No. 331229

WASHINGTON STATE COURT OF APPEALS

DIVISION III

NEIL HORNSBY, Appellant

v.

ALCOA Inc., Respondent

APPELLANT'S BRIEF

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Assignment of Error No. 1: The Appellant assigns error to the superior court's judgment which stated as follows: "The Board's Order of January 23, 2014, which adopted the Proposed Decision and Order of the Board dated December 14, 2013, and affirmed the Department of Labor and Industries Order of February 22, 2012, is sustained and affirmed."

Assignment Of Error No. 2: Claimant assigns error to the superior court's adoption of the Board's FOF #4: "Mr. Hornsby's conditions diagnosed as desquamative interstitial pneumonia, respiratory bronchiolitis, and interstitial fibrosis did not arise naturally and proximately out of the distinctive conditions of his employment."

Assignment of Error No. 3: Claimant assigns error to the superior court's adoption of the Board's Conclusion of Law #2: "Mr. Hornsby's conditions diagnosed as desquamative interstitial pneumonia, respiratory bronchiolitis, and interstitial fibrosis is not an occupational disease within the meaning of RCW 51.08.140."

Assignment of Error No. 4: Claimant assigns error to the superior court's adoption of the Board's COL #3: "The Department Order dated February 22, 2012 is correct and is affirmed."

Assignment of Error No. 5 : The superior court erred in relying on "opinion" of Dr. Lodhi, Mr. Hornsby's pulmonary doctor in Wenatchee,

who did not testify in front of the Board of Industrial Insurance Appeals, and who was not, therefore, subject to cross examination by either party.

Assignment of Error No. 6: The superior court erred in concluding that Mr. Hornsby did not meet his burden of proof by a preponderence of the evidence that his lung disease arose naturally and proximately out of the conditions of his employment at Alcoa Wenatchee Works.

Assignment of Error No. 7: The superior court erred in concluding that Dr. Abraham's never answered the question about causation of Mr. Hornsby's lung disease.

Issue Pertaining to Assignment of Error No.1: Did the superior court err in affirming the boards order?

Issue Pertaining to Assignment of Error No. 2: Did the superior court err in adopting FOF #4, where the evidence was overwhelming that Neil Hornsby's DIP and interstitial fibrosis arose naturally and proximately from the distinctive conditions and exposures in the pot rooms at Alcoa? (The standard of review on appeal is whether the factual determinations are supported by substantial evidence. Martini v. Emp't Sec. Dept., 98 Wn. App. 791, 795, 990 P. 2d 981 (2000).

Issue Pertaining to Assignment of Error No. 3: Did the superior court err in adopting Conclusion of Law #2, where the evidence was overwhelming that Mr. Hornsby's conditions of DIP and interstitial fibrosis arose naturally and proximately caused by the pot room dust containing aluminum and other substances? (The appellate court reviews conclusions of law de novo. Olympic Healthcare Serv., 175 Wn. App. 174, 181, 304 P. 3d 491 (2013).)

Issue pertaining to Assignment of Error No. 4: Did the superior court err in adopting the Board's Conclusion of Law No. 3, where the evidence was overwhelming that Mr. Hornsby's lung conditions of DIP and interstitial fibrosis arose naturally and proximately from the aluminum and other hazardous dusts in the pot rooms at Alcoa Wenatchee Works, and that the pot room exposures may have contributed to Mr. Hornsby's respiratory bronchiolitis? (The standard of review is de novo on conclusions of law. See Olympic Healthcare, 175 Wn. App. at 181.)

Issue Pertaining to Assignment of Error No. 5: Did the Superior Court Judge err in relying on Dr. Lodhi's "opinion," where Dr. Lodhi did not testify before the Board and where Mr. Hornsby's counsel, therefore, had no opportunity to cross examine Dr. Lodhi as to her qualifications or foundation for her opinion? (The standard of review on appeal for

conclusions of law is de novo. See Olympic Healthcare, supra, 175 Wn. 2d at 181.)

Issue Pertaining to Assignment of Error No. 6: Did the Superior Court err in ruling that Mr. Hornsby's did not meet his burden of showing that his lung disease arose naturally and proximately out of the conditions of his employment at Alcoa Wenatchee Works, where there was overwhelming and uncontroverted competent evidence that Mr. Hornsby's lungs were filled with *aluminum* and other hazardous substances present in the pot room dust at Alcoa, and where Alcoa's expert witnesses were impeached regarding 1) their knowledge of the case and evidence, and 2) regarding their knowledge of the contents of cigarettes? (The standard of review for conclusions of law is de novo. See Olympic Healthcare, supra, 175 Wn. 2d at 181.)

Issue Pertaining to Assignment of Error No. 7 : Did the superior court err in concluding that Dr. Abraham did not answer Mr. Hornsby's counsel's questions about his opinion about the cause of Mr. Hornsby's lung disease, when in fact Dr. Abraham very specifically answered the question as to his opinion of causation, on a more probable than not basis, to a reasonably degree of medical certainty as to each of Mr. Hornsby's lung disease diagnoses, concluding that Mr. Hornsby's DIP and interstitial

fibrosis were caused by the aluminum in Mr. Hornsby's lungs, and that his respiratory bronchiolitis is often related to smoking, but that the aluminum might also have contributed to the respiratory bronchiolitis. (JA Page 32)? (The appellate court reviews conclusions of law de novo. See Olympic Healthcare, supra, 175 Wn. 2d at 181.)

A. STATEMENT OF THE CASE

1. Procedural History

Neil Hornsby filed a Notice of Appeal from the a final decision of the Board of Industrial Insurance Appeals, which affirmed the Department of Industrial Insurance order denying Mr. Hornsby labor and industry benefits for lung disease. Mr. Hornsby had alleged that he contracted lung disease from exposure to aluminum in the pot rooms at the Wenatchee Alcoa Works in Malaga, WA. CP 2-5. After a trial in the Superior Court of Chelan County, the Honorable Judge Small upheld the Board of Industrial Insurance Appeals decision denying Mr. Hornsby benefits for an occupational disease. CP 245-246. Mr. Hornsby moved for reconsideration. CP 255-261. That motion was denied. CP 263-265. Mr. Hornsby timely appealed to the Court of Appeals, Div. III. CP 266-272.

The superior court judge gave an oral decision, denying Mr. Hornsby's claim for industrial insurance benefits on October 3, 2014

after hearing oral arguments of counsel. See Verbatim Report of Proceedings. On page 60 of the judge's oral decision, the judge stated that he relied on Dr. Lodhi's opinion that "his lung disease has an established relationship with smoking to DIP and the possibility of aluminum-induced lung disease may be a contributing factor, and I think that's the best description of all of this evidence. Dr. Lodhi summarized that after she's seen both reports from Dr. Abraham. And I thinkd Dr. Abraham, frankly, would agree with that if he was pushed to answer the question that he never did." Dr. Lodhi did not testify before the Board of Industrial Insurance Appeals. (See entire Board Transcript, including depositions.

2. Statement Of Facts

A. NEIL HORNSBY

The Claimant, Neil Hornsby, worked 8-9 years at Burcks just before he started with Alcoa in 2000. RP 4. Before that he worked at Babcock Auto Wrecking did auto part dismantling from 1998-2000. RP 6.

In July of 2000 he started working at Alcoa as a carbon setter. Carbon setting is where you set carbons in the pots, pull them out, reset them, help tap the metal aluminum into the bath.

In 2000, Alcoa did a chest x-ray on Hornsby and all he had was a couple of nodules. Mr. Hornsby was tested by Alcoa at the beginning of

his employment for physical agility and passed with "flying colors." Page 58. He was also given a medical exam including a urine test, x-ray and physical agility test and he did not have any health problems. RP 59-61.

There was no indication that he had any diseases or health problems at the beginning of his employment. RP Page 61. Exhibit #4 was admitted. It was a respiratory questionnaire and pulmonary function test from Alcoa. In 2001 they were not noting any problems with Mr. Hornsby's respiratory system. Page 81.

He worked drilling siphons, and rolling bridges. Neil Hornsby was also on the "burn-off crew," pulling burn offs. RP 8.
When he was first hired in he was not fit tested for a respirator. RP 83.

Hornsby also operated a crane, at Alcoa from 2000-2002. During curtailment, Hornsby was also exposed to a bunch of dust vacuuming out pots during curtailment. RP104. He left because shut down the plant. RP 9. Neil Hornsby's date of separation was 5-21-2002, and his date of return was 7-21-2003. RP 80. Alcoa was non-producing plant during curtailment. RP 43-44.

Neil Hornsby testified that different areas at Alcoa the employees were not aware that they should have been wearing respirators. Alcoa did not require the respirators and he was not informed that it was necessary to wear respirators from 2000-2002. RP 28.

During his layoff from Alcoa he worked for Deserado Mining Company, in Rangely, Colorado. They were mining coal in the summer of 2002. He did pre-employment tests, and they also took x-rays. RP 10 – 11. He was labeled as having "black lung" in mining, at pre-employment medical tests at Deserado. He was not labeled until after working at Alcoa. Page 11.

Neil Hornsby broke his hand at Deserado so he only worked a short time at mine – about a week and a half to two weeks. The rest of the time he did not work in the mine. He only worked a total of 3 weeks for Deserado Mines. Neil Hornsby went back to Alcoa in 2003, as a utility laborer doing anything in pot rooms. RP 12 – 13.

In 2003 there were no indications that Hornsby was suffering from any kind of disease. RP 76-77. Alcoa did health status reports. RP 77-78.Neil Hornsby had no physical limitations when he came back in 2003. He started having health problems in 2005-2006. He experienced fatigue. At first the doctors didn't know what was wrong with him. RP 26. He was labeled with IBS –irritable bowel syndrome. RP 27. Alcoa sent Neil Hornsby to its own doctors and nurses. RP 76. On 7/29/03 he was examined by nurses rather than doctors at the Alcoa site.

On February 5, 2004, he was fit tested for a respirator, and he passed. RP 86.

In approximately 2005, Neil Hornsby collapsed on the job at Alcoa from exhaustion and dehydration. He had been on light duty for 45 days or 60 days and collapsed after returning to full duty. RP 62. He had another serious incident involving fatigue at Alcoa. RP 64. Up until 2005 Neil Hornsby was not having problems doing his job at Alcoa. RP 68. He had a heat stress incident in August of 2005. RP 69.

Dr. Johnson had a written note describing that Hornsby had an incident of sudden and general fatigue on 9/5/07 which was the second incident. RP 70. He was given IV's for dehydration and heat stress. Heat was the same as in 2000-2002 and 2003-2007. RP 72. He had not had an incident of heat stroke requiring medical attention prior to 2005. RP 74.

In 2005-2006 he was diagnosed with fatigue and irritable bowel syndrome (IBS). RP 114. He took pulmonary function tests on 8/8/07 and 9/5/07. RP 115.

Later he took a job in the pot tender pool, probably in 2005-2006. A pot tender also works in a pot room. He worked in first, second, third, and fifth line. RP 15.

Dawn Jessup did the reports on 4/10/2007. He was put on light duty on that date. RP 78. In 2007 he wasn't having trouble

wearing a respirator. RP 83-84. See also RP.116 Dawn Jessup did those tests. From time to time Alcoa gave Mr. Hornsby breathing tests. On 8/8/07 those tests showed that his breathing was restricted. RP 84. On August 8, 2007 Mr. Hornsby was notified that he had mild restrictions, but he continued to wear a respirator. RP 85.

He changed his job to head tapper, carbon setter. A head tapper taps the metal physically into a big siphon and puts it in the pot and taps the liquid aluminum out on 5th line. RP 14.

The workers on all the pot lines have the same type of hazardous exposures to chemicals and elements in the Alcoa workplace. Hornsby also ran the crane and was crane certified.

He would put up aluminum ore in the hoppers. Hoppers are on top of the pots, and that is process of making aluminum. RP 16.

Lots of minerals are used to make aluminum – bauxite, aluminum, aluminum ore, pure ore. Mr. Hornsby said, "There's so many different things we are exposed to out there. It's in the air all the time. " Neil was personally using those elements in doing his job. RP 17.

The crane Neil Hornsby worked on was an open-air crane; it was not self-contained, covered and closed. He also worked as a

crane operator. Page 108. He worked on both types of cranes. RP 109.

Mr. Hornsby explained, "The problem we have with all those different elements, the bauxite, the aluminum, and everything, there's a constant air flow that goes underneath the pots to keep the bottom of the pots cool, from tap-outs, from heating. You've got windows open up above on top of the pot rooms, and so there's a constant air flow, a turbulence, and everything is airborne, all over, all the time." RP 18-19.There is molten, very hot liquid in the pots. It is "liquid metal." RP 19.

Mr. Hornsby had no problems performing any of the pot room duties when he first started at Alcoa. It required a lot of physical strength, Page 24. He was often lifting over 100 pounds. RP 25.

During fit testing the employees wore the 6000 respirator on their faces and tested for size and make sure that there was a good fit for their face. The 6000 is the name of the respirator. RP 29. When Mr. Hornsby first started working with Alcoa, Alcoa did not have the 6000's yet. When he first started he didn't have a respirator. They just had the paper hog-nose mask with a paper filter. Around 2005 he believed he was first fit tested at Alcoa.

Alcoa became more consistent about having respirators. During curtailment the employees didn't have the respirators from 2002-2003. RP 29.

Even when respirators were available a lot of times there were no cartridges available for them – the stores were out of them, non-existent. The purpose of the cartridges was to filter. RP 30. Even on the days the respirators were available, there were times during the day when Mr. Hornsby was not wearing them, like during lunch or if he was a certain distance from the bake pots.

The Alcoa workers wore Tyvex suits for pot lining from approximately 2006-2007. RP 31. The suits were of poor quality and told to "duct tape the seams," because they weren't completely sealed. The Tyvex suits were lying all around the plant – not in a clean facility – so everything was contaminated. Suits were right out in the pot rooms. RP 32. There were other suits, atmospheric suits which were sealed but Alcoa did not provide those suits with superior protection. Mr. Hornsby saw them only in catalogs. RP 33.Tyvex suits were not air-tight so particles could get inside the suits, got burns from soda ash on his body. RP 34-35. Tyvex suits used only when he was doing pot chipping and he did that 7-8 times over a period of five months. RP 118.

Workers wore the paper masks when they could find them. RP 119.The paper masks M3 8576 were one of types of masks used. Hornsby did not wear the paper masks all the time. They did not wear them when they were eating lunch or standing around or when job duties weren't being performed. RP 119-121. He didn't wear a mask while rolling bridges. RP 121.

He wore masks when they were available. They were not required to wear masks in the cranes. The closed cranes had filtration supposedly. Even the paper masks were not always available. Page 123. He wore respiratory protection when the jobs required him to. RP 124. He didn't wear a mask while taking breaks, or eating lunch, or rolling bridges. Page 134. When they were taking breaks and not wearing a mask they were still exposed to dust in the plant. When the proper PPE was required, he wore it if it was available. Alcoa did not inform workers of the effects of alumina or any other materials. He never had a safety violation. Page 136.

Neil Hornsby started smoking at age 16, pack to pack and a half each day. He testified that there were times when he quit for 2-3 years. RP 111. At times in 2003 he reported that he smoked ¾ a pack 7/28/03. RP 112.

For three years he quit. There were days at Alcoa where he might take one drag of a cigarette and then have to go back to work. RP 113. So he wasn't actually smoking the whole pack; he was taking a puff and throwing the rest of the cigarette away. RP 133.

Mr. Hornsby also explained that the environment of Alcoa did contain some of the same hazardous exposures as welding. When a pot goes on high voltage sometimes arcing occurs, which causes a gas similar to welding even if you are not a "welder" per se. RP 126, 135.

He was exposed to hazardous chemicals and toxins when he was doing the pot chipping job. RP 129. When he worked in open cranes over the pots, he was also exposed to air borne dust. RP 130.

Aluminum and everything else is blowing around in the pot rooms. There are huge fans under the pots to keep them cool and it blows dust around the room. When he would be working in the crane poring stuff in the hoppers, there are particulates flying around. RP 131.

Mr. Hornsby bid into pot lines at Alcoa because it was not as physical as the head tapper position. He started to have problems

with missing work. He filed for FMLA because he started missing a lot of days towards the end of his employment. RP 36. Mr. Hornsby left Alcoa for good in 2008. He left to go to a job in Alaska on the pipeline. Mr. Hornsby was getting tired all the time. RP 35-36.

Prior to the termination of his employment in 2008, he was given a pulmonary test and hearing test, and he failed. He was given another test, and he failed again, those results were not anywhere in his employment or medical records. RP 87.

His absentee records were admitted. See Exhibit #6. RP 91. After 2005 he started missing days at work. RP 92. Neil Hornsby submitted his resignation notice on 4-16-2008. RP 94. Neil Hornsby went up to be a camp manager in Alaska. He did not have hazardous exposures at camp. He only worked from July to November because his health was deteriorating and cold was getting to him, so he ended that employment. RP 38. He returned to Washington State in 2009. RP 39.

His health continued to decline. He saw Dr. Houghland at WVC and during the MRI they found out that he had lung issues, so Dr. Houghland referred him to Dr. Lodhi, a pulmonary specialist at W.V.C. RP 40.

Dr. Lodhi referred him to Dr. Raghu at the University of Washington. A biopsy was taken of his lung by surgeon Dr. Knox at the WVC, which lasted an hour and a half longer than they thought it would be because the damage to his lungs was more severe than what they had thought. RP 41.

Biopsies were not taken from the bottom of his lungs. Dr. Raghu had questions about the cause of the damage so he had the biopsies sent to Dr. Abraham. Page 42.So Dr. Raghu had the biopsies sent to Dr. Abraham at SUNY University in Syracuse, New York. Pages 45-46. Before his biopsies were sent, his diagnosis was interstitial lung disease. The primary substance found in his lungs by Dr. Abraham was massive exposure to aluminum. RP 46.

Aluminum was the primary substance. No additional biopsies were taken yet of the rest of his lungs because of the health risk to Mr. Hornsby. Neil Hornsby recognized advice from medical providers to quit smoking. RP 47. Neil Hornsby, said that he was trying to quit smoking because he can't have a lung transplant until he quits for 6 months. RP 48.

Mr. Hornsby was put on steroids for a time as a lung treatment. RP 49. Since Dr. Abraham's report, they discontinued those treatments. He was prescribed oxygen at night, 5 liters. 6 is the maximum and he is at 5 right now. He receives the oxygen from canyul through his nose. RP 50.

Mr. Hornsby also tried physical therapy at CWH, but Mr. Hornsby collapsed. At UW they had him walk up a flight of stairs and he collapsed during the test. He collapsed after four flights (they wanted him to do 8 flights). He was below 83% oxygen saturation in his blood. RP 51.

B. DR. ABRAHAM

Dr. Abraham obtained his undergraduate degree in Life Sciences or biology in 1966. University of California Medical School MA degree in 1970. Page 3. Dr. Abraham's CV was admitted into evidence. See Exhibit List, CP____ and Clerk's minutes regarding the superior court's DECISION dated October 3, 2014. See Exhibit 18. Following that, Dr. Abraham did an internship in pathology as a specialty at Children's Hospital in Boston and at Beth Israel Hospital in Boston. (A CV was attached to the Deposition EXHIBITS.) /Telephonic Perpetuator Deposition of Jerrold L. Abraham, MD, pages 3-4. Hereinafter, JA Page____).

Dr. Abraham had 168 publications listed. Within pathology he had a main area of interest in occupational diseases, especially lung disease and the methods to analyze and characterize dust and other particles in people's lungs. JA Page 5.

He used a process called x-ray spectroscopy to look at tissue samples. With this process particles and foreign materials can be identified. The technique is called "SEM/EDS." JA Page 6 Dr. Abraham has been involved in finding better ways to utilize that kind of analytical technique to help characterize tissues

and what is in tissues such as dust particles. JA Page 7. This technique has been used to identify particles in lungs such as silica, aluminum silicates, various metals such as aluminum and titanium, etc. SEM/EDS were first developed in the 1960's. Dr. Abraham has been testifying in various courts about this technology for many years. JA Page 7.

With respect to Neil Hornsby's case, Dr. Abraham did two reports. Dr. Raghu at the University of Washington had Mr. Hornsby's biopsies sent to Dr. Abraham in New York. First he analyzed the biopsies with a glass microscope and determined that they were abnormal. Dr. Abraham saw areas of fibrosis, and he saw the filling of air spaces with macrophage cells. There was dust visible. Some of it was consistent with smoking and some of it was consistent with other exposures that did not come from smoking. JA Page 8.

In the second report, Dr. Abraham analyzed the particles in Neil Hornsby's biopsies using the SEM/EDS method. JA Page 8.

The biopsies were taken from the right middle lobe and the right lower lobe, superior segment. In his first report, Dr. Abraham noticed that there was evidence of respiratory bronchiolitis, related to smoking in some degree, and also of Desquamative Interstitial Pneumonia, abbreviated "DIP". There was also evidence of interstitial fibrosis and scarring in the supporting structure of the lung. It showed lymphocytes and plasma cells. JA Page 12.

Most of the macrophages contained dust particles of the type seen with smoking, and there were also some that were opaque that were different, dark particles. Pages JA 12-13. Some of the particles were birefringent or crystalline particles that show up as bright when one uses polarized light were used. Page 13.

The opaque and birefringent particles were indicative of exposures to something more than just smoking. Dr. Abraham could distinguish the difference in the particles from many years of experience. JA Page 13.

Respiratory bronchiolitis is the very smallest tubes or airways in the lung which the air travels. "Itis" means inflammation, so respiratory bronchiolitis refers to some inflammation involving the smallest airways. Macrophages are a type of cell that has the capability to surround and ingest smaller cells or dust particles or bacteria, for example. Macrophages means "big eater." Some describe these like PacMan type of cells. JA Page 14.

Desquamative Interstitial Pneumonia (DIP) is a lung disease where the lung air spaces are filled with macrophages. JA Page 14. A person with DIP has cells that are abnormally accumulating in the air spaces of the lungs. This abnormal accumulation can cause problems with breathing if it is severe enough. Air can't normally reach the capillaries that are the walls of the air sacs, so a person doesn't get enough oxygen and the person will be short of breath. JA Page 15.

The interstitum of the lung is the supporting framework the walls of the air spaces and the tissues supporting the airways and vessels. Fibrosis means scarring, the formation of extra collagen or scar tissue. Fibrosis, the scarring, is not normally present. When a pathologist diagnoses fibrosis, it means there is an abnormal amount of scar tissue or collagen. JA Page 16.

Dr. Abraham requested the paraffin blocks from Neil Hornsby's biopsy so that he could perform SEM/EDS, because that procedure cannot be done with glass slides alone. JA Page 17.

Dr. Abraham received Blocks A1 and B1. The SEM/EDS analysis was the subject of Dr. Abraham's second report on November 12, 2012. The analysis showed a large number of particles in Block A1. Ninety percent of the particles in Block A1 contained very fine aluminum metal. JA Page 18.

In addition to aluminum, there were a large number of aluminum silicate particles. The presence of tiny aluminum particles is not something found in the general population. The lung burden with respect to aluminum particles was definitely abnormal. Dr. Abraham testified that a smoker who had not been exposed to aluminum would not show a markedly abnormal lung burden of aluminum metal or aluminum oxide particles. JA Page 19.

Dr. Abraham stated that it was likely that there were other, even, smaller particles of aluminum in Mr. Hornsby's lungs, but the SEM/EDS method can only

detect particles which are $1/10^{th}$ of a micrometer or larger. A micrometer is a millionth of a meter or a thousandth of a millimeter. JA Pages 19-20.

Dr. Abraham testified that there are published articles about the exposure of aluminum and other materials in pot rooms where aluminum is being refined or extracted from the ore. JA Page 20.

A 21- page power point was marked as an exhibit to the deposition, containing photographs of the particles in Mr. Hornsby's lungs. JA Page 21. The directions to understand the photographs were discussed at, Pages JA 22-29 of Dr. Abraham's deposition. JA Pages 22-23. See also Exhibit 18.

Each picture is analyzing an individual particle that was inhaled and retained in the lung tissues. Dr. Abraham went through each photo and described the particles. Page 24. The majority of the particles contained aluminum, although there were a few that contained aluminum silicate, silica, iron with phosphorus, silicon, potassium, and titanium. JA Pages 24-31.

Dr. Abraham concluded that Mr. Hornsby's lungs definitely showed evidence of exposures to very fine aluminum particles, not found in the general population, unless the person had unusual exposure to aluminum or aluminum oxide particles. Many of the particles were very small, similar to what is seen with welding or similar heated materials, fume generation. JA Pages 31-32.

The lung acts as an indicator that someone has had exposure like a filter - - it reflects what is inhaled by the person and it is retained in his lungs. Accordingly, **Dr. Abraham stated in a more probable than not basis that the aluminum found in Mr. Hornsby's lungs caused him to have caused DIP and was associated with interstitial fibrosis. The aluminum could also have contributed to respiratory bronchiolitis is more like which is often related to smoking, but could also be contributed to by the aluminum. JA Page 32.**

Dr. Abraham further testified that smoking would not have caused the interstitial fibrosis. JA Page 33.

The other particles also contributed to the lung injury. Aluminum silicates have been associated with fibrosis. The aluminum in Hornsby's lungs was the major finding. JA Page 34.

Dr. Abraham was involved in a study which looked at approximately 30 patients with a smoking history. The study also looked at each patient's occupational history. The research showed that the amount of fibrosis was related to the amount of dust from occupational exposures and was not related to either the duration or intensity of smoking. JA Page 36.

The study also showed that respiratory bronchiolitis may also be related to dusts like silica, aluminum silicates or metals. The study was called "Inorganic Dust Exposure Causes Pulmonary Fibrosis in Smokers." JA Page 37.

Dr. Abraham participated in another study called "Pulmonary Fibrosis in Aluminum Oxide Workers" which found that aluminum plant workers who made aluminum oxide abrasive like sandpaper and sanding wheels developed interstitial fibrosis associated with these exposures. Another study he participated in called "Desquamative Interstitial Pneumonia in an Aluminum Welder" found that an aluminum welder who was a nonsmoker for 20 years developed DIP. JA Page 38. That study also reviewed a study showing a link between aluminum and interstitial fibrosis in a worker involved in bauxite smelting. JA Page 39.

Dr. Abraham had also reviewed information from Mr. Hornsby's responses to interrogatories, first and second, that outlined exposures from 2000 to 2008 at Alcoa, at a mine in 2002, an auto wrecking yard from 1990 to 1999, and Delta Development from June to November 2008. JA Pages 42-43.

Dr. Abraham explained that fibrosis is the most important irreversible type of change that may make someone need to have their lungs replaced with a transplant. JA Page 53.

Dr. Abraham testified that rarely are aluminum metallic particles found in the background population. The only kind of particles normally detected in the background population are aluminum silicates, silica, iron, and titanium. And even those are in low concentrations. JA Page 58.

The amount of aluminum particles found in Mr. Hornsby's lungs were far above what would be expected in the background population. Normally, Dr. Abraham would have to search for an hour or two to find one aluminum particle in the background population. In Mr. Hornsby's lung, Dr. Abraham found more than he could count in less than an hour. Dr. Abraham's study found that Mr. Hornsby's lung had substantial exposure to aluminum fumes and whatever accompanied those fumes. JA Page 59.

As indicated in the Declaration of Julie A. Anderson, CP_____ Judge Small based his decision of the weight given to Dr. Lodhi's records. These records, were not offered in the Deposition of Dr. Raghu.

C. KENT HARRISON

David Kent Harrison worked for Alcoa from 1974-2009. He worked as a pot tender, set carbons. RP 143-144. He worked with Neil Hornsby in the pot rooms. Kent Harrison was exposed to aluminum or aluminum bauxite like everyone in the pot rooms. The whole pot room lives on ore. It's everywhere. There are thousands of tons of it. According to Harrison everyone breathes it, baths up carbons with it, you ore up pots with it, you walk in it, and you mine it. RP 145.

He has seen the aluminum ore pile up as high as 20 feet deep when they had leaks. Precipitators go off and the whole room turns just gray with it, and you are breathing it. He bathed up carbons for years without a respirator just with an ore bucket. Ore is what makes aluminum. If aluminum bauxite ore wasn't available aluminum could not be made. Aluminum ore is white – it looks like fine sugar or flour. Blend ore is black, and reactor ore is pure black. Kent Harrison breathed it for years. RP 146.

Kent Harrison suffered health consequences also from working at Alcoa. Most of his friends from Alcoa are dying from lung cancer. Kent Harrison has emphysema. In the 90's only paper respirators were available. RP 147.

Harrison wore Tyvex suits some people would duct tape them. People would stand 5 feet from the pot take their 6000 respirators off, and light up a cigarette. In the earlier years the lunch rooms were not sealed off and employees would not be wearing masks in the lunchrooms. RP 159. Most workers wore the little blue paper masks, not the hog nose ma

D. ART WATSON

Art Watson worked for Alcoa from 1974-2005. He worked as a pot tender, carbon setter, head tapper, crane operator and supervisor. When he left in 2005 he was in a supervisor position. RP 165.

Watson supervised the pot lines and Neil Hornsby on occasions. He testified that aluminum is all around the employees in the pot rooms. It comes in a powder form and the employees refined it into metal. He referred to it as "aluminum ore." The aluminum ore was put into the pots---a caustic solution, and refined into aluminum, separating the oxygen from the metal. The aluminum ore powder got into the air constantly. RP 166.

E. BOB RAWLINGS

Bob Rawlings testified that he worked at Alcoa as a carbon setter, pot tender, and for the last six years as a shift supervisor in the pot rooms. RP 170. He worked at Alcoa from 1974 to 2012. The last position he had was as a shift supervisor on D shift. He retired in 2012. He was Neil Hornsby's supervisor. As a supervisor Bob Rawlings was in the pot rooms with the workers. Bob Rawlings said that Neil Hornsby was exposed to aluminum ore. RP 171.

Bauxite is mined out of the ground, refined into alumina. Alumina is what is used in the pot rooms in the process of making aluminum. "Alumina" is what is referred to as "aluminum ore." Aluminum ore looks

like granulated sugar, sometimes a little coarser and sometimes a little finer. RP 172.

Alumina and aluminum ore gets into the air many ways from putting up ore to people sweeping the floor or deck plates, or the ore builds up on shields. They take the shields off, it goes down the gutters, and it goes into the environment. Bob Rawlings was around when they were doing air quality testing for alumina fluoride. Aluminum fluoride is in the ore. Only certain rooms were air tested. RP 173-174.

Bob Rawlings testified that Alcoa would change the procedures when air quality testing was going on. Work would be altered in those rooms. RP 174-175.

Bob Rawlings was present when Neil Hornsby pulled a safety chain. A safety chain is a procedure that when an hourly person thinks that the work is unsafe to do, they are allowed to pull a "safety chain." During this procedure an employee tells a supervisor and if the employee does not get a satisfactory answer then he goes to a pot room manager. The safety people from the union get involved. RP 176.

Neil Hornsby had pulled the safety chain out of concern for the presence of asbestos. Also there was a concern about being in a silo - - a confined space. The safety chain stops the work right there and then until

a solution is found. RP 179. Bob Rawlings was there one time when Neil Hornsby pulled a safety chain. RP180.

There was asbestos in the coating on a reactor and it was lying on the ground. There was also concern about dust in the courtyard. RP 181.

Tyvex suits were not sealed. RP 182.

At times Neil Hornsby was wearing a paper mask. RP 183. There were shortages of filters for the 6000 respirators. If filters weren't available for the 6000, the pot room workers would wear paper masks. RP 184.

Bob Rawlings testified that he never saw Neil without what he was supposed to wearing.

EMPLOYER'S LAY TESTIMONY

A. Ms. Flourney – Sept 16, 2013 Transcript

Ms. Flourney testified that she began working for Alcoa in 2011 as an industrial hygienist. Ms. Anderson objected to her being referred to as an industrial hygienist, as she had no certifications as an industrial hygienist and no experience prior to Alcoa as an industrial hygienist. That objection was overruled.

Flourney admitted "that she took air quality assessments from the 2008 time frame and "reassessed" it." RP 71. When she "reassessed" the 2008 assessment the 2008 "assessment went away." Pages 71-72.

Although she said she didn't delete it, there was no physical record of the assessment. Pages 71-72. She admitted the industrial hygiene standard was to always keep the industrial hygiene records. RP 75. She defined the terms used to describe the assessments. The terms were "uncertain, insignificant, significant, and unacceptable." RP 76.

"Significant" is between 30% and 99% of the occupational exposure limit. Unacceptable means 100% over the set limit that we are going to. RP 76. Dust sample for tapper carbon changers in the pot rooms, which included alumina dust was "significant: in 2005, 2006. RP 79-80. The dust sample for 2000 was also "significant" and the assessment for dust sampled for head tapper equipment operator from 2005 and 2006 was "unacceptable." RP 80.

The assessment for dust for pot lines in 2008 significant. RP 86.

The MSDS for aluminum oxide, RP 87, said, "caution, may cause respiratory tract irritation, may cause lung damage." RP 89.

Under "chronic," the MSDS for aluminum stated, "chronic inhalation of fine dust may cause lung damage." RP 90.

Ms. Flourney admitted that she was not working for Alcoa from 2000 to 2008, so she had no knowledge of Alcoa's employees actual use of respirators at all times in the pot rooms. RP 99.

EMPLOYER'S EXPERT TESTIMONY

A. DR. SIMONS

Dr. Simons was an expert witness for Alcoa. His testimony was presented before the Board of Industrial Insurance Appeals through his perpetuation deposition. On page 48 of that deposition, the following discussion occurred during Mr. Hornsby's counsel's cross examination:

Q: Did you talk to Dr. Lodhi or see any reportsd of Dr. Lodhi after Mr. Hornsby had his study in New York by Dr. Abraham?

A: Let me take a look. I believe I did see some notes. I've got—

Mr. Mann: Which report from Dr. Abraham, Counsel, the supplemental or the preliminary?

Ms. Anderson: Both.

THE WITNESS: Dr. Abraham's initial report, just to be clear, was October 17, 2012; and then we have the supplemental report November 12, 2012.

What I saw was one subsequent note from Dr. Lohdi dated November 19, 2012, in which he [sic] "his lung disease has an established relationship of smoking to DIP and the possibility of aluminum-induced lung disease may be a contributory factor." No actual medical records from Dr. Lodhi were offered or admitted. Dr. Lodhi was never called as a witness by either party. Dr. Lodhi's qualifications were never established, nor was her CV admitted or discussed during the Board proceedings. Alcoa did not present any evidence that Dr. Lodhi had even had the opportunity to review the results of Dr. Abraham's

analysis of Neil Hornsby's lung biopsy. (See entire transcript of Dr. Simons' perpetuation deposition.)

B. Dr. Cox Perpetuation Deposition

Dr. Cox's Perpetuation deposition was taken on July 23, 2013. Claimant's objections were overruled and Claimant's Motion to Strike was overruled

Dr. Cox studied pulmonary medicine. He was board certified by the American Board of Internal Medicine, subspecialty Board of Pulmonary Disease, subspecialty Board of Critical Care medicine, but he let his certification lapse. RP 6. Dr. Cox has been in practice full time in pulmonary critical care at what is now called Swedish Edmonds Hospital, formally Stevens Hospital in Edmonds, WA. Page 7. About 20% of Dr. Cox's time is spent on performing IME's. RP 8.

On October 24, 2011 he did an IME on Neil Hornsby. Cox RP 16. (hereinwith RP__).

Dr. Cox testified that major cause of DIP is cigarette smoking. Dr. Cox testified that he reviewed Neil Hornsby's smoking history. RP 28. Dr. Cox testified that cigarette smoke contains approximately 4,000 different chemicals "including things like aluminum...." Hornsby's counsel moved to strike the part about what is contained in cigarettes on the grounds that Dr. Cox is not an expert in the content of cigarettes. RP 29-30.

Claimant's counsel again moved to strike Dr. Cox's statement on RP 39 that "there are metals in cigarettes. Pages 39-40. See also same objection, RP 43, on same basis on RP 31. Employer's counsel noted on RP 40 that Claimant had a continuing objection to this testimony.

Dr. Cox reviewed Hornsby's chest x-rays taken on July 13, 2000 – WVC chest x-ray was abnormal. There were several small nodular densities. He admitted that he didn't know exactly what type of lung condition was going on. RP 34. Dr. Cox testified that small pulmonary nodules can be nonspecific, but it was abnormal. RP 35.

When asked whether the finding of aluminum oxide, aluminum metal, silica particles, and iron particles was abnormal, Dr. Cox said, "I don't know if it's normal or not. I – Dr. Abraham indicates it's abnormal, but you would have to know the context." Dr. Cox said that he reviewed Hornsby's work history. RP 39.Dr. Cox had not seen Dr. Raghu's records. RP 45.

Dr. Cox saw Neil Hornsby one time on October 24, 2011 then never saw him again. RP 49.

Mr. Hornsby didn't see Dr. Raghu until 2012. The first time Dr. Raghu saw Neil Hornsby was September 22, 2012. RP 49. Dr. Abraham's reports and those of Dr. Raghu were not part of Dr. Cox's initial analysis or conclusion from the IME because Mr. Hornsby saw Dr. Cox on July 23, 2013, and Mr. Hornsby did not see Dr. Raghu until September 22,

2012. Dr. Abraham's records were dated October 17, 2012 and November 12, 2012. RP 50-51.

Dr. Cox got paid to do the IME from company who sets up the examination in this case from Inland Medical.

In this case, Dr. Cox testified that Alcoa requested that he do additional work. He billed Employer's counsel Mr. Mann's office directly for reviewing Raghu and Abraham records. Dr. Cox's rate was $400 per hour for record review and for deposition per L&I. RP 53. Dr. Cox spent 5 – 6 hours from 7-14-13 to date of deposition July 23, 2013 preparing for the deposition. Dr. Cox admitted he had only "glanced" through Neil Hornsby's lay testimony in front of the judge. RP 54. Dr. Cox didn't recall that in many of Alcoa's yearly questionnaires Hornsby said he smoked half a pack a day. RP 55. Dr. Cox didn't remember that Neil Hornsby testified that there were periods of time he didn't smoke at all. Dr. Cox didn't recall Neil Hornsby's testimony about the 3 year period he quit completely. RP 56. Dr. Cox didn't recall that Neil testified that Alcoa employees were not allowed to smoke on the Alcoa site. RP 56-57.

Dr. Cox also admitted that he didn't recall Neil Hornsby's testimony that he was constantly exposed to massive quantities of aluminum and aluminum oxide, etc. at Alcoa. RP 58. In fact when Dr. Cox did his IME report he indicated that he had not been provided an "Occupational Work

Disease History" so he could not answer the question, "Have you discussed with the Claimant the work activities of all jobs listed in the work history (including the discussion of protective equipment and engineering controls?) RP 60.

Dr. Cox had previously testified in the deposition that if he needs more information he asks for it before he writes his report. RP 63.

Dr. Cox also admitted that he didn't recall Neil Hornsby testifying about the following issues: 1)That he was exposed to aluminum fumes; and 2) That substantial amounts of aluminum powder in various forms is floating around the pot rooms. RP 66. Dr. Cox did not review the other workers testimony in front of the Board. RP 66-67.

Dr. Cox also admitted that he did not know what Neil Hornsby was exposed to when he did tapping, cleaning pots, grinding, chipping, pot tending, or rolling bridges. RP 67-68.

Dr. Cox has never done an IME at the request of an injured worker. RP 69-71.Dr. Cox admitted that he was not aware of any studies linking DIP to aluminum smelter workers. RP 71.

Dr. Cox's IME report was completed before Neil Hornsby was seen by Dr. Raghu and before Dr. Abraham analyzed his lung biopsies. RP 71-72.

His IME was not for the purpose of treating Neil Hornsby. RP 73.

Dr. Cox's review of Alcoa's records showed that as of 8-8-07 Alcoa's pulmonary function tests taken of Neil Hornsby showed a mild restriction as of 8-8-07. A mild restriction was also found on 9-5-07. RP 74.

Dr. Cox in his IME stated that he had done a complete medical literature search and found no instances of this disease in aluminum workers or aluminum smelter workers. RP 75. Dr. Cox admitted that he had not read a number of articles pertaining to adverse pulmonary effects on pot room workers. RP 76.

He also did not do a medical literature search for the pulmonary fibrosis issue. RP 78-89. Dr. Cox did not recall that Neil Hornsby testified that he was around aluminum fumes in the work that he did at Alcoa. RP 92.

Dr. Cox also admitted that a "nodule" is nonspecific and it could indicate many of several possibilities. Pulmonary fibrosis does not generally appear as a nodule on a chest x-ray. RP 94.

Dr. Cox was not aware of the research Dr. Abraham reviewed such as Minerological Analysis of the Respiratory tract in Aluminum Oxide-Exposed Workers. (RP 80) Neither was he familiar with the Shaver and Riddell study. (RP 84) He also wasn't sure if he had all of Alcoa's health records. (RP 73). He had not reviewed the article called "Human Health

Risks Assessment for Aluminum, Aluminum Oxide, and Aluminum Hydroxide. (RP 79.)

C. **Dr. Simons Perpetuation Deposition**

Dr. Simons was an expert paid by Alcoa. He saw pulmonary patients. Simons RP 8. Dr. Simons never examined Mr. Hornsby. RP 11. He was not a treating physician. Legal testimony constitutes about 10% of his practice. RP 14. Simons admitted that Dr. Abraham is a well-known and very credible pathologist. RP 14.

Dr. Simons had not reviewed the Neil Hornsby's coworkers lay testimonies. RP 17-18.

The Board of Industrial appeals judge overruled Hornsby's counsel's objections concerning Dr. Simons opinions that the aluminum found in Mr. Hornsby's coming from aluminum, even though Dr. Simons testified that he was not aware of the specific contents of cigarettes. RP 11, 23, 24. (On page 1, lines 30-31 of the Board of Appeals Proposed Decision and Order, the judge overruled all objections and Motions contained therein "except as noted below.")

Dr. Simons then stated, "First of all, let me say that I'm not taking the position that the aluminum in his lung definitely came from cigarette smoking. In fact, given the fact that he had what has

been described as a large amount of aluminum in the lung, much of it may have come from his work related exposure." RP 25.

Hornsby's counsel objected on the basis of "lack of personal knowledge" to Dr. Simons' testimony that Mr. Hornsby's smoking history would bring about the diagnosis of DIP. RP 31. Referring to Dr. Abraham's report, Dr. Simons admitted that a pathologist can make a pathologic diagnosis. RP 35.

Dr. Simons didn't know if he had reviewed all of Neil Hornsby's medical records. RP 40. Dr. Simons did not see any lung function reports between 2007 and 2011. RP 41. Dr. Simons did not know what kind of cigarettes Neil Hornsby smoked. He had no idea of the composition of different toxins in the particular brand of cigarettes Neil Hornsby smokes. RP 42.

Dr. Simons testified that he was aware some aluminum had been found in cigarettes, originating in the filter, but he admitted he did not know whether Neil Hornsby ever smoked filtered cigarettes or which specific brands he smoked, or even any specific information as to the analysis done on any specific brands. RP 42.

Dr. Simons also admitted that he did not know whether the nodules seen in 2000 caused Neil Hornsby's DIP. RP 45.

Dr. Simons had not analyzed the air quality at Wenatchee Alcoa Works. RP 46. He had never had another case involving a person who worked in the pot rooms of an aluminum plant. RP 46. He also admitted a person could have more than one disease at a time. RP 46-47.

B. ARGUMENT

1. **The Superior court erred in adopting the Boards judgment as follows:** "The Board's Order of January 23, 2014, which adopted the Proposed Decision and Order of the Board dated December 14, 2013, and affirmed the Department of Labor and Industries Order of February 22, 2012, is sustained and affirmed."

By adopting the Judgment of the Board, the Superior Court affirmed the Board's Conclusion of Law #2 which stated: "Mr. Hornsby's conditions diagnosed as desquamative interstitial pneumonia, respiratory bronchiolitis, and interstitial fibrosis did not arise naturally and proximately out of the distinctive conditions of his employment."

In essence, the Superior Court agreed that Mr. Hornsby's lung conditions of DIP, interstitial fibrosis, and respiratory bronchiolitis did not arise naturally and proximately out of the conditions of employment. This issue is directly related to the argument infra pertaining to Dr. Abraham's opinions, and regarding

the deficits and shortcomings of the expert opinions of Cox and Simons. There arguments are incorporated herein by reference.

2. The Superior Court Erred In Relying On Testimony Referred To By Another Expert Witness Referring To Neil Hornsby's Treating Physician, Dr. Lodhi, Where Dr. Lodhi Was Not Called By Either Party, And Mr. Hornsby's Counsel Was Not Therefore Afforded The Right To Confrontation Of This Doctor.

The superior court judge erred in relying on statements made by Alcoa's expert witness, Dr. Simons, where Dr. Simons referred to Dr. Lodhi's opinion that "his [Mr. Hornsby's] lung disease has an established relationship of smoking to DIP and the possibility of aluminum-induced lung disease may be a contributory factor."

The Industrial Insurance Act is to be liberally construed for the purpose or reducing to a minimum the suffering and economic loss arising from injuries and/or death occurring in the death recurring in the place of employment. RCW 51.12.010. All doubts as the meaning of the Act are to be favored towards the injured worker. Kilpatrick v Department of Labor and Industries, 25 Wash. 2d 222, 230, 883 P.2d 1370, 915 P. 2d 519 (1995).

The importance of cross examination cannot be overlooked. The rights guaranteed under the Confrontation Clause include the right to have the witness

physically present, to have that testimony offered under oath and subject to cross examination, and to provide the trier of fact with an opportunity to observe the demeanor of the witness. Marilyn v. Craig, 497 U.S. at 836 ,845-846, 110 S.Ct. at 3157, 111 L. Ed. 2d 666 (1990). The primary interest secured by the Confrontation Clause, however, is the right of cross-examination, "'the principal means by which the believability of a witness and the truth of his testimony are tested.' " Kentucky v. Stincer, 482 U.S. 730, 736, 107 S.Ct. 2658, 2662, 96 L.Ed.2d 631 (1987) (quoting Davis v. Alaska, 415 U.S. 308, 316, 94 S.Ct. 1105, 1110, 39 L.Ed.2d 347 (1974)). The Court in Stincer called cross-examination the "'greatest legal engine ever invented for the discovery of truth,' " 482 U.S. at 736, 107 S.Ct. at 2662 (quoting California v. Green, 399 U.S. 149, 158, 90 S.Ct. 1930, 1935, 26 L.Ed.2d 489 (1970), which, in turn, quoted from 5 JOHN HENRY WIGMORE, EVIDENCE IN TRIALS AT COMMON LAW § 1367 (3d ed.1940));

The Washington courts have recognized the importance of oral cross examination in civil cases. See e.g. Weyerhaeuser v. Pierce County, 124 Wn. 2d 26, 32, 873 P.2d 498 (1994). In Weyerhaeuser, a case involving an appeal of a denial of a conditional use permit was reversed on the grounds that oral cross examination was not allowed.

Here, the superior court judge erred in basing his decision on Dr. Lodhi's opinion, where Dr. Lodhi was not called as a witness before the Board by either

party. Dr. Simons referred to having reviewed her decision. However, and from her medical records were not admitted in evidence, and counsel for Mr. Hornsby was not able to cross examine Dr. Lodhi because she was not called as a witness. Her opinion, referred to by Dr. Simmons was taken without any context as to the date, time, place of her medical opinion. To use Dr. Lodhi against Mr. Hornsby without cross examination, and without a foundation for her "opinion" violated Mr. Hornsby's right to confront the witnesses against him. The superior court judge erred in placing reliance on this unsworn opinion because that opinion was not properly presented before the Board of Industrial Insurance Appeals.

3. Neil Hornsby's Lung Diseases Of DIP And Interstitial Fibrosis Naturally And Proximately Arose From The Distinctive Conditions Of Alcoa Wenatchee Works.

"Occupational disease" means such disease or infection as arises naturally and proximately out of employment under the mandatory or elective adoption provisions of this title." RCW 51.08.140. A disease is proximately caused by conditions of employment when "there is no intervening independent and sufficient cause for the disease, so that the diseases would not have been contracted but for the conditions existing in the employment." Intalco Aluminum v. Labor & Industries, 66 Wn.App. 644, 654, 833 P.2d 390 (1992). To show that a worker's medical condition arose "naturally out of employment [t]he worker

....must show that his or her particular work conditions more probably caused his or her disease – based disability than conditions in everyday life or all employments is general; the disease or disease based disability must be a natural incident of that workers' particular employment. Intalco, 66 Wn.App. at 654, citing Dennis, 109 Wn.2d at 481.

In worker's compensation cases, the court must give special consideration to the opinion of the attending physician. Hamilton v. Dept. of L & I, 111 Wn.2d 569, 571, 761 P.2d 618 (1988). This is because the attending physician is not an expert hired to give a particular opinion consistent with one party's view of the case. To serve the goal of providing compensation to all covered workers injured on their employment, the Act should be liberally construed with all doubts resolved in favor of the worker. Intalco, 66 Wn.App. at 654, citing Dennis v. Dept. of L&I, 109 Wn.2d 467, 470, 745 P.2d 1295 (1987); RCW 51.12.010.

The court in Intalco held that the worker does not have to prove or identify the specific toxic agent or agents that proximately caused the claimant's disease. The court can review the worker's work history and determine that there is no other likely cause of their disease. A physician's opinion as to the cause of the claimant's disease is sufficient when it is based on reasonable medical certainty even if the doctor cannot rule out all other possible causes without resort to surgery. Intalco, 66 Wn.App. at 657. Halder v. Dept. of L&I, 44 Wn.2d 537, 543-45, 268 P.2d 1020 (1954).

In Intalco, NIOSH did not measure all the chemicals present in the Intalco pot room atmosphere, such as aluminum particulates. An industrial hygenist testified in Intalco that numerous toxins, including aluminum, benzene solubles, petroleum pitch volatiles, and carbon monoxide would also be present in the pot room atmosphere. He further testified that carbon monoxide and petroleum pitch volatiles had been associated with neurologic disease.

The evidence is sufficient to prove causation if, from the facts and circumstances and the medical testing given, a reasonable person can infer that a causal correction exists. Douglas v. Freeman, 117 Wn.2d 242, 252, 814 P.2d 1160 (1991), Sacred Heart Medical Ctr. v. Carado, 92 Wn.2d 631, 636-637, 600 P.2d 1015 (1979).

In Intalco, Intalco argued that medical testing was insufficient because the physicians could not identify the specific toxic agent or agents that proximately caused the claimant's disease. A NIOSH expert in Intalco identified several toxins in the pot room, some of which had been associated with neurological disease. While they could only hypothesis that aluminum could be the specific agent responsible for the claimant's disease, they firmly concluded that a toxin or combination of toxins present in the atmosphere of the Intalco pot room more probably than not caused the claimant's neurologic disease. The court looked at similarities and a review of the worker's work histories revealed no other likely cause of their disease.

Animal studies revealed that aluminum exposure could cause symptoms similar to those exhibited by the claimants. The medical testimony was sufficient to show causation in Intalco, where the physicians concluded that exposure to a toxin or a combination of toxins in the Intalco pot room more probably than not caused the claimants' disease. Intalco, 66 Wn.App. at 655-656.

The court in Intalco did not require that claimants identify the specific toxic agent responsible for his or her disease or disability.

The court in Intalco explained as follows:

> The cause-effect relationship need not be clearly established by animal or epidemiological studies before a doctor can testify that, in his opinion, such a relationship exists. As long as the basic methodology employed to recall such a conclusion is sound, such as use of tissue samples, standard tests, and patient examination, products liability law does not preclude recovery until a "statistically significant" number of people have been injured or until science has had the time and resources to complete sophisticated laboratory studies of the chemical.

(Emphasis added.) Intalco, 66 Wn.App. at 661, quoting, Ferebee v. Chevron Chemical Co., 736 F.2d 1529, 1535-36, (D.C. Cir.), cert denied, 469 U.S. 1062 (1984).

"The court in Intalco also addressed a jury instruction explaining that it doesn't matter if there is proof the exposure was allegedly safe for the "average worker" as follows:

> Intalco also challenges the following instruction: You are to be concerned only with the effects of exposure in the pot room on these particular workers. If you determine that their medical conditions are occupational diseases, it does not matter if it was allegedly safe exposure for an average worker. Intalco argues that this instruction was prejudicial and misleading because it suggested that the jury need not find that a specific condition in the work place caused [833 P.2d 401] the

> claimants' disease. In determining whether an instruction could have confused or misled the jury, the court examines the instructions in their entirety. " Hamilton v. Department of Labor & Indus., 111 Wash.2d 569, 573, 761 P.2d 618 (1988).

In this case, Neil Hornsby testified that he was continuously exposed to aluminum at Alcoa. Other lay witnesses confirmed this fact. Neil Hornsby was not always protected by paper masks or a respirator. Neil Hornsby testified and had documents to support him, that he was in good health and had no problems performing his job tasks at Alcoa until approximately 2005, when his health began to decline. Mr. Hornsby was exposed to alumina, aluminum oxide, and other hazardous substances.

He further testified that only part of his lung was biopsied. Other parts of his lung may contain other exposures, but they have not been biopsied yet. The evidence is clear, nevertheless, that Neil Hornsby has at least two diseases naturally and proximately caused by the conditions of his employment, to wit: DIP and interstitial fibrosis, according to Dr. Abraham. Dr. Abraham was not hired as an expert witness. Rather Dr. Raghu, a treating physician at the U.W., had requested that Neil Hornsby's biopsies from the Wenatchee Valley Clinic be sent to Dr. Abraham for analysis. So Dr. Abraham should be considered as part of the treating physician team, rather than an expert witness.

Dr. Abraham testified that ninety percent of the particles in Neil Hornsby's lung biopsies contained very fine aluminum metal. He further testified

that very fine aluminum particles are not found in the general population unless a person had unusual exposure to aluminum, aluminum oxide particles, or from aluminum fumes.

Dr. Abraham further found that the finding of interstitial fibrosis was the most important type of change that may make someone need to have their lungs replaced with a transplant. Dr. Abraham testified, that on a more probable than not basis, to a reasonable degree of medical certainty, that the aluminum found in Mr. Hornsby's lungs caused the DIP and the interstitial fibrosis.

Dr. Abraham also testified that the other particles found in Neil Hornsby's lungs may have also contributed to his lung injury such as aluminum silicates, silica, iron, with phosphorus, silicon, potassium, and titanium. Dr. Abraham reviewed medical research which supported his medical opinion. Dr. Abraham also had reviewed Neil Hornsby's work history from Dr. Raghu's notes and Neil Hornsby's answers to interrogatories in forming his opinion.

Therefore, the lay witnesses and medical testimony supported the medical opinion that Neil Hornsby has two diseases – DIP and interstitial fibrosis – that arose naturally and proximately from the conditions of his employment at Alcoa. By contrast, Alcoa's paid experts Dr. Cox and Dr. Simons were discredited on many grounds during the deposition, including lack of knowledge of Neil Hornsby's work history, lack of knowledge about the testimony presented at the Claimant's lay testimony hearings, lack of knowledge about the contents of

cigarettes and the type of cigarettes smoked by Neil Hornsby, etc. See summary of Dr. Cox and Dr. Simons testimony, supra.

Dr. Cox admitted that he "did not recall" much of the evidence testified by Neil Hornsby and his lay witnesses at the hearing. Dr. Cox admitted that he may not have all the records – in fact that he had not been provided Neil Hornsby's Occupational History form. Dr. Cox clearly had no foundation or qualifications to testify about the contents of cigarettes, yet testified about this over objection.

Dr. Simons, Alcoa's other paid expert, was truthful about the deficiency of his knowledge of what kind of cigarettes Neil Hornsby smoked, or about any specific information about which brands' filters were alleged to contain aluminum. Dr. Simons also admitted that he could not say whether the "nodules" seen on an x-ray in 2000 developed into DIP.

Under the standards discussed in the State v. Maule, supra, Dr. Simons was not qualified to offer an opinion on this issue. The court must determine if an expert has the appropriate qualifications to give an expert opinion on a particular issue. Clearly, Dr. Simons had no specific information about what type of cigarettes Neil Hornsby smoked or which cigarettes have been found to have aluminum in the filters. Having no qualifications to opine on this subject, the judge should have sustained Claimant's objections.

Neither doctor had the qualifications to dispute Dr. Abraham's conclusions that Neil Hornsby's occupational exposure to aluminum caused his

DIP and pulmonary fibrosis. Neither doctor was familiar with the research Dr. Abraham was involved in and was aware of regarding the diseases caused by occupational exposure to aluminum and aluminum fibrosis.

The facts set forth above in section III constituted overwhelming evidence of his exposure to aluminum at Alcoa. The lay testimony on this issue was supported by Dr. Abraham's analysis of Neil Hornsby's lung biopsies. (See also Exhibit 18, attached as Appendix A) Dr. Abraham found an abnormal lung burden of aluminum particles not caused by smoking and not present in the ordinary background population.

It was undisputed that Neil Hornsby had no health issues interfering with his ability to do his job until after having worked for Alcoa from 2000 to 2006 (with a short break). From 2006 to 2008 Neil Hornsby's health and lung condition continued to decline. Dr. Abraham's testimony was further undisputed that the burden of aluminum particles was abnormal and not found in the normal background population. Dr. Abraham's research indicated that these abnormal aluminum particles caused Neil Hornsby to develop the DIP and interstitial fibrosis. Dr. Abraham's research further excluded cigarette smoking as the cause of these diseases.

Dr. Abraham was sent Neil Hornsby's biopsy slides from Neil Hornsby's lungs. Dr. Abraham went through the photographs of the SEM/EDS analysis and provided photographs showing the identified particles, its opinion was that based

upon the results of the spectrography, Mr. Hornsby's lungs showed a substantial burden of aluminum particles. He concluded that aluminum was the source of Neil Hornsby's DIP and respiratory fibrosis.

The superior court erred in finding that Neil Hornsby had not proved, by a preponderance of the evidence that his lung diseases arose naturally and proximately out of the distinctive conditions of his employment at ALCOA WENATCHEE Works. **The Superior Court erred in stating that Dr. Abraham did not answer the questions about causation fo Mr. Hornsby's lung diseases.**

Dr. Abraham very specifically answered Mr. Hornsby's Counsel's questions, on a more probable than not basis, to a reasonable degree of medical certainty. Dr. Abraham answered as to each lung disease. He opined that Mr. Hornsby's DIP and interstitial fibrosis were caused by the aluminum in his lungs. He also opined that bronchiolitis is often related to smoking, but the aluminum may also have contributed to it. JA Page 32-33. Dr. Abraham also discussed a number of medical studies linking pot room exposure to aluminum and the DIP and interstitial Fibrosis. Exhibit # 18 was admitted into evidence by the superior court. It shows the evidence of aluminum in Mr. Hornsby's lung biopsies. The fact that Mr. Hornsby's lungs were filled with aluminum was not disputed by Alcoa. Alcoa merely blamed "smoking" on the presence of aluminum, even though Simons and Cox admitted that they did not know what kind of cigarettes

Mr. Hornsby smoked, how much he smoked, or whether aluminum was a substance contained in cigarettes.

C. CONCLUSION

The superior court's decision should be reversed, and the case should be remanded to the Department of Labor and Industries with instructions to allow Mr. Hornsby's claim for Labor and industry benefits for the diseases of DIP and interstitial fibrosis.

Respectfully submitted this 30th day of November 2015.

LAW OFFICES OF JULIE A. ANDERSON, LLC

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