ISSUES

1. Whether Claimant proved by a preponderance of the evidence that he sustained a compensable occupational pulmonary disease arising out of and in the course of his employment with Respondent-Employer.

2. Whether Claimant has proved by a preponderance of the evidence that medical care was reasonably necessary to cure and relieve him of the effects of his occupational disease.

3. The amount of Claimant's average weekly wage.

FINDINGS OF FACT

1. Claimant was employed with Respondent-Employer as the director of product development. Claimant alleges an occupational disease of his respiratory system arising from exposure to volatile organic compounds in the workplace.

2. Respondent-Employer is a technology licensing company that develops hardware and formulations for various manufacturers of vaporized marijuana products.

3. Claimant's job included creating formulations of oil which consisted of multiple volatile organic compounds, including terpenes, being added together on a small scale to eventually be sold to a manufacturer who would mass produce the product. The formulation process would involve using a pipette to transfer the terpenes into hot oil, blending the hot oil using a homogenizer to create aerosolization and labelling it. After the formulation process, Claimant would distribute small batch product samples to testers, including Claimant and other employees of Respondent-Employer, and conduct a survey for feedback on different aspects of product use. Testers like Claimant would inhale the formulation in the cartridge. From 2018 to 2022, Claimant conducted these tests and tracked results.

4. When Claimant was seventeen years old, he was diagnosed with bronchitis and treated for six months, during which time he kept an inhaler at his doctors' recommendation. Later, when Claimant was in college from 2011 to 2015, he developed respiratory distress for unknown reasons. His providers again gave him an inhaler and he was released from care six months later.

5. Around March 2020, Claimant reported to Respondent-Employer that he had contracted COVID-19. Claimant requested he be able to work from home, which Respondent-Employer allowed.

6. On December 22, 2020, Claimant underwent a CT scan of his chest which showed an inflammatory infiltrate suggesting infection or aspiration in the left lower lobe along with mild diffuse esophageal distention.

7. In March of 2021, Claimant sought treatment for dysthymia, mental fogginess, and diarrhea, at the National Jewish.

8. In April 2021, Claimant saw gastroenterologist Dr. Miranda Ku. Dr. Ku opined that Claimant's respiratory issues were related to his stomach, including recurrent aspiration and vocal cord dysfunction, both of which can be the result of GERD.

9. In July 2021, Claimant was diagnosed with the delta variant of COVID-19. Claimant had pneumonia-type symptoms, shortness of breath, and difficulty breathing. Claimant was treated by Dr. Howard Saft at National Jewish Health but was not hospitalized. By the start of 2022, Dr. Saft released Claimant from treatment, and Claimant no longer needed medications or inhalers.

10. On February 18, 2022, Claimant underwent a methacholine challenge test provided by Dr. Pacheco. Claimant's results of the methacholine challenge testing did not meet the threshold for asthma. Claimant also had a laryngoscopy on February 18, 2022, performed by Dr. Michael Mohning after his methacholine challenge test. The laryngoscopy showed cobblestoning in Claimant's posterior pharynx.

11. From February 2022 through December of 2023, Claimant saw Dr. Saft for fatigue, dyspnea, viral syndrome, rash, skin sores, cognitive and physical fatigue, decreased appetite, abdominal complaints, and heartburns with muscle aches.

12. At some point in early 2023, Claimant began conducting his product testing at home. At that point, Claimant was handling the cartridge formulation steps; preparation of samples; creation of CBD oils; terpene bottling and testing.

13. However, in April 2023, Claimant stopped participating in the testing altogether due to experiencing throat irritation and coughing from consuming the product. Claimant continued to work with the product from his home office, including creation of the formulas, filling the pods, and distributing the samples, and he kept his laboratory equipment next to his work desk, resulting in continued exposure to the vapors.

14. Claimant sought treatment with Dr. Saft at National Jewish on January 9, 2024. Claimant reported to Dr. Saft that his chest symptoms and tightness had been worse when he would go to work and that he would feel better when at home.

Claimant denied experiencing heartburn. Claimant explained that he would work regularly with terpenes. Claimant also disclosed to Dr. Saft that he would smoke marijuana for his sciatica and that he no longer exercised due to his recent symptoms. Dr. Saft noted that Claimant had worsening dyspnea with left mid-chest discomfort and mildly decreased pulmonary function on testing as well as some mild wheezing. An X-ray of Claimant's chest was clear. Dr. Saft expressed concern about occupational exposures being a contributing factor. He recommended Claimant continue with Pulmicort and Spiriva, albuterol as needed, a Medrol Dosepak trial, and a spirometry. Dr. Saft referred Claimant to occupational medicine for further evaluation.

15. On January 17, 2024, Claimant returned to National Jewish where he was attended by Dr. Karin Pacheco for further evaluation regarding the workplace exposure for Claimant's pulmonary condition. Claimant reported that his symptoms had begun approximately two years earlier with the onset of shortness of breath and a raspy cough and that the symptoms had worsened in November and December 2023 with a change in his cough to one characterized as dry, short, and sharp. Claimant told Dr. Pacheco that when he returned to the workplace in January 2024, he noted the onset of a profound cough triggered by workplace fumes, and that despite removing the chemicals from Claimant's home office Claimant's cough had not improved much. Dr. Pacheco reviewed Claimant's occupational and medical history. Dr. Pacheco noted that on physical examination, Claimant had diffuse expiratory wheezes throughout his chest consistent with active asthma. While Claimant reported avoiding use of his albuterol inhaler due to it triggering palpitations and worsening his postural orthostatic tachycardia syndrome (POTS), so Dr. Pacheco recommended switching to Xopenex. Additionally, although Claimant denied developing any rashes when his skin was exposed to the compounds during his work, Dr. Pacheco suspected that Claimant may have developed sensitization and asthma to the compounds or an allergy to marijuana itself. Dr. Pacheco recommended a methacholine challenge with laryngoscopy and for Claimant to start peak flow monitoring twice daily.

16. On January 26, 2024, Dr. Saft wrote a letter stating Claimant was "undergoing testing to determine the cause of his medical condition," and recommended that Claimant refrain from working with chemicals involved in his position with Employer "as they may be a contributing factor."

17. On or about March 12, 2024, Claimant saw Dr. Saft again after developing symptoms of a runny nose, cough, fevers, chills, and shortness of breath. Claimant reported taking multiple COVID tests, all of which were negative. Dr. Saft's physical exam noted his lungs were clear and no wheezing. Dr. Saft noted, "Overall, he was improving with his symptoms, but then developed a rhinorrhea, cough, dyspnea." The record did not document any heartburn. Dr. Saft instructed Claimant to discontinue all use of marijuana products, and he recommended

conducting an allergy test for the chemicals Claimant was exposed to in the workplace.

18. On April 24, 2024, Claimant underwent another methacholine challenge test at National Jewish, which showed "Positive airways hyperresponsiveness to methacholine with a PD-20 FEV1 at 70.15 mcg." That same date, Claimant underwent another laryngoscopy, which showed moderate erythema and moderate edema.

19. Claimant returned to Dr. Pacheco on May 7, 2024. She reviewed Claimant's results from the two methacholine challenges and noted that the 2022 results were "borderline positive" and that the recent repeat test on April 24, 2024, was "clearly positive" for asthma. Claimant reported to Dr. Pacheco that he has had to decrease his use of marijuana due to near constant nausea and loss of appetite, which Dr. Pacheco noted to be suggestive of "cannabis hyperemesis syndrome." Claimant also reported experiencing rashes on both of his forearms that had since resolved. Dr. Pacheco noted this to be consistent with possible contact dermatitis. Claimant denied experiencing heartburn. Dr. Pacheco assessed Claimant with asthma and hyperemesis syndrome and recommended Claimant undergo allergy testing for the workplace chemicals, discontinue use of marijuana, and continue with Pulmicort.

20. On June 5, 2024, Claimant again saw Dr. Pacheco. Dr. Pacheco reviewed the testing from Claimant's patch testing which showed positive reactions to fragrances and preservatives. Dr. Pacheco felt that because the reactions were immediate, they were likely neurally mediated. Claimant also reported that his nausea had resolved, though as a result of lorazepam prescribed by his psychiatrist and not as a result of his temporarily discontinuing marijuana use. Claimant reported heartburn as well, clarifying that he would experience mild acid reflux to spicy foods and would avoid such foods. Dr. Pacheco provided Claimant with temporary work restrictions of returning to work without exposure to terpenes and flavorings. Claimant was to continue using a peak flow meter daily. She also recommended speech pathology for control of irritable larynx syndrome.

21. When Claimant returned to Dr. Pacheco six weeks later on July 17, 2024, Dr. Pacheco reviewed Claimant's peak flow data. Claimant reported that he had completely stopped smoking marijuana and now only consumed edibles. He also reported that he had tried to return to the office with his restrictions, but that he had been sent home pending a full duty release. He reported that he was still able to do some work, including coordination, response to e-mails, market research, and cannabis moving, and that he continued to receive his regular salary. Regarding Claimant's pulmonary function testing, Dr. Pacheco noted that Claimant's results were not substantially different from those obtained on January 17. Dr. Pacheco recommended Claimant switch from Pulmicort to Advair, conduct prick skin testing for regional aeroallergens, enroll in pulmonary rehabilitation, and continue to monitor peak flow rates at home.

22. On September 10, 2024, Claimant underwent an IME with Dr. John Hughes arranged by his attorney. Dr. Hughes reviewed Claimant's medical records with National Jewish, took Claimant's subjective history, and examined Claimant. Dr. Hughes opined that Claimant presented with "a rather straightforward history of occupational asthma" and relied on Dr. Pacheco's medical evaluation and assessment that asthma in Claimant's case "has been substantially aggravated by his occupational exposure to terpenes and flavorings." He ultimately concluded that Claimant sustained occupational asthma as a result of his exposure to terpenes and flavorings at work. He further opined that the medical evaluations and treatment appear to have been reasonable, necessary, and related to Claimant's occupational asthma.

23. Respondents, in turn, obtained an IME with Dr. Jeffrey Schwartz. Dr. Schwartz reviewed Claimant's medical and occupational history as provided by Claimant and as documented in Claimant's medical records. Dr. Schwartz also performed a spirometry test on Claimant which showed significant variability of his peak expiratory flow. Ultimately, Dr. Schwartz concluded that Claimant did not have asthma of any etiology. He reasoned that the methacholine challenge test from February 2022 showed normal bronchial hyperresponsiveness, which, he explained, would make a diagnosis of asthma "exceedingly unlikely" given that airway hyperresponsiveness is a pathophysiologic hallmark of asthma. Although Claimant had a positive methacholine challenge test in April 2024, Dr. Schwartz felt that it was a non-specific result likely attributable to a concurrent viral illness, GERD, or chronic sinusitis rather than asthma. Even if Claimant had asthma, Dr. Schwartz noted that the medical literature linking terpene exposure to asthma was non-existent, and that there was insufficient testing to determine whether Claimant had a terpene-specific allergy. Regarding Claimant's pulmonary symptoms, Dr. Schwartz felt that they were more likely the result of other conditions, including Claimant's GERD with likely laryngopharyngeal reflux and recurrent aspiration, Claimant's chronic sinusitis with polyposis, possible vocal cord dysfunction, and likely a psychogenic component as evidenced by the inconsistent spirometry effort.

24. On September 18, 2024, Claimant returned to National Jewish where he was attended by Jordan Leigh Bull, PA-C. Claimant reported that he continued to work for Respondent-Employer performing desk work. However, Claimant reported that he recently had to transport product while covering for a coworker, resulting in sinus inflammation and burning that persisted for a week. Claimant explained that he had been in the warehouse for only two minutes while picking up the product, that he spent less than an hour with transporting the product, and that this was even with the product being individually packaged and placed in a larger container for transportation.

25. At hearing, Claimant and Licethy Jubrey credibly testified consistently with the above.

26. Dr. Schwartz testified at hearing as an expert in internal medicine and pulmonology. He testified that Claimant suffered from GERD as evidenced by an esophagram and CT scans showing esophageal dilation. He explained that GERD can occur without the typical symptoms of heartburn or regurgitation, a condition sometimes referred to as "silent GERD." In his opinion, GERD was a more likely cause of Claimant's respiratory complaints and throat irritation than asthma, particularly given the laryngoscopy findings of throat inflammation and cobblestoning, which he attributed to post-nasal drainage and chronic sinusitis rather than chemical exposure or asthma.

27. Regarding the methacholine challenge test results, Dr. Schwartz testified that the 2021 test was definitively negative, which in his view ruled out asthma under accepted medical standards. While the 2024 test yielded a positive result, Dr. Schwartz dismissed its diagnostic value due to Claimant's then-recent viral respiratory infection. He testified that such infections can temporarily induce airway hyperresponsiveness, leading to false positives on methacholine testing.

28. Dr. Schwartz also testified that he found the spirometry test results to be unreliable. He noted significant variability in Claimant's expiratory efforts, which he interpreted as inconsistent with good-faith performance. Because of this variability, he concluded that the results could not be used to support an impairment rating or to diagnose asthma. He further suggested that the inconsistency could indicate malingering.

29. In his testimony, Dr. Schwartz noted that terpenes have not been shown to cause asthma and that Claimant experienced similar symptoms in response to a wide range of everyday irritants, including mouthwash, rubbing alcohol, and garlic. This, he opined, reflected a generalized sensitivity rather than an occupationally-induced condition. He also raised the possibility of cannabis hyperemesis syndrome based on Claimant's ongoing marijuana use and associated gastrointestinal complaints. In his view, continued cannabis use, despite medical advice to cease, undermined any claim that the workplace exposures were the primary cause of Claimant's condition.

30. The Court finds Dr. Schwartz's testimony credible but does not find his opinions regarding the cause of Claimant's asthma symptoms to be persuasive.

31. The Court finds instead that Claimant has proved by a preponderance of the evidence that he sustained a compensable aggravation of his pre-existing asthma as a result of his prolonged and repeated exposure to terpenes or other volatile organic compounds in the workplace.

32. Claimant's job responsibilities involved regular and prolonged exposure to volatile organic compounds, including terpenes and other flavoring agents, during the formulation and testing of vaporized cannabis products. Claimant's symptoms of cough, dyspnea, and chest tightness began and progressively worsened during

the period of occupational exposure, and the symptoms were worse when Claimant was newly exposed to the chemicals again. For example, Claimant reported to Dr. Pacheco on January 17, 2024, that when he returned to the workplace in January, he experienced a profound cough triggered by workplace fumes. While he reported that symptoms persisted after removing chemicals from his home, the acute worsening upon re-exposure at the office supports a cause-and-effect relationship. Claimant also reported that on September 18, 2024, when transporting product, he experienced a flare-up in his symptoms just from being in proximity to the product. Although Dr. Schwartz raises well-reasoned doubts as to the cause of Claimant's symptoms and offers GERD as a plausible alternate explanation, the Court finds the temporal correlation between Claimant's exposure and symptom onset to be such that it is more likely than not that Claimant's workplace chemical exposure aggravated Claimant's pre-existing asthma, necessitating medical treatment.

33. Therefore, the Court finds that Claimant has proved that Claimant's worsened pulmonary condition resulted directly from the conditions under which his work was performed for Respondent-Employer, and which followed as a natural incident of the work and as a result of the exposure occasioned by the nature of his employment, and which is fairly traced to Claimant's work as a proximate cause and which did not come from a hazard to which the worker would have been generally exposed outside of the employment.

34. The Court further finds that Claimant has proved by a preponderance of the evidence that his treatment at National Jewish Health from January 9, 2024, and thereafter, as summarized above, was reasonably necessary to cure and relieve Claimant of the effects of his occupational disease.

35. Claimant earned $125,499.97 in wages during the fifty-two weeks leading up to his date of injury. Therefore, his average weekly wage is $2,413.46.

CONCLUSIONS OF LAW

Generally

The purpose of the Workers' Compensation Act of Colorado, §§ 8-40-101, C.R.S., et seq., is to assure the quick and efficient delivery of disability and medical benefits to injured workers at a reasonable cost to employers, without the necessity of litigation. *See* § 8-40-102(1), C.R.S. Claimant shoulders the burden of proving entitlement to benefits by a preponderance of the evidence. *See* § 8-43-201, C.R.S. A preponderance of the evidence is that which leads the trier-of-fact, after considering all of the evidence, to find that a fact is more probably true than not. *Page v. Clark*, 592 P.2d 792 (Colo. 1979). The facts in a workers' compensation case must be interpreted neutrally; neither in favor of the rights of the claimant, nor in favor of the rights of respondents; and a workers' compensation claim shall be decided on the merits. § 8-43-201, C.R.S.

Assessing weight, credibility, and sufficiency of evidence in Workers' Compensation proceeding is the exclusive domain of the administrative law judge. *University Park Care Center v. Industrial Claim Appeals* Office, 43 P.3d 637 (Colo.App.2001). Even if other evidence in the record may have supported a contrary inference, it is for the ALJ to resolve conflicts in the evidence, make credibility determinations, and draw plausible inferences from the evidence. *Id*. at 641. When determining credibility, the fact finder should consider, among other things, the consistency or inconsistency of the witness's testimony and actions; the reasonableness or unreasonableness (probability or improbability) of the testimony and actions; the motives of the witness; whether the testimony has been contradicted; and bias, prejudice, or interest. *Prudential Insurance Co. v. Cline*, 57 P.2d 1205 (Colo. 1936); *Bodensieck v. Industrial Claim Appeals Office*, 183 P.3d 684 (Colo.App.2008). The weight and credibility to be assigned expert testimony is a matter within the discretion of the ALJ. *Cordova v. Industrial Claim Appeals Office*, 55 P.3d 186 (Colo.App.2002). To the extent expert testimony is subject to conflicting interpretations, the ALJ may resolve the conflict by crediting part or none of the testimony. *Colorado Springs Motors, Ltd. v. Industrial Commission*, 441 P.2d 21 (Colo. 1968).

The ALJ's factual findings concern only evidence and inferences found to be dispositive of the issues involved; the ALJ has not addressed every piece of evidence or every inference that might lead to conflicting conclusions and has rejected evidence contrary to the above findings as unpersuasive. *Magnetic Engineering, Inc. v. Industrial Claim Appeals Office*, 5 P.3d 385 (Colo.App.2000).

Compensability – Occupational Disease

An injury must "arise out of and occur in the course of" employment to be compensable, and it is the claimant's burden to prove these requirements by a preponderance of evidence. Section 8-41-301, C.R.S.; *see also*, *Madden v. Mountain West Fabricators*, 977 P.2d 861 (Colo. 1999). An injury "arises out of" the employment when it is sufficiently related to the conditions and circumstances under which the employee usually performs his or her job functions to be considered part of the service provided to the employer. *Price v. Industrial Claim Appeals Office*, 919 P.2d 207 (Colo. 1996); *Popovich v. Irlando*, 811 P.2d 379, 383 (Colo. 1991). An injury is said to have arisen in the course of employment if the injury occurred while the employee was acting within the time, place, and circumstances of the employment. *Id*. For an injury to arise out of employment, the claimant must show a causal connection between the employment and the injury such that the injury has its origins in the employee's work-related functions and is sufficiently related to those functions to be considered part of the employment contract. *Triad Painting Co. v. Blair*, 812 P.2d 638, 641 (Colo. 1991).

Here, Claimant's injury is best characterized as an occupational disease. An occupational disease, as opposed to an industrial injury, arises not from an accident, but from a prolonged exposure occasioned by the nature of the employment. *Colo. Mental Health Inst. v. Austill*, 940 P.2d 1125 (Colo.App.1997). Section 8-40-201(14), C.R.S., defines "occupational disease" as: "A disease which results directly from the employment or the conditions under which work was performed, which can be seen to have followed

as a natural incident of the work and as a result of the exposure occasioned by the nature of the employment, and which can be fairly traced to the employment as a proximate cause and which does not come from a hazard to which the worker would have been generally exposed outside of the employment."

As found, Claimant's job responsibilities involved regular and prolonged exposure to volatile organic compounds, including terpenes and other flavoring agents, during the formulation and testing of vaporized cannabis products. Claimant's symptoms of cough, dyspnea, and chest tightness began and progressively worsened during the period of occupational exposure, and the symptoms were worse when Claimant was newly exposed to the chemicals again, and the temporal correlation between Claimant's exposure and symptom onset is such that it is more likely than not that Claimant's workplace chemical exposure aggravated Claimant's pre-existing asthma, necessitating medical treatment.

The Court concludes, as found, that Claimant has proved by a preponderance of the evidence that he sustained a compensable aggravation of his pre-existing asthma as a result of his prolonged and repeated exposure to terpenes or other volatile organic compounds in the workplace.

Medical Benefits

The Colorado Workers' Compensation Act ("the Act") provides that an employer must provide medical care "as may reasonably be needed . . . to cure and relieve the employee from the effects of the injury." Section 8-42-101(1)(a), C.R.S.

As found, the Court concludes that Claimant has proved by a preponderance of the evidence that the medical treatment Claimant received at National Jewish Health from January 9, 2024, and thereafter, as summarized above, was reasonably necessary to cure and relieve Claimant of the effects of his occupational disease.

AWW

The entire objective of wage calculation is to arrive at a fair approximation of the claimant's wage loss and diminished earning capacity. *Campbell v. IBM*, 867 P.2d 77, 82 (Colo. App. 1993). In general, an ALJ is to compute a claimant's AWW based on the claimant's earnings at the time of injury. *See* § 8-42-102(2), C.R.S. (2021).

Where the prescribed methods will not result in a fair calculation of a claimant's AWW in the particular circumstances, section C.R.S. § 8-42-102(3) grants an ALJ discretion to determine AWW "in such other manner and by such other method as will, in the opinion of the director *based upon the facts presented*, fairly determine such employee's average weekly wage." Section 8-42-102(3), C.R.S. (emphasis added).

As found, Claimant earned $125,499.97 in wages during the fifty-two weeks leading up to his date of injury. Therefore, the Court concludes that Claimant's average weekly wage is $2,413.46.

ORDER

It is therefore ordered that:

1. Claimant has proved by a preponderance of the evidence that he sustained a compensable occupational disease arising out of and in the course of his employment with Respondent-Employer.

2. Claimant has proved that the medical treatment he received at National Jewish Health on January 9, 2024, and thereafter, was reasonably necessary to cure and relieve him of the effects of his occupational disease.

3. Claimant's average weekly wage is $2,413.46.

4. All matters not determined herein are reserved for future determination.

If you are dissatisfied with the Judge's order, you may file a Petition to Review the order with the Denver Office of Administrative Courts, 1525 Sherman St., 4th Floor, Denver, CO 80203. You must file your Petition to Review within twenty (20) days after mailing or service of the order, as indicated on certificate of mailing or service; otherwise, the Judge's order will be final. You may file the Petition to Review by mail, as long as the certificate of mailing attached to your petition shows: (1) That you mailed it within twenty (20) days after mailing or service of the order of the Judge; and (2) That you mailed it to the above address for the Denver Office of Administrative Courts. For statutory reference, see section 8-43-301(2), C.R.S. For further information regarding procedures to follow when filing a Petition to Review, see Rule 26, OACRP. You may access a petition to review form at: http://www.colorado.gov/dpa/oac/forms-WC.htm.

DATED: April 9, 2025.

Stephen J. Abbott
Administrative Law Judge
Office of Administrative Courts
1525 Sherman Street, 4th Floor
Denver, Colorado, 80203