BEFORE THE ARKANSAS WORKERS' COMPENSATION COMMISSION

WCC NO. H303552

KYLE MCKAUGHAN, Employee	CLAIMANT
U OF A DIVISION OF AGRI, Employer	RESPONDENT
PUBLIC EMPLOYEE CLAIMS DIVISION, Carrier	RESPONDENT

OPINION FILED MAY 23, 2024

Hearing before ADMINISTRATIVE LAW JUDGE ERIC PAUL WELLS in Springdale, Washington County, Arkansas.

Claimant represented by EVELYN E. BROOKS, Attorney at Law, Fayetteville, Arkansas.

Respondents represented by ROBERT H. MONTGOMERY, Attorney at Law, Little Rock, Arkansas.

STATEMENT OF THE CASE

On February 27, 2024, the above captioned claim came on for a hearing at Springdale, Arkansas. A pre-hearing conference was conducted on August 14, 2023, and a Pre-hearing Order was filed on August 18, 2023. A copy of the Pre-hearing Order has been marked Commission's Exhibit No. 1 and made a part of the record without objection.

At the pre-hearing conference the parties agreed to the following stipulations:

1. The Arkansas Workers' Compensation Commission has jurisdiction of this claim.

2. The relationship of employee-employer-carrier existed between the parties on January 27, 2023.

3. The respondents have controverted this claim in its entirety.

4. The claimant was earning sufficient wages to entitle him to compensation at the weekly rates of $609.00 for temporary total disability benefits and $457.00 for permanent partial disability benefits.

By agreement of the parties the issues to litigate are limited to the following:

1. Whether Claimant suffered a compensable occupational disease in the form of cancer developed as a result of his employment with the respondent with a last exposure date of January 27, 2023.

2. Whether Claimant is entitled to medical treatment for a compensable occupational disease in the form of cancer as a result of his employment with the respondent.

3. Whether Claimant is entitled to temporary total disability benefits from January 28, 2023, to a date yet to be determined.

4. Whether Claimant's attorney is entitled to an attorney fee.

5. Respondents raise lack of notice as a defense in that the May 26, 2023, AR-C was the first notice of any alleged work-related injury.

6. Whether Claimant is entitled to benefits under A.C.A. §11-9-527.

The claimant's contentions are as follows:

> "Claimant contends he is entitled to medical treatment for cancer. Claimant reserves all other issues."

The respondents' contentions are as follows:

> "The claimant alleges he contracted cancer as a result of his employment with the respondents. The claimant filed a Form AR-C on June 1, 2023, and lists the date of injury as January 27, 2023.
>
> The respondents contend that the claimant did not contract cancer as a result of his employment with the University of Arkansas. The claimant filed a Form AR-C dated May 27, 2023 (Copy attached). The Form AR-C appears to have been received by the Arkansas

> Workers' Compensation Commission on June 1, 2023.The Form AR-C was received by Respondent Public Employee Claims Division on June 5, 2023. The respondents would contend that the notice provisions of Ark. Code Ann. §11-9-701 (a)(1) apply to the facts of this claim and the respondents are not responsible for disability, medical, or other benefits prior to receipt of the employee's report of injury.
>
> The respondents contend that the claimant did not sustain compensable injuries while in their employ. The respondents have controverted this claim for benefits.
>
> In the alternative, if it is determined the claimant sustained a compensable injury(ies) and is entitled to any benefits, the respondents hereby request an offset for all benefits paid by the claimant's group health carrier, all short-term disability benefits received by the claimant, all long-term disability benefits received by the claimant, and all unemployment benefits received by the claimant. Respondents contend that it would be entitled to a credit pursuant to A.C.A. §11-9-411 against any additional indemnity benefits that may be awarded to the claimant.
>
> The Respondents reserve the right to offer additional contentions, or to modify those stated here, pending the completion of discovery."

The claimant in this matter is deceased, having passed away on December 11, 2023. The claimant's Certificate of Death found at Claimant's Exhibit 2, page 28, indicates the following causes of death: cardiac failure, protein calorie, malnutrition, and multiple myeloma. The claimant was employed by the respondent as a Safety Officer as he described in his deposition taken August 29, 2023. The claimant filed an AR-C with the Commission on June 1, 2023. In that AR-C the claimant was asked to "briefly describe the part of the body and the cause of injury." The claimant responded, "I developed cancer as a result of my work." The claimant has asked the Commission to determine if he suffered a compensable occupational disease in the form of cancer developed as a result of his employment with the respondent with a last exposure date of January 27, 2023.

In the claimant's deposition roughly three months prior to his death, he testified about his work duties for the respondent as a Safety Officer. In 2014 the claimant began to work for the respondent university on what he termed the "farm." This was essentially the respondent agricultural department's farms and experimental stations. The claimant's main office was in Fayetteville, but he would also travel around the state to eleven other respondent owned locations. The claimant testified that once a month he would spend a couple of days at the off-site stations performing safety training, inspections, and picking up chemicals to bring back to the Fayetteville facility.

The claimant was asked in his deposition about handling and accounting for chemicals in his job as a safety officer:

> Q Okay. And I guess – and you've mentioned a couple of times already having to deal with some chemicals. You talked about that at the lab audits and now working, doing these farm inspections. Describe for me, Kyle, if you could, what you mean by handling the chemicals or accounting for these chemicals. What all did that require you to do?
>
> A Okay. Well, if there's some used up chemicals, say at food science – that's where my office was at – they would send me an email and say "Kyle, I got, you know, four liters of acid to pick up," and I'd go pick up the acid. Then I'd put it in this storage room that I have there on the farm. And I'd put the used chemicals in that storage room, and then once a month, we had an outside company come pick up the chemicals to haul off, to get rid of. But I would just haul the chemicals to the storage room but – and go from there.
>
> Q And was there a storage room on each different farm or experiment station? Or did you have just one storage room in Fayetteville or some place?
>
> A I – I just had one there in Fayetteville. And you know, if I had to pick up chemicals, say, in Stuttgart it was a lot cheaper for me to pick them up in Stuttgart and take them back to Fayetteville

than it was for me to have the company come out to Stuttgart to pick up the chemicals. So I was just trying to save money that way.

Q And if you had to transport those chemicals from, let's say Stuttgart back to the storage room in Fayetteville, how would that work? Did you put them in some sort of container that wouldn't leak and put them in the vehicle and drive them back up to Fayetteville? Or would you – did you have to do special kind of handling for those kind of things?

A No, they'd be in a box. I mean, I wouldn't haul anything that was dangerous as far as flammables, things like that. I wouldn't haul that. But as far as pesticides, herbicides, no, they were in a box or they were secured. But they were in – I wouldn't haul anything inside my cab, inside my – especially herbicides, pesticides, and all that. That gets smelling pretty bad. But – I always made sure that instead of spending the night somewhere, I'd make sure – say I went to Stuttgart. I'd make sure I made it back to Fayetteville and not have to spend the night anywhere, you know, a hotel or something like that. I wouldn't care if someone took the chemicals, but I wouldn't want to get in trouble either so –

Q I gotcha. And when you say these chemicals might have been in boxes or whatever and they were secured, kind of explain to me, what do you mean by that?

A Well, they would just be put in boxes so they wouldn't roll all over the back of the cab.

Q Okay. Would they be –

A. Boxes or containers. Yes.

Q Would they be taped up or sealed up somehow or another or –

A. Yes, sir.

Q Okay.

A Yeah.

Q And would you – would you be – would you have been responsible for taping up the boxes or securing the boxes, say, in

> Stuttgart before you started making your trip back to Fayetteville? Or did somebody else do that for you?
>
> A If there was no one else available, I'd do it. But usually, I'd want them to do it. I'd want them to secure the boxes.
>
> Q And if they secured the boxes for you, I guess that would kind of help reduce your having to handle them and that kind of thing? Is that right?
>
> A Correct. Yeah. The less people that handles, yeah, chemicals or anything, sharps containers, anything, so…

At the hearing in this matter the claimant's supervisor, Nathan Van McKinney, was called as a witness by the claimant. Mr. McKinney is the respondent's Associate Vice-President for Agriculture. Mr. McKinney gave a description of the storage shed where the claimant would temporarily store chemicals before an outside/third party entity removed them. He described it as a cinder block building with five or six rooms and estimated it to be about 1,200 square feet. On cross examination Mr. McKinney explained that the building is ventilated with a fan that automatically comes on when someone enters the building. Mr. McKinney took over the job duties of picking up chemicals and biowaste for the claimant after he became ill and unable to work.

In his deposition the claimant was asked about exposure to chemicals during his job duties for the respondent and his use of proper protective equipment (PPE) as follows:

> Q As you would have to work or handle these chemicals at these various locations, besides – you've described for me about how they would be boxed up on occasion and you would drive them back to Fayetteville. But besides that exercise of transporting the chemicals, were you somehow or another exposed to chemicals in other aspects of your job, like doing other things where you would come in, have some exposure to chemicals?
>
> A Well, yeah. I mean, if there was a spill in one of the labs, I'd have to go in and clean it up. You know, clean it up properly.

I—I—I'd rather do it than someone else do it because I had all the proper PPE and all that and disposed of it properly too – any chemical spills.

Q Okay. That – that's kind of what I was wondering. If you – if you ever had to do anything like that with chemicals, would you have – would you wear a mask and gloves and that kind of equipment?

A Yes, sir.

Q I guess – I guess as a safety officer, you would know the importance of doing it that way. Correct?

A Yeah. It wouldn't look good if I went in there without something.

Q As far as you can remember, did the – did the university or for that matter yourself, did you – were you always provided with that protective equipment that you needed to do your job?

A Yes, sir.

Q I guess I'm wondering, did you ever have an occasion where you had to do something around all these chemicals and you didn't have a mask or the appropriate equipment? Do you remember ever – that ever happening?

A No. The only – the only thing, I came in contact with some – I don't know if you know what methyl bromide is. They used to use it – it's outlawed now, but they used to use it a long time ago to kill bugs underneath the ground to grow things. It's highly – I think the Jews used to use it on the Germans a long, long, long time ago, so it's pretty dangerous.

Q All right.

A But anyway, there was a bottle – we found about five or six bottles there in Fayetteville that was really, really old. And I had to get rid of them. Well, one of them was leaking a little bit, had this foam coming out of it. And I didn't have the proper PPE at the time, but then I went and got the proper PPE to shut off the valve. But any other time, just – just walking in a building that the vent wasn't turned on yet, especially herbicides, pesticides. I don't

> know if you've ever been on a farm, but that stuff can smell pretty bad if you don't have a vent on or something like that so…

On direct examination by the claimant's attorney Mr. McKinney was asked about his observations of the claimant's PPE use as follows:

> Q Okay. So did you observe – I think you said that you observed Kyle doing his work from time to time transporting chemicals.
>
> A Uh-huh.
>
> Q Did you ever observe him with the chemicals when he was not wearing gloves or a mask?
>
> A Yeah. Yes.
>
> Q Would you say that was – how much of the time would you say that would be?
>
> A I am merely guessing, but I would say about half the time he was wearing all of the appropriate PPE and it feels like about half the time I saw him he was not.

On cross examination Mr. McKinney was asked about the availability of PPE for the claimant as follows:

> Q He told me at his deposition that he was provided by the University all of the proper PPE that he needed to do his job; is that correct?
>
> A How much do you want me to answer that? I don't know. I suspect that is the case, but I don't know.
>
> Q Was there ever a time where Kyle came to you and said he did not have the proper PPE to do his job?
>
> A No, not to me.

On re-cross examination Mr. McKinney was asked about the claimant being written up for not using appropriate PPE as follows:

> Q During the time that you supervised Mr. McKaughan, did you ever have to write him up for not using the appropriate safety equipment?
>
> A No, I didn't
>
> Q Did anybody else that you know of?
>
> A Not that I am aware of.
>
> Q If you knew that Kyle had not been using the proper safety equipment, Dr. McKinney, would you have written him up?
>
> A No.
>
> Q Why not?
>
> A I would have given him a reminder that he is expected to set a good example and that we need to remember to wear our masks and we need to remember to wear our gloves, but I can tell you for a fact that you walk in those labs and you forget, which I did frequently. You walk in those labs and the people who are working in those labs are often not using the same protective equipment that Kyle would have been expected to. So it's just easy. When you are in a rush when you are trying to deliver that stuff, it is easy to walk in, pick that stuff up and forget, which I did frequently.

At the hearing in this matter the claimant's widow, Tonya McKaughan, gave testimony that she had been to the storage shed one time and at that time chemicals were being removed by a third party. She testified at that time that she did not observe the use of gloves or masks by anyone present. The claimant testified in his deposition about the onset of his symptoms as follows:

> Q Okay. So Explain to me, if you can, Kyle, how it was that – when did you begin to notice any kind of symptoms or pain or problems that led you to go to the doctor to get this diagnosis? And kind of describe all that for me.
>
> A Well, be honest with you, I was at work one day back – it was January – it was the end of January. And I just felt weird at

> work. So I went up to Pat Walker there on campus and took my blood pressure, and it was like 220-something over 100-and-something. So I went to the emergency room. Luckily, they started doing blood tests and somehow I lost four pints of blood. Was missing. You know, wasn't in my stool; wasn't in my urine. And they just couldn't find it. And luckily, there was a lady there that knew a little bit about multiple myeloma. And they did an MRI and they found – my back was bothering me too, and that's when they found that the multiple myeloma started eating way at my – my nerves in my back. That – that's what caused all that – the pain in my back. But if it wasn't for this lady coming by my office and telling me, 'Kyle, you look like" – sorry my language – "you look like crap," I probably wouldn't have went to the doctor. But she pretty much saved – you know, could have had a heart attack or something like that. That blood pressure was that high. So I feel kind of lucky in some way, but I'm very unlucky in another so…..
>
> Q So that – that day you said sometime at the end of January of this year. Right?
>
> A Yes.

The claimant was seen at Mercy Hospital Northwest Arkansas emergency department on January 27, 2023, and was admitted to the hospital at that time. The claimant first saw Dr. Patrick Travis at Highlands Oncology on February 14, 2023. Dr. Travis followed and treated the claimant throughout the remainder of his life. On November 3, 2023, Dr. Travis issued a lengthy summary note detailing the claimant's multiple myeloma and chronic lymphocytic leukemia, which are exceedingly rare conditions for one person to simultaneously have according to Dr. Travis. Following is Dr. Travis' November 3, 2023, summary note:

> Mr. Kyle McKaughan was, at first visit, a 60 y/o (DOB 3/17/62) seen in clinic for first time on 2/14/23 for initial evaluation and recommendations for newly diagnosed lgG Lambda Multiple Myeloma and CCL, B-cell type. He was admitted directly from Mercy ER on 1/27 after presenting with uncontrolled HTN and incidental finding of acute renal insufficiency, hypercalcemia, and pancytopenia. Of note, he was admitted to NW Medical Center for new-onset atrial fibrillation 12/21/22 and cardioverted by Dr. Singh and placed on Eliquis. TEE at that time showed preserved

EF 55-60%. Lab studies dated 12/20/22 show his hemoglobin 14, HCT 42, Platelet 181K, Creatinine 0.8 with BUN 12 and normal electrolytes. Subsequently, labs on 1/27/23 after presenting to ED with dizziness, lightheadedness, and hypertension showed pancytopenia (hemoglobin 8.8), acute renal insufficiency (creatinine 2.4), hyponatremia (sodium 124 likely secondary to pseudohyponatremia), and hypercalcemia (calcium 13) with elevated total protein 9.9 and albumin 2.7. He was transfused packed red blood cells during hospitalization for hemoglobin 6.8. He was given a dose of Zometa on 1/31 for hypercalcemia. Eliquis was stopped due to thrombocytopenia with platelet in the 10-20 range. He denied any signs of bleeding. Workup included bone marrow biopsy on 1/1/23 (Accession #10195643) revealing hypercellular marrow (>95%) with CD5+ cell lymphoproliferative disorder, favoring CLL, and extensive plasma cell involvement with core biopsy >95% plasma cells, lambda restricted. Flow cytometry on plasma cells was negative for CD20 but CLL positive for CD20.

Flow cytometry for plasma cells also showed CD19 negative, CD38 detected, CD56 not detected, CD117 (KIT) negative, CD138 detected, cytogenetics and FISH pending. US kidney and bladder on 2/2 was unremarkable. Due to acute on chronic lumbar back pain he had an XRAY of lumbar spine on 1/30, revealing mild curvature of the mid lumbar spine convex to the left. Severe spondylosis at L2-L3 with mild changes were seen at L1-L2 and L3-L4. Subsequently, he had MRI of Lumbar spine without contrast showing large disc bulge with posterior spondylitic ridging that impressed on anterior thecal sac L2-L3. Moderate to severe narrowing of the thecal sac and crowding of cauda equina. He was seen by Dr. Castellvi, neurosurgery, who did not think surgical intervention indicated. Denied any change in bowel or bladder habits. Pain was controlled with oxycodone 5 mg oral at night. Completed 4 days of pulsating dexamethasone. UPEP inpatient showed total protein of 7513 with lgG lambda band. A complete SPEP was not done inpatient. He was found to be B12 deficient and started on B12 supplement.

Labs on first visit in clinic showed WBC 10 with ANC 2.4 (likely elevated WBC due to recent steroids with no signs of infection), Hbg 6.4, HCT 18.5, Pit 20K, Cr 2.3 with NA 132 and Ca 7.3 with alb 2.5 (corrected Ca 8.1), TP11, LD 393, and Alk phos 60.

His overall course was further complicated by hemolytic anemia secondary to antibody production from his Chronic Lymphocytic

> Leukemia precipitating on his red blood cells. Because of this emergent initial treatment was geared at treating the Chronic Lymphocytic Leukemia. Starting with Cytoxan and Rituxan and then expanding his treatment to include drugs for multiple myeloma. Unfortunately, although slowing his hemolytic anemia we were never able to completely squelch the hemolysis. Also, we only barely made headway on his myeloma. Keeping in mind he had profound disease in his marrow (>95%) and extramedullary extension to disease involving the nerve roots of the cauda equina.
>
> The lifetime risk of Multiple Myeloma is 0.76% Correspondingly, the risk of Chronic Lymphocytic Leukemia is 0.39%. Looking at these two rare B-cell malignancies the risk of developing both at the same time would be exceedingly rare. The chance of developing these malignancies de-novo without environmental influence would likely be impossible.
> Environmental influence leading to both Multiple Myeloma and Chronic Lymphocytic Leukemia: Agent Orange exposure in Vietnam, Camp Lejeune water exposure, and Roundup exposure.
>
> Day in and day out Mr. McKaughan transported a variety of toxic chemicals, corrosive agents, heavy metals, pesticides, and herbicides. Many of the chemicals Mr. McKaughan handled extensively and transported are carcinogenic. After visiting with Mr. McKaughan extensively and reviewing the chemical exposures he has had, it is clear that this was secondary to work exposure leading to his malignancies. Mr. McKaughan is at this point completely and totally disabled. He has months of recovery from his nearly life-ending treatment, a treatment required because of the complexity of his dual malignancies. These malignancies will define his life for the foreseeable future.
>
> ***
>
> Subsequent to the first summary I complete Mr. McKaughan was hospitalized with a catastrophic cardiovascular event with combination of stroke and heart attack. I want to state again, had Mr. McKaughan not spent such an extensive time exposed to these carcinogenic chemicals this would not have happened.

In Dr. Travis' November 3, 2023, summary note he also discusses belief that the claimant's job duties of handling hazardous waste as described above was the cause of the claimant's two exceedingly rare and simultaneous cancers.

Dr. Travis was deposed on January 19, 2024. That deposition has been admitted into evidence as Joint Exhibit 1. Dr. Travis has been board certified in oncology but was at the time of the deposition board eligible in oncology because of required testing during the COVID time period that he was unable to perform. Dr. Travis is a founding member of Highlands Oncology and has been a participating member for 26 or 27 years. During Dr. Travis' deposition he extensively discussed the two types of cancer afflicting the claimant and both doing so at the same time being such a rare event.

> Q Okay. Explain to me how that would work for the population.
>
> A So, if you – right now, if you did – went to the database and you look to see about patients who have both the diagnosis of CLL and multiple myeloma, what you would find is that there are cases, but they're very, very rare. So, most of the time those are listed as what's called case reports. There's not enough to study a group. There's single cases that are listed. If you look at those cases, most of those are because the B-cell clone, the cell that went bad because of malignancy, it has somewhat waffled between chronic lymphocytic leukemia and multiple myeloma. The most common – I'm going to try not to get too far into the weeds. But the most common is where you have an AGA secreting CLL, so that's the antibody it makes, the IGA, and then it matures or transforms over time and you also have multiple melanoma, but the cell clone, the bad cell, is the same. Kyle was different. He had two independent cell clones that developed a malignant – malignancies at, we believe, the same time. The reason that we believe that they occurred at about the same time is that because both were causing catastrophic problems and it would have been unlikely for him to survive very long with either of them. So, extrapolating back, we think that that – they occurred at the same time. Kyle is one of maybe less than 10 case reports of that that I can find ever and that goes back to some things that came out of Chernobyl even. This is rare. I don't think you can extrapolate the statistical chance that this would occur from those independent numbers.

Dr. Travis also testified about the claimant's use of PPE as follows:

> Q Did Kyle tell you he was using the proper protective equipment when he was handling these compounds?
>
> A He told me that's what he told you, but he wasn't.
>
> Q So he told you he was not using it?
>
> A Correct.

Dr. Travis is also of the belief, as shown in his deposition testimony, that the claimant was handling these chemicals extensively as he was asked about in his deposition as follows:

> Q Okay. Now, when you – in your letter, you suggest that he handled these chemicals extensively. I guess I just want to ask what – describe what you mean by extensively, if you mean anything by that.
>
> A I mean that that was a day in and day out that that was his job that he described rolling out on taking the family back home on holiday trips because he had to run somewhere and pick some chemicals up and transport them and then go back home and pick the family. But I think it was – I think he handled them a great deal.
>
> Q But daily or weekly or do you know?
>
> A I don't know.

When asked in his deposition about any specific herbicides the claimant mentioned Dr. Travis stated, "I don't recall that at all." Dr. Travis was also asked about any specific chemicals mentioned by the claimant as follows:

> Q Okay. Your letter, your summary note, it doesn't really mention any specific chemicals that I can see. You just talk about a variety of toxic chemicals, agents and that kind of thing.
>
> A Yes, sir.
>
> Q So, do you recall from your notes or discussions with Kyle any specific kind of chemical or product?

> A You're asking me to make a big leap. If you have a list of 30 chemicals, herbicides, pesticides and there's a significant number of them carcinogens, I can't make a leap as to which one was the carcinogen in question.
>
> Q Well, my question is, did Kye ever relate any specific product or chemical or herbicide to you?
>
> A Just what was on the list. No, sir.
>
> Q Okay. Did he ever relate to you any specific day or time where he felt like he was exposed to any of those specific chemicals or herbicides?
>
> A No, sir.

The list referred to by Dr. Travis is found at Claimant's Exhibit 1, pages 88 and 89. Apparently, both lists were marked and written upon by Dr. Travis. His marks were to note substances that were carcinogens. The claimant's widow also gave testimony about the list as follows:

> Q All right. And at some point did you take a list of chemicals to Dr. Travis?
>
> A I did because the very first thing he asked us, the very first thing he asked when we walked into the exam is, "Do you work with chemicals?"
>
> Q And where did you get the list of chemicals?
>
> A From a manifest from the pickups from the HAZMAT team that comes out and – Heritage. They always have to sign a manifest and it is when they pick up and the weight of the chemicals and Kyle would have to sign off on it.
>
> Q All right. So on Page 88 of the Claimant's Medical Exhibit, we have this list signed here by Dr. Travis?
>
> A Uh-huh.
>
> Q Is that the list you gave him?

A It is.

Q And Page 89, is that also what you gave him?

A Yes.

It is certain from Dr. Travis' summary note and deposition that he believes some substances the claimant was exposed to through his work with the respondent caused his two exceedingly rare simultaneous cancers.

> Q Doctor, in your opinion, are there any other things or causes that could have caused Kyle's cancers?
>
> A I think that having two separate clones, two separate B-cell clones that likely become malignant in close proximity to each other, that it was some toxin exposure that led to that. I think it would be unlikely to find a cause where you would support that it was just a de-novo occurrence.
>
> Q So, is the answer to the question, no? You don't think anything else could have caused it?
>
> A I think it was toxin.

The respondent in this matter paid for and received a medical opinion dated December 16, 2023, from Henry F. Simmons, Jr., MD, Ph.D., who is a toxicologist and physician at UAMS. Dr. Simmons' report can be found at Respondent's Exhibit 1, pages 1-14. Following is a portion of Dr. Simmons' report which includes his disagreement with Dr. Travis' views on causation as follows:

> 4. At the request of Mr. Robert Montgomery, an attorney for the Arkansas Insurance Department, I reviewed the following materials related to Mr. Kyle McKaughan who died of multiple myeloma and chronic lymphocytic leukemia in 2023:
>
> a. Medical records of Dr. Patrick Travis
> b. Depositions of Dr. Patrick Travis and Mr. Kyle McKaughan
> c. Summary Letter of Dr. Travis dated 11/3/2023
> d. Email from Mr. Robert Montgomery dated 1/4/2024

e. Statements of coworkers Lance Maples and Vaughn Skinner
f. U of A SAREC 2023 Pesticides Used in Season (a list)

5. My purpose in so doing was to evaluate toxicological causation opinions rendered by Dr. Travis regarding Mr. McKaughan's death from my standpoint as a medical toxicologist. In brief, I concluded that the etiology of his concomitant multiple myeloma and chronic lymphocytic leukemia is unknown and that to link it to workplace chemical exposure as described in the materials that I reviewed is speculation. Opinions that I hold within a reasonable degree of medical and toxicological probability appear as impressions in the paragraphs that follow. However, if more data becomes available, I reserve the right to amend my views to the extent it warrants.

Background

6. Mr. Kyle McKaughan was 60 years old when he began feeling bad in January of 2023 and was found to have hypertension, elevated calcium, hypertension, renal dysfunction and anemia. By 2/14/23 he had been referred to an oncologist, Dr. Patrick Travis, with a newly diagnosed very unusual, dual lgG lamda multiple myeloma and B-cell type chronic lymphocytic leukemia. A comprehensive evaluation was undertaken to identify existing complications and choose an optimal therapy. Unfortunately, his disease was aggressive and he died in December of 2023.

7. His past medical history included no significant medical or surgical diseases. He was a nonsmoker, but he had drunk some alcohol and he had used smokeless tobacco products for 40 years. His father had had lung cancer. He had never served in the military. His occupational history included predominately occupational safety roles since the early 90s excluding a couple of years in the insurance business. In 2011 he began working for the University of Arkansas.

8. Based upon his deposition Mr. McKaughan held two positions at the University of Arkansas related to environmental health and safety that in part included work in areas where chemicals were stored or used. During the first, from some point in 2011 to 2014, he monitored research laboratories to assure proper labeling and storage of chemicals as well as compliance by personnel with use of proper protective equipment (PPE). If a chemical spill occurred in a laboratory setting, he would clean it up using appropriate technique and dispose of waste the right way as he ordinarily had all the proper PPE with the exception of one occasion.

9. At that time, personnel discovered five or six cylinders of methyl bromide, an outdated soil fumigant. When one was noted to be leaking, Mr. McKaughan, based on his training and expertise, realized that he did not have the proper PPE. However, he acquired it, closed the leaking valve, and completed the cleanup.

10. By 2014, Mr. McKaughan, according to his job description had become an Agricultural Safety Officer with complex responsibilities related to training others (40%), compliance with regulations (40%), and on-site activities (20%). The last included investigation of work-related accidents and inspection of machinery around the state. A coworker, Vaughan Skinner, who worked with him for years wrote that although Mr. McKaughan sometimes transported stored pesticides and chemicals for disposal, he never saw him handle them or "do anything inappropriate regarding safety." Another coworker, Lance Maples, who worked with Mr. McKaughan for about 10 years predominantly in indoor settings described him as one who "taught and followed proper safety procedures in all areas of his job to his [own] and others utmost safety."

11. In his deposition, Mr. McKaughan testified that probably once per month, he would travel from his Fayetteville office [as Agricultural Safety Officer] to other stations to do training and would sometimes transport unwanted chemicals back to a storage room in Fayetteville for pickup by a disposal service. However, pesticides and herbicides "especially" were never hauled in the cab. Although these agents were usually taped up or sealed in boxes to prevent their rolling in the back of the truck, he would do it himself if others were not available. It should be noted that Mr. McKaughan did not make these excursions in his own vehicle.

12. In a summary letter dated 11/3/2023, Dr. Travis noted that "After visiting with Mr. McKaughan extensively and reviewing the chemical exposures he has had, it is clear that [his diagnosis] was secondary to work exposure leading to his malignancies." In the deposition, Dr. Travis strongly emphasized that this condition was so rare that it represented only "one of maybe less than ten case reports" in presumably the world's oncology literature extending back to the Chernobyl affair of 1986! [17] [Chernobyl of course was a radiation disaster in Ukraine in 1986.] In further support of his view, he noted in his summary letter that some people exposed to Agent Orange, a herbicide used in Vietnam; to water at Camp Lejeune, a military base in North Carolina; and to Roundup, a

herbicide containing glyphosate had developed multiple myeloma or chronic lymphocytic leukemia but he did not say simultaneously in those cases.

Impressions

13. I have great respect for Dr. Travis' clinic assessment and medical care of Mr. McKaughan. However, those areas are independent of toxicological causation analysis. In my opinion the cause of Mr. McKaughan's cancer is unknown, particularly given that his case is "one of maybe less than ten case reports" in the world's oncology literature as referenced by Dr. Travis extending back to Chernobyl in 1986 which involved radiation as opposed to chemical exposure.

14. Toxicological insults including cancers begin with exposure. However, exposure is only an opportunity for absorption. Furthermore, absorption or uptake must be sufficient to exceed body defenses and cause irreparable harm. [threshold] In addition, experience as reported in the literature must sufficiently support the conclusion that a strong connection exists between the compound and the observed disease. [literature support] The disease should also occur at such a time that the exposure is temporally eligible to be its cause. Finally, within reason, it should be possible to exclude other potential causes of the disease. [differential diagnosis]

Dr. Travis cannot identify the "carcinogen in question" or degree of exposure.

15a. Although Dr. Travis once had access to a list of perhaps 30 chemicals, by the time of his deposition he was unable to name a single one and specifically could not identify the "carcinogen in question." [26] He also did not list any specific compounds in his 11/2/2023 summary letter. Even had he been able to name a compound or compounds, he would still have been unable to say when the patient was exposed or for how long. Accordingly, he would still not know how much of any specific chemical the patient absorbed, much less if it was enough to cause any injury. Thus, from the beginning the answers to questions about exposure, absorption and exceeding thresholds were never answered by Dr. Travis.

15b. There is certainly no evidence that any of Mr. McKaughan's body fluids or tissues were ever shown to be contaminated with any chemical present at any site where the patient worked. However, it must be noted that such studies would not be part of

any routine clinical investigation and the time to conduct them would have passed by the time of his diagnosis.

16. Of course, Mr. McKaughan did have exposures to various workplace chemicals as described in his job description, his deposition and by his coworkers, but he had been trained to deal with them and based upon his testimony he did so in an appropriate way which would limit absorption and reduce the potential for toxicity at the job site.

17. The use of appropriate personal protective equipment or PPE by design limits the absorption of chemicals that occurs with exposure. Dr. Travis, when asked if someone could safely handle the chemicals on the aforementioned list while wearing PPE answered, "Likely so." [23/24] I think it logical that a long-time safety officer like the patient should be considered protected. Dr. Travis' letter of 11/02/2023, unlike his deposition [24], says nothing about Mr. McKaughan failing to wear PPE when handling chemicals.

18. Mr. McKaughan testified that he not only wore proper PPE when necessary but that he would obtain it if he did not have it. As a case in point, when personnel encountered an unusual material, methyl bromide, instead of handling it unprotected, he acquired proper PPE first and only then safely shut down the leak. Thus, the intensities of any exposure were limited which in turn limited any absorption and any potential effects.

19. Mr. McKaughan's testimony also does not support Dr. Travis' testimony that his patient had workplace exposures to chemicals "day in and day out." [24] Mr. McKaughan instead testified that he made trips to the field probably on only a monthly basis as opposed "to day in and day out." Furthermore, the chemicals he picked for disposal during these excursions based upon his testimony were transported in sealed boxes in the bed of a university truck as opposed to his private vehicle. Once again, reducing not only the frequency of exposures but also their magnitudes in this fashion would be expected to lower his risk.

Dr. Travis has insufficient literature to support his assignment of causation to Mr. McKaughan's work.

20a. Because the case [near simultaneous multiple myeloma and chronic lymphocytic leukemia] is so "rare" in Dr. Travis' words, representing perhaps only "one of maybe less than ten case reports" in the world's oncology literature dating back to 1986 [38

years] its cause(s) is uncertain, the time it takes the disease to appear after an exposure is uncertain, etc.

20b. For example, even if Dr. Travis had identified a particular chemical which he has not [26] and even if he could demonstrate significant exposure and absorption which he cannot, without literature establishing the casual connection between the chemical and the dual disease he could not make a causal connection.26

20c. As another example, even if Dr. Travis knew when the dual malignancy developed which he does not [19/20] he would still have to know when the meaningful exposure to a toxicant took place to be sure that it was temporally eligible to be the cause and it would take literature to establish that time frame.

20d. Dr. Travis likening Mr. McKaughan's exposures as he described them to [32] unspecified events involving a defoliant, Agent Orange, used in Vietnam decades ago and to contaminants in the water supply in Camp Lejeune in North Carolina over many years [32] seems did not resolve any unknowns in my view.

Dr. Travis cannot eliminate other causes of Mr. McKaughan's cancer unrelated to his job.

21a. Multiple myeloma and chronic lymphocytic leukemia are more common with advancing age. [17] The patient was 60 years old.

21b. Multiple myeloma and chronic lymphocytic leukemia in some cases "clearly" develop without obvious toxin exposure in some fashion. [18]

21c. Everyone in the world is exposed to "carcinogens" and it is "hard to know what to what degree those things cause cancer." [21,22]

21d. There may be about 36,000 new cases of multiple myeloma in 2023 [20] and in my opinion there is little reason to believe that many had jobs like Mr. McKaughan.

21e. The lifetime risk of myeloma is 0.76% and of chronic lymphocytic leukemia is 0.39%. That is 7.6 and 3.9 people out of 1000 over a lifetime respectively and in a country of 300,000,000 million people that will turn out to be quite a number.

> 21f. How a person actually "contracts the disease" [multiple myeloma or chronic lymphocytic leukemia separately or together] is unknown. [18] As I interpret this statement, Dr. Travis states that the exact nature of the inciting molecular mechanism of the disease remains uncertain.
>
> 22. In summary, given the above information, I concluded that Mr. McKaughan's dual hematologic malignancy cannot be attributed to his workplace exposure within reasonable medical and toxicological certainty. A specific causal agent or set of causal agents cannot be identified. The steps Mr. McKaughan routinely took to protect himself as an Agricultural Safety Officer appear impressive and effective. The condition as described by Dr. Travis is extremely rare. The available literature is insufficient to establish a causal connection. Alternate causes cannot be excluded.

On February 19, 2024, Dr. Travis authored a letter to "To Whom It May Concern." Following is the body of that letter:

> Mr. McKaughan developed two aggressive B-cell malignancies. They were diagnosed simultaneously and the speed with which they were progressing suggests that they occurred at the same time.
>
> The development of both at the same time makes an outside exposure inciting carcinogenesis likely. No one else in his family or close proximity developed a malignant process. Therefore, it would not be an exposure common to the household.
>
> Mr. McKaughan worked with a series of toxic chemicals at the time of development of these malignancies. It is my medical opinion that these exposures led to the development of his malignancies.
>
> For many years there was an ongoing battle over cigarettes being a cause for lung carcinoma. The questions were raised as to how you could prove that these patients, who smoked, did not have other exposures. Intuitive reasoning and common sense lead us to realize that cigarettes are directly linked to lung cancer long before it was accepted as true.

Here, the central question is whether the claimant suffered a compensable occupational disease in the form of cancer developed as a result of his employment with the respondent. Those

cancers specifically being simultaneous multiple myeloma and chronic lymphocytic leukemia. It is without doubt those conditions led to the claimant's death on December 11, 2023.

In defining this cause of action, Ark. Code Ann. § 11-9-601(e)(1)(A) (Repl. 2012) provides:

> (A) "Occupational disease", as used in this chapter, unless the context otherwise requires, means any disease that results in disability or death and arises out of and in the course of the occupation or employment of the employee or naturally follows or unavoidably results from an injury as that term is defined in this chapter.

A causal connection between Claimant's job and the disease must be established by a preponderance of the evidence. *Id*. § 11-9-601(e)(1)(B). This standard means the evidence having greater weight or convincing force. *Barre v. Hoffman*, 2009 Ark. 373, 326 S.W.3d 415; *Smith v. Magnet Cove Barium Corp*., 212 Ark. 491, 206 S.W.2d 442 (1947). In setting parameters concerning such a claim, the statute further reads:

> An employer shall not be liable for any compensation for an occupational disease unless . . . [t]he disease is due to the nature of an employment in which the hazards of the disease actually exist and are characteristic thereof and peculiar to the trade, occupation, process, or employment and is actually incurred in his or her employment. This includes any disease due to or attributable to exposure to or contact with any radioactive material by an employee in the course of his or her employment[.]

Id. § 11-9-601(g)(1)(A). An occupational disease is characteristic of an occupation, process or employment where there is a recognizable link between the nature of the job performed and an increased risk in contracting the occupational disease in question. *Sanyo Mfg. Corp. v. Leisure*, 12 Ark. App. 274, 675 S.W.2d 841 (1984). Such diseases are generally gradual rather than sudden in onset. *Hancock v. Modern Indus. Laundry*, 46 Ark. App. 186, 878 S.W.2d 416 (1994).

If the claimant fails to establish by a preponderance of the evidence any of the requirements for establishing compensability, compensation must be denied. *Mikel v. Engineered Specialty Plastics*, 56 Ark. App. 126, 938 S.W.2d 876 (1997).

Unfortunately, the claimant in this matter passed away prior to the hearing. His deposition was taken prior his death and I find him to be a credible witness. Both parties in this matter focused on the claimant's use of PPE and the time spent with substances that cause cancer. There were witnesses that I have mentioned throughout this opinion and some that I have not mentioned at all, all of which have some word to say about both the claimant's use of PPE and his time spent with carcinogenic substances. After a review of all the testimony in evidence, I find that the claimant used PPE the vast majority of the time when it was required. That was the essence of his deposition testimony. Others did observe him not wearing PPE, but there is no evidence that he was handling a specific substance that required him to do so at that time. No witness identified a specific substance that required PPE and stated that the claimant wasn't wearing it while handling that specific substance.

Mr. McKinney did testify that he was not wearing all the appropriate PPE about half the time he saw him. However, within that same statement he says he was merely guessing. Mr. McKinney never identifies any specific substance or circumstance that the claimant should have had a certain PPE and did not while using any certain substance or combination thereof. Mr. McKinney engaged in speculation and conjecture in his statements about the claimant's PPE use. All claims for workers' compensation benefits must be based on proof. Speculation and conjecture, even if plausible, cannot take the place of proof. *Ark. Dept of Correction v Glover*, 35 Ark. @ 32, 812 S.W. 2nd 692 (Ark. App. 1991); *Deana Constr. Co. v Herndon*, 264 Ark 791, 595 S.W. 2nd 155 (1979).

As to the claimant's time spent with cancer causing substances, he testified in his deposition that it was a few days a month that he did so at the satellite locations. However, I am certain he spent some fair amount of time doing so at the main Fayetteville location. The claimant's supervisor, who took over his toxic disposal job duties during the claimant's illness, testified that it took an average of about 10 hours per week to deal with the chemicals. The claimant also spent time in the storage shed doing inventory that Mr. McKinney did not do, but I think Dr. Travis' "day in and day out" testimony and statement greatly overestimates the claimant's time spent with toxic chemicals.

The claimant has never alleged any exposure to a certain or specific chemical or a combination of chemicals that he believes to have caused his dual cancers. Instead, the case put forward is that there are lots of toxic substances that he was around and that must have caused his dual cancers. Not even Dr. Travis can identify any specific or any combination of specific substances that are shown to cause such a rare cancer combination that the claimant had. Dr. Travis' causation opinion is based upon speculation and conjecture. There is no proof of any substance or combination of substances for the claimant's condition. I find the greater weight of evidence is that the cause of the claimant's dual simultaneous cancers is unknown. Dr. Simmons' report in great detail supports that position. I believe his expertise and analysis of the facts deserves greater weight than that of Dr. Travis, and as such, I find the claimant is unable to prove by a preponderance of the evidence that he suffered a compensable occupational disease in the form of cancer developed as a result of his employment with the respondent.

From a review of the record as a whole, to include medical reports, documents, and other matters properly before the Commission, and having had an opportunity to hear the testimony of

the witnesses and to observe their demeanor, the following findings of fact and conclusions of law are made in accordance with A.C.A. §11-9-704:

FINDINGS OF FACT & CONCLUSIONS OF LAW

1. The stipulations agreed to by the parties at the pre-hearing conference conducted on August 14, 2023, and contained in a Pre-hearing Order filed August 18, 2023, are hereby accepted as fact.

2. The claimant has failed to prove by a preponderance of the evidence that he sustained a compensable occupational disease in the form of cancer developed as a result of his employment with the respondent, with his last exposure date of January 27, 2023.

3. The claimant has failed to prove by a preponderance of the evidence that he is entitled to medical treatment as he was unable to prove his occupational disease in the form of cancer compensable.

4. The claimant has failed to prove by a preponderance of the evidence that he is entitled to temporary total disability benefits as he is unable to prove his alleged occupational disease compensable.

5. The claimant has failed to prove his attorney is entitled to an attorney's fee in this matter.

6. The respondent's issue of lack of notice as a defense is moot.

7. The claimant has failed to prove by a preponderance of the evidence that he is entitled to benefits under A.C.A §11-9-527 as the claimant is unable to prove that he sustained a compensable occupational disease.

ORDER

Pursuant to the above findings and conclusions, I have no alternative but to deny this

claim in its entirety.

If they have not already done so, the respondents are directed to pay the court reporter, Veronica Lane, fees and expenses within thirty (30) days of receipt of the invoice.

IT IS SO ORDERED.

HONORABLE ERIC PAUL WELLS
ADMINISTRATIVE LAW JUDGE