interaction of the State's existing execution protocol with Bucklew's health condition. The possible claim addressed in the

2008 funding petition, however, focused on the potential for uncontrolled bleeding and ineffective circulation of drugs within Bucklew's body under the State's former three-drug execution protocol. The petition does not demonstrate that Bucklew was then on notice of a claim that a future execution protocol using the single drug pentobarbital would create a substantial risk of severe pain resulting from tumors blocking his airway while laying supine during an execution.

Third, the State urges that Bucklew's claim is barred by *res judicata* or claim preclusion, because Bucklew could have litigated his as-applied challenge to the execution protocol in an earlier case styled *Zink v. Lombardi*, No. 12-04209-CV-C-BP. In *Zink*, a group of inmates sentenced to death, including Bucklew, brought a facial challenge to Missouri's execution protocol. A complaint was filed in August 2012, and the eventual deadline for motions to amend pleadings was January 27, 2014. Principles of claim preclusion do not bar Bucklew's as-applied challenge if he was unaware of the basis for the claim in time to include it in the *Zink* litigation. See *Whole Woman's Health v. Hellerstedt*, — U.S. —, 136 S.Ct. 2292, 2305, 195 L.Ed.2d 665 (2016). The State again points to Bucklew's 2008 funding petition in support of its preclusion defense, but for reasons discussed, that petition does not establish that Bucklew's present claim was available to him in 2008. At oral argument, the State argued that Bucklew could have added his as-applied challenge to the *Zink* litigation after he was examined by Dr. Zivot in April 2014, because the district court granted the *Zink* plaintiffs leave to amend their complaint in May 2014. But the court's order allowed the *Zink* plaintiffs leave to amend only a single count of the complaint to allege a feasible

alternative method of execution. The order did not reopen the pleadings deadline for as-applied claims by the several individual plaintiffs. *See Zink v. Lombardi*, No. 12-04209-CV-C-BP, 2014 WL 11309998, at \*4-5, 12 (W.D. Mo. May 2, 2014). The State therefore has not established that Bucklew's as-applied claim is barred by *res judicata*.

\* \* \*

For these reasons, I would reverse the judgment of the district court and remand for further proceedings to be conducted with dispatch.



## AFFIDAVIT OF ALANA BOYLES

I, Alana Boyles, being first duly sworn, states [sic] as follows:

1. I am over 18 years of age and competent to make this statement.
2. I am currently employed as Director of the Division of Adult Institutions and have been so employed since May 1, 2017.
3. As the Director of the Division of Adult Institutions, I am responsible for the general supervision, management and control of the division. As a part of my duties I have personal knowledge of the Department's execution protocols and the facilities used to execute those protocols.
4. When the Department executes an offender, the offender lies on an adjustable gurney. The top portion of the gurney can be positioned at various degrees of inclination ranging from fully upright to completely reclined.
5. In carrying out the Missouri Supreme Court's order to execute Russell Bucklew, the Department will adjust the gurney so that Mr. Bucklew is not lying fully supine at the time the Department administers the lethal chemicals.

FURTHER AFFIANT SAYETH NOT.

/s/ Alana Boyles  
Alana Boyles

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Subscribed and sworn before me, a Notary Public in  
and for said County and State, on this 9th day of  
March 2018.

/s/ Teresa A. Wehmeyer  
Notary Public

My commission expires:

[Notary Seal] TERESA A. WEHMEYER  
Notary Public – Notary Seal  
STATE OF MISSOURI  
County of Cole  
My Commission Expires: 2/07/2022  
Commission #14932654

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UNITED STATES COURT OF APPEALS,  
EIGHTH CIRCUIT

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No: 17-3052

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RUSSELL BUCKLEW,  
*Appellant,*

v.

ANNE L. PRECYTHE, DIRECTOR OF THE  
DEPARTMENT OF CORRECTIONS, *et al.*,  
*Appellees.*

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March 15, 2018

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Appeal from U.S. District Court for the Western  
District of Missouri—Kansas City, (4:14-cv-8000-BP)

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ORDER

Before SMITH, Chief Judge, WOLLMAN, LOKEN,  
COLLTON, GRUENDER, SHEPHERD, KELLY,  
ERICKSON, GRASZ and STRAS, Circuit Judges.

Appellant Bucklew's petition for rehearing by panel  
is denied. Judge Colloton would grant the petition for  
rehearing by panel.

Appellant Bucklew's petition for rehearing en banc  
has been considered by the court and the petition is  
denied. Chief Judge Smith and Judge Kelly would  
grant the petition. Judge Colloton and Judge Gruender

would grant rehearing en banc on Point I of the petition for rehearing en banc.

Judge Duane Benton took no part in the consideration or decision of the petition for rehearing en banc.

KELLY, Circuit Judge, dissenting from the denial of the petition for rehearing en banc.

I would grant Russell Bucklew's petition for rehearing en banc—and reverse the district court's grant of summary judgment—for the reasons stated in the dissent from the panel opinion in this case. *See Bucklew v. Precythe*, 883 F.3d 1087, 1096–97, 2018 WL 1163360, at \*7 (8th Cir. 2018) (Colloton, J., dissenting). I would also grant Bucklew's petition to the extent it seeks reconsideration of this court's conclusion, in *Bucklew v. Lombardi*, 783 F.3d 1120, 1128 (8th Cir. 2015) (en banc), that those sentenced to death must plead a “feasible, readily implemented alternative procedure” for carrying out their sentence in order to state a plausible as-applied claim under the Eighth Amendment. I continue to believe that “[f]acial and as-applied challenges to execution protocols are different,” that death row inmates “need not plead a readily available alternative method of execution” to bring an as-applied challenge, and that “[a] state cannot be excused from taking into account a particular inmate's existing physical disability or health condition when assessing the propriety of its execution method.” *See id.* at 1129 (Bye, J., concurring in the result). “While the Supreme Court has been clear on the general proposition that, so long as a state-imposed death penalty is constitutional, there must be some way for states to carry out executions, the Supreme Court has also been clear that some individuals cannot be executed.” *Id.* at 1130 (collecting cases); *see also Madison v. Alabama*, — U.S. —,

138 S.Ct. —, — L.Ed.2d —, 2018 WL 514241 (Feb. 26, 2018); *Dunn v. Madison*, — U.S. —, 138 S.Ct. 9, 12, 199 L.Ed.2d 243 (2017) (Ginsburg, J., concurring). In my view, neither *Glossip v. Gross*, — U.S. —, 135 S.Ct. 2726, 192 L.Ed.2d 761 (2015), nor any subsequent case from the United States Supreme Court dictates the result this court reached on this issue in *Bucklew v. Lombardi*, 783 F.3d 1120 (8th Cir. 2015) (en banc).

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UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

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No: 17-3052

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RUSSELL BUCKLEW,

*Appellant*

v.

ANNE L. PRECYTHE,

Director of the Department of Corrections, et al.

*Appellees*

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Appeal from U.S. District Court for the Western  
District of Missouri - Kansas City  
(4:14-cv-8000-BP)

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ORDER

Before WOLLMAN, LOKEN, and COLLOTON, Cir-  
cuit Judges.

Bucklew's motion for stay of execution has been  
considered by the court and is denied.

Order Entered at the Direction of the Court:  
Clerk, U.S. Court of Appeals, Eighth Circuit.

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/s/ Michael E. Gans

March 15, 2018

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