



PETROLEUM HISTORY SOCIETY
OIL SANDS ORAL HISTORY PROJECT
TRANSCRIPT

DAVE RYAN BEGAN WORK AT GREAT CANADIAN OIL SANDS (GCOS)/SUNCOR IN 1982 IN FILM AND VIDEO PRODUCTION AND INDUSTRIAL PHOTOGRAPHY FOR PUBLIC AFFAIRS PURPOSES. HE PRODUCED VIDEOS RANGING FROM "BLAST SITE SAFETY" TO "SAFE USE OF TIGER TORCHES." HE WON AWARDS FROM THE INTERNATIONAL TELEVISION ASSOCIATION OF CANADA FOR THE TRAINING VIDEOS "WHEN THE MACHINES GO SILENT" AND "SAFE ON FIRST." FROM AUGUST 1994 TO SEPTEMBER 1997, RYAN MOVED INTO PUBLIC RELATIONS AND WAS A MEDIA RELATIONS SPOKESPERSON FOR SUNCOR OIL SANDS GROUP. HE DEVELOPED AND IMPLEMENTED COMMUNICATIONS STRATEGIES AND COORDINATED CRISIS COMMUNICATIONS. HE RETIRED IN 2007 BUT WAS ASKED TO RETURN AND BECAME A PERMANENT EMPLOYEE AGAIN IN MAY OF 2009 AND CONTINUES TO WORK IN THE TRAINING AREA FOR THE COMPANY.

DATE AND PLACE OF BIRTH: July 7th, 1952 at Trail, BC

Date and Place of Interview: 1:30 pm, May 29th, 2012, the residence of Dave Ryan (see below)

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Name of Interviewer: Adriana A. Davies, CM, PhD

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Consent form signed: Yes Initials of Interviewer: AD

Last name of subject: RYAN

AD: My name is Adriana Davies, and I'm a researcher/interviewer for the Petroleum History Society on the Oil Sands Oral History Project. It is the 29th of May at 1:40 and I'm interviewing David (Dave) Ryan in his home. Dave, can you tell me when and where you were born?

DR: I was born in 1952 in Trail, British Columbia. My dad worked for an industrial firm there called COMINCO or COMINCO Mining and Smelting, CM and S [Consolidated Mining and Smelting Company].

AD: Can you give me a kind of potted summary biography, and then we'll continue with specific questions on your oil sands involvement.

DR: Sure, I graduated from NAIT [the Northern Alberta Institute of Technology, Edmonton] in 1972 with a diploma in radio/TV arts. I worked in radio in beautiful downtown Melfort, Saskatchewan, for a couple of years. I worked here in Edmonton for CFRN FM and CFRN television for a while. Worked for the radio station then came back and worked for what was then Capital Cable, which is now Shaw Cable. Worked for them for a number of years. Worked for a company called Western Cinevision selling professional Sony television gear, and actually ended up selling the gear to Suncor that I ended up using in my next job. When I joined Suncor, the original position was as an audio-visual technician, so we had our own small—one person, that's how small it was—audio-video department with television and then, of course, film photography. I ran that for probably 12 to 14 years. Then, I went into public affairs as a Media Relations Officer for a couple of years, and then I joined up with what became the Risk Management Learning Centre in 1999. And they do, or they did and they still do, training of operations people and contractors that come in. Retired in 2007, was rehired again in 2009, at the Firebag Institute Plant, and that's where I'm working right now.

AD: So you have a lengthy history, and who would have known that somebody who started, who studied television arts would end up working for a premiere oil sands company. Now tell me a little about that package you sold them.



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DR: [Laughter] Well, it seems to me the package was ¾-inch Sony editing gear, ¾-inch cassette. And it was a very basic package: a couple of recorders, a TV camera, a tripod, a microphone, a couple of other odds and ends, and it came to about \$40,000 at the time, which you know was a fair bit of money in 1981. And so I sold it to them, and as we were signing the contract, Jim King and I were sitting in a bar in Fort McMurray. I said to him, "So, who's going to run this?" He said, "Ah, anybody can do television. We'll get one of the summer students to do it." I said, "Oh, okay. Sure, all right." So we left it at that, and about six or seven months later I got this phone call from Jim. "Hi Dave?" "Ya." "You still interested in doing radio and television stuff?" "Ya." "Well, how'd you like to come up here and work for us, because the stuff the summer students are turning out we can't do anything with." So he offered me the position and moved up to Fort McMurray, and I took that position in July of 1982.

AD: What was your job description?

DR: It was audio-visual specialist. Basically, what I did is I worked for the Training Department, so I was charged with making slide programs, which were quite popular at the time; video lessons as well; plus audio cassette and slide presentations that we used. Anything of an audio-visual nature for the Training Department, as well as looking after the televisions and video players and all that kind of stuff that we had in all the various classrooms. Because when I started we had a centralized training group of 30 some instructors covering any discipline you could think of. You could come to us and we could give you a welding instructor, an instructor in electronics, or programmable logic, and so my job was to provide the services that they needed in terms of audio-visual support to them. Where it grew from there, however, is that I ended up being involved in a number of investigations in terms of documenting scenes and incidents and supplying video or photographs to the investigation team.

AD: In terms of the training and risk management department, who were the people who ran it at that time?

DR: Well, Bert McKay, of course, was there. Dave Holmes was another gentleman that ... He was my supervisor for a while, which is hilarious because two months ago I was walking down the hall at Firebag and went, "Dave?" And he went, "Dave?" It was Dave Holmes. He's back working at Firebag as a contractor, so ... There was ... Mike McDougall was there. There was, like I said, there was 30 some instructors that were all in that centralized training department at that time.

AD: Can you give me an idea of a typical training module?



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DR: Well, let me see, a typical training module. I worked the, what we called then the refinery. What we call now the upgrader. So, for the first few years I was there, and one of the first series of programs that I did was on our coking units. And so what I would do ... I can remember specifically one presentation I was asked to put together which was on coking cycles. So coke drums come in a pair. There's one online and one offline, and what you do is use the online one until it's full of coke, then you switch to the empty one, and then you take the coke out of the other one, and switch them back again. And while it sounds simple in theory, in practice it's a fairly critical operation because, without those drums operating correctly, the whole upgrader, the whole refinery, loses product. And those were 96 feet tall and 26 feet around, so the work had to be done correctly because there were some pretty catastrophic results if you did it incorrectly. So, what I would put together for that one is a very simple animation of what the coke, or sorry, what the coking procedure would look like—how would you go from making the switch from one to the other.

And then we'd also take the camera out and we would shoot at the various spots where the operators would be turning valves and doing things, because there's a lot of advantage to be able to, when you look at the video, say "Okay, when we go out, I'm going to take you to where that position is, right there." So, I can remember one of the very first days of shooting, we were out in the top deck, the fourth deck of the cokers, and it was a flat, steel checkerplate deck. And I was standing next to one of the top heads, which is probably about twice the size of a manhole cover, and the material that goes in and out of there, if I can remember correctly, is about 900 degrees C, so it's pretty hot. And so the ... I was standing there, getting my camera set up, and Jim Guinn was with me, helping me put all this together. He was a trainer in the upgrader for, gosh, it must have been 40 years. He just retired recently. And he said, "You might not want to stand there too much longer." And I said, "Well, why?" This was where he'd have to be to have the shot. "Well, get your shot and move." "Well, how come?" He says, "Cause your boots are melting."

And I looked down, and sure enough my work boots ... [laughter] the deck was so hot ... It was the summer time, and the deck was so hot it was actually melting the soles of my work boots. So, I got my shot and then moved over a couple of feet so that I didn't end up ruining a expensive pair of steel-toed work boots. We ended up insulating the deck and making it a lot more comfortable for the coker operators that were up there because you may be up there for a whole 12-hour shift up there on the fourth deck, so ...

AD: I wasn't aware that there was so much customized training, but I guess there was so much innovation that you basically had to take people who were graduates of technical programs or construction labourers and train them up to the changes in the technology.



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DR: We were obviously the first, and a lot of it was invented there, and some of it was adapted from other oil field applications. And so a lot of the things that we did there didn't have a corresponding brotherhood with anything else that anybody else was doing. Cokers operate pretty much the same everywhere, but there are still things that happen in terms of the cycles, etc., that are key to that particular plant. So, ya, a great deal, in fact, I would say, the majority of the training that we did, probably 66 percent of the training we did was actually manufactured in house. And some of the more common things—electronics, of example—we could purchase programs or bring in programs from the outside, but a great deal of the training that we did was actually put together by the trainers.

AD: So how many training programs would you be typically running in a year?

DR: Oh gosh, I provided the voicing for the training programs that I put together. I did the announcing on them. And I can remember walking down a hallway in the training centre and having the odd experience of hearing my voice come out of about six different classrooms at the same time. And so I wouldn't know, but there would be hundreds of training classes that we would put on over the year. And we would get somebody new in the mine, for example, 'cause we did training for the mine extraction, what we called then the power house. It was later that it became TransAlta, and upgrading, we did the training for all of those folks. So, when we would get a new hire, they would start off in a base position, and they would work with the trainer and the trainer would introduce them to their tasks and responsibilities, and eventually they'd get them to where they'd be working on their own, and then they'd be off.

But then there are also steps in the progression that you made where if you were at the next progression, then you would have to study to get onto that next piece of equipment or that next unit or module of the plant, so we would always be getting students back as they progressed into a different position or a different role.

AD: So, it wasn't just orientation. It was really a kind of life-long learning.

DR: It was, and it was very hands on. Some of the instructors that we had—Jim Green comes to mind. I don't think Jim is with us any more—but he was a coal miner in England who came to Fort McMurray because he'd been working in the coal mines for so many years that he had coal miner's lung. And they told him to go to some place with nice fresh air, so he went to Fort McMurray. And he would take the belt walkers and the folks that were working on those conveyor belts, because when I started we had somewhere in the neighbourhood of 64 kilometres of conveyor belts taking oil sand from the mining face up to the extraction area. Those are really the lifeline for the mine.



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And that's where you would start in the mine. So Jim would take them out, and you would start as a belt walker and the first thing you would do is walk a particular belt up and down and watch it. See how it looked, see how it sounded, how it smelled. What did it feel like? Because a lot of it was just done through experience, when you were working with the belts like that. So Jim would take them out there and show them the ropes and get them started. And then they would move on to another position in the mine, and they would come back for some more training, and another position, etc.

AD: So are these materials all archived or ...

DR: Well, I don't really know what happened to them. I do know that they decided about 1994 that they didn't want to have the audio-visual department anymore, and they shut it down. So they got rid of all the materials that I had created out to whoever I had created them for, broke up the equipment and donated it to Keyano College. And you know, I don't think there was a lot of thought put into the fact that there might be some value to some of these training packages, because they were technologies or processes or jobs that weren't being used anymore. So I doubt very much if it survived at all.

AD: So how many years in all did you work with the course development?

DR: It would have been from '82, when I started, up until when I moved over to Public Affairs, which probably would have been, oh, '96, '97, somewhere in there.

AD: There were all sorts of things happening at the plant. Not just technological changes, but some labour issues. You started in the years that led up to the 1986 strike. Do you want to talk about it, from your perspective.

DR: Well, before that there was the almost strike in 1984, when we were required to stay on site and they put us up in some lovely hot trailers down in where the origin camp was located, because April 1st was when the contract agreement would run out, which we always thought was kind of ironic, that April Fool's was the day [laughter] that the contract was up for renewal. So they came very close to going into strike mode in '84, but at the last moment—literally the last moment—they managed to shake hands and walk away with a deal.

In '86 the Union, I think they felt that they had come very close to what they wanted in '84 and this time they were not going to hold back. I don't really think that they thought the company would be willing to accept the strike situation, but they did, so we ended up with a situation where folks like myself were tasked with basically running the operation, with running the plant site. So I can remember April 1st, the night of, or the morning of April 1st, midnight, where we took over from the operators.



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Now I had worked in the upgrader in terms of doing training programs, but I'd never swung a valve in my entire life. So I can remember watching ... we stood over by the Central Maintenance Building, by the CMS building, and at the stroke of midnight we could see all the operators walking out of the refinery. They'd got it down to minimum rates, walking out of the refinery and past us, and they were wishing us I guess it was luck, but I don't think that was the word they were using. And so then we walked in. We took over the refinery. We took over the upgrader.

Jack Emery was one of the key people to making that happen, at least on my shift, 'cause there were two shifts, to making it work, 'cause Jack had worked in the upgrader since the 1960s and basically knew every nut and bolt in the whole place. But you had people like myself, who was an audio-visual specialist. We had the editor of the Suncor newspaper that was on our shift. We had people who came from the oil and gas side [that] they brought in from Peace River to come and work for us and basically none of us had ever worked in an upgrader before, and we'd certainly never worked together.

When we got into the upgrader, we discovered to our horror that all the specialized tools that we needed to operate, for example, the Wilson Snider valves, had been thrown out into the coke pit before the Union folks left, so we had to go and grub around down there to try to find the specialized equipment we needed to make the place work. The first time we had a pump fire, and pump fires were pretty common back then, somebody grabbed a fire extinguisher, pulled the pin, and squeezed the handle, and found out it was empty. They had emptied most of the fire extinguishers throughout the plant. So we had to go through and check all the fire extinguishers and recharge those ones that had been emptied.

So it was an interesting time, but I think one of the most interesting things that came out was that after we got going for a bit - John Gallagher was the gentleman who was the shift supervisor for our shift. And some interesting things happened in that John decided that we have a whole bunch of people working together that don't know each other, have at best a loose grasp at what they're doing, so basically what he let us do is run it as best we could. And we found out some interesting things: we found out that the plant, which had been designed back in the late '50s, early '60s, really had a lot more capacity than what we had been putting through it prior to 1986. And, once we got the operations under our belt a little bit, we decided we were going to start upping the rates to see what this place could really do. Because, frankly, a lot of the upper management was busy doing something else and they weren't looking over our shoulders as we were running the upgrader. So John said, "Let's see what she can do. Let's put the pedal to the metal and start bringing it up." We ended breaking every production record known by the plant, because when this place was designed, it was designed with slide rules, with tables. It wasn't done with a computer and a Cad Cam. You couldn't guess within a 16 thousandths of an inch exactly what the tolerance on this was, so everything was very much overbuilt.





So we were able to put a lot more product through there than what the design capacity was originally built and, like I said, we broke every single production record known to the company during that six months, which really ticked off the Union people quite a bit, because they didn't believe the production figures that were coming out from a bunch of guys that normally were chair bound could make a plant produce more than they were.

But, following the strike, production rates increased and stayed increased. They went up considerably post '86 than what we were doing pre '86. There was the usual—I don't know usual—but the problems in town, where you've got a lot of people who now don't have an income. I lived down in Grayling Crescent, and lived there 25 years, the whole time I was in McMurray, and Grayling Crescent is a destination neighbourhood. Like it's the ... there's no through traffic through there. There's only one road in, one road out, so it's a very small little self-realized community probably close to a hundred houses in there, not very big, and at one point in 1986, 80 percent of the houses were vacant. The owners had moved on. Many of them became what were called dollar houses. You know, they'd go to the bank, and the bank would buy it off them for a buck, because they could no longer afford to make the payments. You know, there was some rock throwing, name calling—that kind of thing. It took some time after the strike for everybody to heal and to get along again, because on one day you're out operating in the plant and the next day you're back in the office and you've got the people who are operating the plant normally, and ya, so there was a transition period you had to go through where everybody sort of got to know each other again and forgive past transgressions, etc.

AD: Simply put, what do you think were the causes of the strike?

DR: My opinion is that it was basically an arm-wrestling match between the then-head of the MIOW, McMurray Independent Oil Workers, Don Marchand and the then-head of the oils sands group, OSG, who was Mike Supple. And I think the two of them simple didn't get along and decided that they didn't play well together and that they would one up each other and that the other side would eventually cave in. Well, it turns out that one side didn't cave in. We ended up with a very unfortunate situation of having the strike.

AD: Some workers moved on to other areas, to ...

DR: We lost some permanently, yup. Some came back. Quite a number of them came back and to the same positions. But we did lose some people permanently. They had moved off. I know my neighbour, for example, who was a welder at Suncor—he's still there, actually—he started in the 1970s. And he went off, and because he was a tradesperson, it was easy to find a job doing welding for somebody else. But someone who had a specialized position, say as a bucket wheel operator,



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there's not too many bucket wheels that you could go operate at. You know, that would replace that job, so there were some of them that went off and took other positions and didn't come back. Others, that went off and took positions and did come back.

AD: Just after that there was the fire. Did you want to talk about that?

DR: Yes, we had the fire where we burned down plants three, four, and 16. It was one of the ones that I worked on for quite a number of months, actually. I did a lot of video and photo documentation. In fact, I found out about the fire because I had put together a videotape for Mike Supple. Can't remember what it was about. Oh, I know what it was about. He asked me to put together a video that showcased his boat that he had in the Caribbean. He wanted to use it as a sales tool to get more people to rent his boat. So I put that together for him. So I was going out to his house—I believe it was a Sunday—to drop off the final product for him. And when I got to the front door, I knocked on the front door, and Mike came to the front door, and his hair was white and his face was grey. His hair was normally white, but his face was grey, and I handed him the tape and I said, "What's wrong?" And he said, "There's a fire." "Oh, okay." So he said, "You'd better go home and wait by the phone." "All right."

So I shut the door and on my way back I could see the column of smoke coming from the plant down the river. So I got the call a few hours later to come out and do my documentation thing. What I used to do, for example, during major incidents was I would take photographs around the perimeter to the scene, because it's very helpful to reconstruct things. Where was that fire truck? How were the hoses laid? How was the disposition of emergency equipment, etc.? So when I got out there, the plant was still burning fiercely. The reason it burned was because they were putting a new roof on it, on plant three or four. So what they'd done is they'd removed all the gravel. They'd tarred the whole thing, which meant that it was tarred from one end to the other, which of course is very flammable. Now, we had an ore bin at that time, which was about 300 feet high, and the oil sand would come up on a conveyer belt and would drop inside. But in order to keep the oil sand from sticking to the conveyor belt, we would put diesel fuel on it, which meant that on the inside of the ore bin wall, oil sand and diesel fuel had built up. Our fire chief at the time, Al Cannon, had written several memos, saying "Listen, a couple of years ago you let us take some steam lances and get that down. It's a fire hazard. We've got to do something about it. It's getting to the point where we really need to look at it." "Well, no. We'll produce a few more barrels. We'll produce a few more barrels."

And what happened is that one of the conveyor rollers at the top caught fire. It dripped burning rubber down into that oil sand-diesel fuel mix. That took off. It burned down the conveyor. It actually followed the conveyor belt because, of course, it's made out of rubber and the rubber soaked in diesel fuel. So it burned down the conveyor belt, all the way down to the bottom. And the fire spread across the roof to plants three and four, because they were open with tar, they were as



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flammable as all get out. We couldn't figure out how it went from the one building to the other. What we found out was that, part of the investigation, was that there were cable trays that went through there, so you'd have a big aluminium tray full of many different kinds of cable: control cables, power cables, etc. And the rating for those cables was fireproof, so why did they burn? You see in the photographs that I took that these things were like fuses. Wherever there was cable trays laid, the fire followed the cable trays and caused more damage. Well it turns out that the cables were fireproof when they were laid individually, but they were not fireproof when they were laid in bundles, because then they could support each other. So there was a huge lawsuit. I believe at the time it was the single-biggest insurance claim in Canadian history. The number of \$64 million comes to mind. How it actually ended up, I'm not sure.

So, when I got there, there were the flames coming out. My first thought when I got there was "Wow. This is going to be my last day working for Suncor." I didn't see how it would come back from that. So I took photographs. We ... The firefighters were having a very difficult time finding the hotspots because of the size of the structure. They were basically having to arc the water up, straight up in the air, and then try to drop it down on to the fire. So we hired a helicopter, and I jumped in the helicopter with one of my video cameras, and we flew around the fire several times to try to find where those hot spots were. Coincidentally, there was a gentleman who was working for Alberta Labour, who also sold equipment on the side, and one of the things he sold was an infrared camera. So we went up with this infrared camera and with that we were able to look at the structure and say, "Okay, behind this wall," because that area would be hotter than the others, "that's where some fire is located." It was quite useful for the firefighters to do that. But the wind was terrible that day. The helicopter was having a dickens of a time getting us to a position where we could get the photographs that we needed. And it was, it was pretty hairy. I've enjoyed shooting out of helicopters and did it quite a lot, but that was probably the hairiest helicopter ride I've ever been on. When we were finished and went back to the helipad, which was located up at the main gate, the operator had to make four passes before he could finally get it lined up correctly to land the helicopter, because the wind was blowing it over top.

When it was done, of course, we had to go and rebuild it. And one of the pictures in my mind that comes back from that time is of the ore bin. Like I say, 300 feet, some 300 feet to the top, and it was wintertime. It was minus 40 with a blowing, bitter wind, and on the steel superstructure you could see the iron workers moving back and forth up there, swinging the iron into position to build the place back up and get it running again. We came within about two weeks of not being able to make payroll. If we'd gone ... if the repairs had extended another two weeks, we wouldn't have been able to make our payroll. Now there were two gentlemen, three gentlemen that were trapped by the fire at about the 200-foot level. There was no way to get down. And they were literally trapped there with no ladder. The fire was on the inside. The fire was approaching them. The one guy, one of the





gentlemen decided he was going to jump for it, and they hauled him back. The other two hauled him back a couple of times. And by coincidence there was a very tall crane there, called the “sky crane.” And one of the crane operators jumped in. He didn’t know anything about the crane. He just knew that he had to get the man basket up to rescue these guys. And he managed to turn it around and get the basket up there, get the guys in it, and get ‘em down. He did about a half million dollars [damage] to the crane, and nobody complained at all, because without his ability we would have lost those, we would have lost those gentlemen.

AD: So was there any loss of life?

DR: No.

AD: Which is pretty amazing isn’t it?

DR: Yup.

AD: How many firefighters and rigs were involved in putting out the fire?

DR: Well, we we’ve always had a co-operative agreement, both with the city and with Syncrude, so that if there’s a fire or an incident that’s bigger than one plant can handle, or that the city can handle, then we will contribute equipment. So there was quite a lot of equipment that ended up being there that day. Some of it from the city. Some of it from Syncrude, because it took some considerable time in order to get that fire damped down and put out. Because, of course, you’re dealing with hydrocarbons. The place ...

AD: All flammable.

DR: Yup. The place was saturated with hydrocarbons.

AD: So how many, you know, hours did it actually burn?

DR: I think probably, and I’m going to admit I’m guessing here, I think it probably took, if my memory serves me correctly, I think it took about three days from the time it lit to the time they could finally say it was over. Now there was an area in there called the MCC, the Motor Control Centre, and in there were a number of huge transformers, and the transformers had oil in them to keep them cool. Well, when the fire ripped through there, it popped the transformers apart and they burned. Those transformers were sourced at a time when it was common to use PCBs in transformer oil. So we had to work under the assumption that the whole area was contaminated with PCBs. And I can remember one of the jobs that I got was they needed some pictures of the MCC room and none of the engineers would go in there to get it. So I put on a Tyvek® suit over top of my coveralls and donned breathing gear, and with one of the firefighters with me—we both had



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ropes tied around us—we climbed through the wreckage until we could come to a point where we could take photographs of the damage in the Motor Control Centre and bring it back for the engineers to look at to try to determine, to try to determine the damage. But I can remember pictures of support beams—you know, we're talking support beams that are this wide—that were melted in a U shape. The temperatures that were reached up there were phenomenal. The steel just melted like butter in most places. It was a tremendous, tremendously hot fire.

AD: Now, I'm ... What about other accidents? There were fatalities. Do you want to talk a bit about that?

DR: Well, prior to 1967, during the construction of oil sands, you weren't actually required to document or report to the government fatalities. They were investigated by the local authorities. So we know there were fatalities before Suncor started up, but we don't know who they were or how many that occurred.

In my capacity of running the audio-visual department, my small contribution to investigations was to document the scenes. And so there were several different fatalities that I worked on, but I'm going to tell you the story of one of them that I didn't work on. The gentleman's name was Jan Mellar, and on April 21st 1981 Jan was working on one of our bucket wheels. He was a welder. So I'm teaching a course one day. This is during our journey to zero, and I'm talking about the fact that in my background I had never, ever seen an incident from a cut finger to a dead person that could not have, in some manner, been prevented. And one of the guys spoke up in the room and said, "Oh, that's just a bunch of hooley. You can't always prevent things. Things are always going to happen."

And so a gentleman stood up at the back of the classroom and said, "Can I tell a story?" And so I said, "Okay." If I mentioned his name, people would know him. And he said, "Well, I worked with a gentleman called Jan Mellar. He was a welder. And he said, "On my very first day on plant, I was working as a labourer, and they sent me to get a five-gallon tin of toluene." Toluene is a highly flammable toxic hydrocarbon which is used for cleaning rubber when you're putting conveyor belts together. So he said, "Okay, I don't know anything that's going on. Pick up truck, went to the warehouse, came back with a five-gallon can of toluene." And as he's walking up on the bucket wheel with this, everyone's heading down, "Coffee break." Okay, so he puts the bucket down and they go for coffee. When they come back, the superstructure they were working on had been covered with plywood. And the plywood, of course, is weather warped. When somebody stepped on that piece of plywood, that five-gallon pail of toluene tipped over the side, landed next to where Jan Mellar, as a welder, was working, burst open, soaked him in five-gallons of toluene and then lit off.



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He survived. My neighbour and one of the other firefighters there managed to ... They said they literally had to scrape him off the side of the steel to get him out to the ambulance. It took him four days to die in hospital. So the gentleman is telling the story, and the class is very quiet, listening to what he's got to say. This would have been in the late '90s, and he said, "Now, that occurred back in the '80s," and he said, "I've worked here since then, and I have never, ever gone through that front gate on the bus without hearing Jan scream." He says, "I've heard that every single working day of my life since that day." So you know, those kind of incidents can have ... they have far-reaching effects, not just on the people that they happen to. But on the surrounding people as well.

Another one that I wanted to mention was the one where we had a bucket wheel collapse. This was back in February 9th in 1994. The gentleman's name was Patrick Dick. I got a phone call. It happened at five o'clock in the morning, so I got a phone call about five or 5:30, saying "Dave, there's been an incident out at the plant site. You need to come out and take pictures." So, unfortunately, it was fairly common that I did that. So I got out there, grabbed my cameras, was told it was out in the mine, with a problem with the bucket wheel. And when I walked out there, it was a surreal sight, because you've got a machine that's as tall as a 20-storey building and it's tipped at an angle like this. Where it's supposed to be like this, it's like that. So what had happened is that a bucket wheel is a balanced mechanism. It has the digging head at one end, and it has a counterbalancing weight at the other end. And what happened was that two very long stringers that go from the main structure to the digging head were, one of them broke, which caused the digging head to swing to one side, which broke the other one, which meant now the structure was unbalanced and that multi-ton counterweight fell on a piece of equipment in which Patrick Dick was working. And it fell on top of him so accurately that you couldn't have dropped it on him better if you'd gone out and surveyed the site. I mean it landed directly on top of where he was working. So the ... they got his body out. I took my pictures and they got the body out. And actually, I went into there and recovered his personal effects. Went back later, was asked to go in take photographs of his personal effects that were in there, and then bring them out for, bring them out for the family. So I worked closely with the investigators on that one, and by the time I was finished I have about—of course, we were working with film in those days—I had a stack of negatives that was probably two and a half, a stack of photographs that was probably two and a half or three feet high in various binders. Thousands of photographs from that incident.

In order to demolish the bucket wheel, we had to use explosives, because nobody knew how to get it down. So we essentially blew up 1371, and I worked on that. They needed people to place explosives, so I was out there taping charges to bits and pieces of it and helping bury ... Mike McDougall and I buried I think it was about 600 pounds of Anfo explosives under the digging head, and we blew it up, cut it up, and got it off site.



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It turns out what caused the failure, however, was that we knew we were making the change from bucket wheel to truck and shovel. This was pretty much our last bucket wheel. It was its last life, and they were using it to dig up frozen oil sand. It was a road. And so, normally what we would do is we would blast the oil sand so that it was fluffy and it would be easier to dig. Well, when you're digging into frozen oil sand, every time one of those buckets slams into it, it sends a shock wave right through the structure and then back again. Slam, slam, slam. And the bucket wheel was digging right at the very bottom of its reach. It wasn't digging up in normal reach. We had stopped doing non-destructive testing on it, because we were going to be shutting it down soon. And it turned out there were all kinds of cracks. I took pictures of dozens of various cracks over the length of the bucket wheel, and one of them was serious enough to cause that strut to fail, and the whole bucket wheel, the whole bucket wheel to collapse, causing the death of Patrick Dick.

AD: In terms of the investigations, there would have been an internal team, but, of course, the government gets involved with it?

DR: Yes, well the Alberta Government inspectors would be ... You know, we worked hand in glove with the government inspectors. In fact, Mike Asher was the Executive Vice-President at the time—a wonderful man; I really enjoyed working with Mike—and one of the things that he did was that, when the investigation committee was put together, he decided that 50 percent of the members would be from the Union. So it was half Union, half Staff that made the investigation team that both investigated the cause and planned the demise of 1371. How do we get rid of it? And so you would ... First of all because it was a fatality, you would have an investigation by the RCMP, you'd have an investigation by the province, and then you would have the internal investigation done by Suncor as well.

AD: And then, I mean, in terms of equipment failure, could that be deemed equipment failure since it was being operated at the edge of its range?

DR: What the findings were from the government, I never got my hands on. But I do know that from my work with the investigation committee that basically it was, um, it was Suncor's responsibility to make sure that that piece of equipment was in good enough shape to run safely. And we, we neglected that. We didn't do that.

AD: Now, when did the linkage between the training and risk management happen? Because they worked in tandem, didn't they?

DR: I'm not sure what you're getting at there. Training and risk management?



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AD: It was my understanding, I think from speaking to Bert McKay, that he was involved in both, that the departments were linked.

DR: Okay. Now I see what you're getting at. So there was the training department whose job it was to teach the belt walkers how to walk the belts, the operators in the upgrader how to operate the various pieces of equipment in the plants there. But then there was the ... It was first called the Safety Training Centre, later called the Risk Management Learning Centre, and the job there with those folks was to teach risk-based courses. So they would teach such things as self-contained breathing apparatus, fire-watch duties. They would teach anything that was basically safety related and not a part of the operations training. You know. We would teach courses like fall protection, for example, which anybody who worked at heights needs to know. So we taught all of those risk-based courses.

AD: And were you involved in the production of any of those?

DR: Well, I moved over when they down-sized me out of the Public Affairs Department. I moved over to the Safety Training Department in '99. And they were using overhead projectors and little plastic film thingees on them, and I went, "Gee, you know, maybe we should think of using something just a tad more modern than that." So I managed to talk them into getting one data projector and one laptop, and I started to take those courses and transfer them over to PowerPoint presentations, And once they saw how much better it was for the trainers and how much better it was for the students using that technology, and how it was much easier to be more flexible because to change something was a matter of moments as opposed to making an overhead slide. So I took all of the courses of the Safety Training Centre and transferred them over to a PowerPoint format. And that's what we used up 'til ... well, they're still using the projectors.

AD: So tell me when you shifted over to public affairs and what your duties became.

DR: Well, when they shut down the audio-visual department, I had been attached for about two years to the training Department. Well, first of all, they shut down the Central Training Department. The decision was made by senior management that the plant should run as four independent business units. The upgraders should have all the resources it needed to do its thing. TransAlta, which was then TransAlta, needed to have all its resources. The extraction, etc., they needed to have everything self-contained. They were independent business units. So the idea of a centralized training department didn't fit that model. So we took all the people in the Training Department and farmed them out. Well, I didn't work for one particular department. I worked for whoever they happened to need me to work for. So they weren't sure where to put me, so they said, "Well, okay. We'll put him over in Public Affairs."





So I took my television equipment and my 35 mil equipment and moved them over to the Public Affairs Department, and continued to work on training-related presentations. In fact, I had five years' worth of training presentations—I lined up a work plan for five years—when Suncor went through one of its right sizing exercises and went, “Oh my gosh, we’re not in the business of producing videos. Why do we have a video department?” So they shut the video department down, and I was lucky enough that the Public Affairs people said, “Well, you’ve been here this long we may as well make you a member of our department.” So from that I went into media relations. Basically, my job was to work with both tours—people that were coming in, investors or potential investors at that time, who were coming in to look at the site or to work with the various media outlets, trying to get the story of the oil sands out.

AD: And so when was that shift?

DR: That would have been '99 to probably 2001. Oh, I'm sorry, the Public Affairs would have been from about '96 until '99.

AD: I may backtrack a little bit and talk about the shift ... I mean you've talked about the restructuring and the creation of UNIF [?], but of course the shift to truck and shovel happened. Do you want to give me a bit of chronology and some anecdotes about that?

DR: Sure. Well, when the oil sands, when GCOS started, they needed to be able to move a certain tonnage of oil sands through the extraction plant to feed the upgrader, in order to make their design capacity. The only machinery they could find that would allow them to move that tonnage was machinery that was used in Germany to mine coal, which were bucket wheels. So one bucket wheel was purchased in Germany and brought over. It's a very small one. It's down at the discovery centre right now, and it was used as a proof of concept. And it seemed to do the job. So a full-sized bucket wheel was purchased and shipped over. And I used to work with one of the engineers, and he said, “Yup,” he said, “they showed up and they dropped off box after box and piece of equipment after piece of equipment,” and he said, “Right, where's the instructions, where's the plans? Oh, there they are.” So he said he sat down with this big huge book, opens it up ... It was all in German [laughter]. There was no English translation on how A fits B or how B works at all. So they had to get some translators in to change it over from German into English so they could assemble it in the first place.

But the bucket wheel technology meant that, because of the size of the machine and the way it worked, the bucket wheels were so big that they weren't agile. They had to dig what was in front of them, and they would go back and forth, back and forth, and you would dig what was there. Now, you would need more than one bucket wheel digging at a time to feed the extraction plant. What that meant was that the oil sand, the oil sand ratio back at the extraction plant was different. And so



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the extraction plant could never tune themselves to get the maximum benefit from the material that was coming through. So that sometimes they were releasing oil out to the dykes because they were tuned up for a leaner run. And sometimes they were working harder than they should because there wasn't enough oil in there to get it out. So the extraction plant was always adjusting itself to what was coming in. And that meant a lot of wasted energy and time. It also took an awful lot of maintenance people to run those buckets, and the conveyor belts that fed them all the way back to the extraction plant. And the further we got into the lease, the longer those conveyor belts are going to be, and they were longer and longer and longer.

So the decision was made to go with truck and shovel, and that decision was made by somebody who I credit with saving the organization, which is Dee Parkinson. When she came in, and I worked with Dee quite closely during the time that she was there, her mandate was to get this place to make some money or figure out how to shut it down and sell it. And so Dee sat down and said, "Listen, we have to look at solutions that are different. We can't continue to do things the way they are, because that's not working anymore." And so the truck and shovel was being used in the coal industry, and the thought was, "Well, let's see if we can get that to work for us." And some test equipment was brought in. A shovel was built. I think it was built by Bucyrus. And we bought some heavy haulers. I believe they were made by then what was Haulpak. I think they were bought out by somebody else. But the mandate was that this big shovel would be able to fill this big truck with three scoops of the dipper. In other words, like taking an ice-cream scoop, it would take one, two, three, and she'd be full and she could pull away. So they were going to do the test runs with this equipment, and I got called out to set up my video camera so that we could document this so that this multimillion-dollar piece of equipment could prove or disprove that it was going to work.

I can remember getting out there the first day, and it's winter, it's colder than heck, and the bucket comes back like this, he's going to make his first bite, and it goes clunk, clunk. It doesn't have enough power to dig into the oil sands at all. That was the end of the trial. They couldn't even fill the bucket one time, so they went back and they made improvements, etc. They called me back out, and this time it took five scoops in order to fill the truck. So they sent me back home and they did some more work and they called me back out again. This time it was four scoops in order to fill the truck. It wasn't getting any ... it wasn't getting all that much better. So they basically had to redesign that shovel from top to bottom. The word was, and I don't know how accurate this is, that there was somewhere in the neighbourhood of an additional \$5 million that had to be spent to refit that shovel for the service that it was required.

So we now knew that truck and shovel was going to work. But it also meant now we had to say goodbye to a large number of people who were running the equipment or had been on the support side. You know, because there was mechanics, there was belt walkers, there were operators. The



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entire support trail for all of those bucket wheels was now redundant. We didn't need that any more. So I believe we lost somewhere in the neighbourhood of about 460 employees over a very short period of time. And some of them were very long-serving employees. I remember one gentleman who had been with the company 23 years, and he had spent his entire career working on the bucket wheels. And Bob and I were pretty good friends. And I went into his office the day he was leaving to help clean things out, and we got to the last of the stuff in the box, and he turned to me and he said, "Dave, I don't know what I'm going to do." He says, "I've done one ... I've worked on one piece of equipment for almost a quarter century, and my skills are no longer called for. I don't know what I'm going to do." Well, it turned out that Bob did land on his feet. He started his own safety instruction/safety training company that works now out of Sherwood Park. But you know, there was ... the company offered packages to help you to retrain or to move to retirement if that's what you wanted to do. But it was a very ... It was a really stressful time for us employees to see people we had worked with, you know, sometimes for 20 years, to say goodbye and see them walk off the plant site for the last time. But it was what we had to do in order to make the company survive.

Now the advantage of truck and shovel is that, whereas conveyor belts aren't very moveable and bucket wheel excavators aren't very quick in moving around, truck and shovel can be quite adroit. You can have a number of trucks, a number of shovels. And what that means, then, is that you can take oil sands of a percentage from here and oil sands of a percentage from here and feed it to the extraction plant so that the percentage of oil to sand ratio is hitting the extraction plant always at the same ratio. So the extraction plant can then run full tilt boogey all the time. They're not trying to roll things back or speed things up, etc., and so you can custom blend, if you like, the amount of sand that's going back to the extraction plant and keep it the same.

What we did is, we did a number of core holes. In other words, we drilled a whole bunch of cores in the oil sand, and we used that to build a three-dimensional map. So we now know how much oil is in the sand in a three-dimensional map underground. So what we can do is we can say, "Okay, well this week we're going to need this shovel over here, we're going to need that shovel over there. But next week, it's going to be in some poorer stuff so we need some richer stuff so we need to move him over there." So it was a combination of being able to use GPS, because we knew exactly where our trucks were; how long it was going to take for that truck to get back to the dumping facility. We knew exactly where those shovels were in relationship to the quality of the ore that they were mining. And it allowed us to run a much more efficient, much more efficient organization. Subsequently, things have really taken off since we turned to truck and shovel.

AD: What were your duties when you moved into the public affairs area?



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DR: Basically, I worked with different media outlets. Somebody would call up from the *Edmonton Journal* and say they were interested in doing an article. So they came up; I'd show them around; I'd spend time with them. If it was the radio station in town, because of course we had a lot to do with the local radio station and the newspaper, I would work with them to try and find the information they needed for a particular story. Or if they sent a photographer out, they needed a photograph for an article they were working on, I would arrange the permissions and go with them to where the photograph needed to be taken. So sometimes you'd be dealing with somebody from the *Fort McMurray Today* and later that afternoon you might have somebody from the *New York Times* phoning and looking for information, so it was pretty interesting. Plus we'd also do, I'd also do tours for people who were interested in the oil sands or potential investors in the oil sands. And so they would come in, and my job was to take them out and show them around and explain how the place ran. It was a lot of fun. I enjoyed doing that.

AD: I gather that you did some award-winning film work. Do you want to talk about that?

DR: There was an organization called the International Television Association of Canada (ITVA Canada). And it was extant back in the '80s and in the '90s, when there was a lot of work being done in industrial television in house. And so there were two presentations that I was lucky enough to win Silver Awards for. One of them was called "Safe on First" and it was an introduction to the oil sands. It was basically everybody who came in on their first day, be they contractor or employee would see this multi-part video that introduced them to the oil sands; talked about our safety ethics; looked at each of the operating areas and how they basically functioned; and what possible hazards there might be existing in those areas. The other one was one I did for the environmental department. It was called "When the Machines go Silent" and it was a look at what Suncor's plans were for when the company had folded its tents and moved away. What was it going to look like? What were you going to see if you came back out there to have a look? How were things going to be reclaimed? So it was a look at the reclamation process.

AD: Do you want to talk a bit about that? I mean, clearly you documented it, but, you know, the industry is now under attack. I mean, from environmental groups. How serious was Suncor in terms of the ...

DR: Well, I can say that the ...

AD: Litigation, and ...



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DR: Yup, the video that I made was made back probably in the '90s, in the '90s somewhere, late '80s, early '90s. And Suncor was really quite serious. I mean, we had to put aside X number of dollars for every barrel we produced, had to go into a separate trust fund that we didn't organize, we didn't have access to, so that money would be there. And I worked a lot with the Environmental Affairs people. Steve Tuttle, for example, was one of the gentlemen that I worked with and I was impressed by what they were trying to do.

For example, when Suncor - GCOS was starting up, you ended up with all this sand in the dykes. Well, they needed some way to keep that sand from blowing away. So what they did is they looked for a plant that would bind the sand up and grow quickly and survive the harsh Fort McMurray winters, so they settled on Caragana and it worked great. The Caragana would spread like mad. The only problem was it's not native. And so, when the environmental people got more involved in things, we actually got the Environmental Affairs Department looking after reclamation activities. "Look," they said, "This doesn't meet ... This does not meet our licence requirements. This isn't the right thing to do, because we're essentially bringing in an invasive species that doesn't belong here." So we had to go back, and we removed all the Caragana. And we found native species that would grow in there instead. I mean, we struggled for a long time with the problems of tailings, and it's only in the last probably four years, maybe, that we've found the perfect solution. I mean, there have literally been billions of dollars spent—that's with a B—doing research on the best way to deal with the tailings that have been, that have been produced.

And I can say quite honestly that Suncor was very attentive to the environment back in the '80s and '90s. Probably not as much as they are today because the focus then wasn't as environmentally focused as it is now, but they certainly weren't negligent towards the environment. I mean, if you're spilling something, you're not making money from it. If you're releasing something into the air, you're letting something of value get away. I mean, environmental care is just good business. Besides the point that it's the right thing to do, it's also a good business plan. I can remember we had a leak at the bottom of one of the dykes. There was a catch basin at the bottom, and basically that catch basin had a pump there, so when it filled up it would pump back out to the top. There wasn't very much seepage or leakage down there, but the pump broke and nobody checked on it. So some of the material that had gathered in there, when the snow started to melt and spring come around it ran out on the ice and there was this big brown patch on the ice. And somebody, of course we had to report it and say, "Oops, we made a mistake." And so I can remember going, driving Dee Parkinson out there to look at it, and she was madder than a wet hen. And she said, "Okay, you guys have to get out there, and you have to take every scrap of that ice out before it gets thin enough that you can't get machinery on it. And you've got to get all of that ice, and you've got to get back up, and you've got to put it in the dyke. And now I want to know what your plan is, my maintenance, for checking on these pumps on a regular basis, please. And I need this on my desk within 48 hours, of





how you're going to keep this from happening again." So perhaps we weren't as focused in the '80s and the '90s as we are today, but I can honestly say I never saw a negligent environmental activity in the 25 years that I was there. And I knew that plant from one end to the other. I mean, I've worked in basically every plant that there was out there at some time or another. I was poking around there with a camera of some kind.

AD: In terms of the byproducts of ... I'm thinking sulphur and so on ... do you want to talk a bit about that?

DR: Well, the two biggest byproducts that we had were coke and sulphur. And coke is like artificial coal. The cokers - what you do is you take the bitumen, you remove the sand, you put that bitumen, which is like molasses, which is like a coke drum, and you heat it up. You heat it up a lot. And what happens is the volatiles flash off the top. You put them over into a tower. You cool it down. You capture them as liquid, and you're left with all this carbon behind. And so what you're left with is something that looks like lava rock. It's lightweight; it's porous; and it's black. That's the coke that accumulates inside the coke drums, which you would then have to cut out. And we had thousands of tons of that, and because it was high sulphur, there wasn't much of a market for it. You know coke as a material for steelmaking is a very valuable product, but nobody wants coke that has high sulphur in it because you'd have to spend a lot of money to treat the off-gases, the flue gases in order that you're not polluting. So a lot of the coke that we generated, some of it we sold to Japan and shipped out by rail and, other, we had to bury in landfills on the plant site. But the Government of Alberta, of course, they own the land. We're just leasing it, and anything that comes out of there as a product they're interested in keeping. So the coke had to be buried in a specific manner, in a specific spot so that it could be found again and used if somebody came up with a use for it.

The other thing that we produced was a lot of sulphur. And we produced sulphur into what we called a sulphur pad, which was right down by the river. So the liquid sulphur would come out of the upgrader, and it would go into this big padded area, and it was just yellow liquid. And then it would cool off and solidify, and that's where we would keep it. But it was getting to the point, as production ramped up, that it was getting more and more difficult to keep this sulphur. So it was decided to break up the pad and ship it off site. So we hired a company called Sulmar [Sulphur Marketing], and they set up a small plant there where they would chip up the solid sulphur, heat it up to a liquid, put it into a tank car, send it out to the railhead, and they would ship it off south to whoever wanted to buy it. Interesting company, Salmar. They burned down their own plant three times, and the last time they burned it down they went out of business. When we went out to the railhead to have a look around there was great dismay, because they had let sulphur get away from them everywhere. There was sulphur on the ground. There was sulphur coating buildings. There was sulphur all over the place. And so Suncor stepped up and said, "Okay, this is ... We're at fault for this. If we had supervised





them more closely, this wouldn't have happened." So they had to go in and remediate all the buildings, all the soil. They took chemicals and they used a spray plane to spray them into the surrounding forest to try to cut down on the ... to try to reduce the impact that the sulphur had blown off into the bush would have. And there was quite a bit of money that was spent in cleaning that up.

AD: Well, as you know, of course, sulphur mixed with hydrogen becomes sulphuric acid and then ...

DR: Yes.

AD: ... as it rains, so it does have to be controlled. Now, can you tell me about the House River spill.

DR: Back in '94, I got a call that there had been a pipeline break. And what had happened was that the pipeline going to Edmonton went down into a little valley, and went underneath a creek, and then surfaced on the other side of the creek, up a little hill and continued on its way to Edmonton. Well, Murphy's Law being what it was, where the pipeline broke was just at the bottom of the hill, just above where the creek was located, and the nearest check valve was some distance away. So the crude got into the House River, and the House River feeds into the Athabasca River. And so the result was that we spent millions of dollars trying to reclaim the House River. We put in booms. We put in skimmers. We put in absorbents. And we didn't get it all by a long shot. Quite a lot of it ended up in the Athabasca, to the point that we ended up ... The city ended up shutting down the water treatment plant for I think it was four days while the slick went by. So big fine from the government, multi-million dollars trying to clean things up. That's one of the other reasons I say environmental stewardship is good business. Because if you do manage to mess something up like that, it's going to cost you millions of dollars to try to rectify it. It's much easier to prevent it from happening in the first place. So what caused the House River spill? Well, there was that section of pipeline on which we had deferred the maintenance four times. You know, we said, "Let's do the maintenance." "Well, you know, it looks pretty good. Let's let it go. You know, we're overdoing the maintenance. Well, construction's really good. Let's let it go." And then we had the House River spill.

AD: So you learn from that. Now the foreign environmentalists, largely, although, of course, you know, our own Canadian hydrologist, Dr. David Schindler. Now the actual concern about seepage from tailings ponds. I know that's more a Syncrude issue than a Suncor issue. But how real is that?



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DR: Well, I can say that Pond 1 had seepage. And it was known from the time that the pond was built that it was going to have seepage. There is no known way that you can build a containment structure that big and have it 100 percent impermeable. So the real solution to tailings ponds is to not have one in the first place or to be able to convert them over into a dry state, which is what we've done, of course, now with Pond 1. Now it's in a fully reclaimed state, so really that's the solution is to really not have it or, if you do have the ponds, now that we have tailings solidification process pretty much down pat, and, frankly, Suncor was the one who invented it, patented it, and have now made it available to anybody who would like to use it, without getting benefit back on the patent. That's the way to deal with those issues. Yes, they're there, but we have ways, we have tools to help us deal with that.

AD: Do you want to talk a bit about that process?

DR: I don't know a lot about it other than what I'd read so I'd be remiss ...

AD: You'd rather not.

DR: Ya, I'd be remiss to talk about that one.

AD: Okay. Now, do you want to talk about your experience with Firebag? Just background and then what you did.

DR: Well, I started ... I retired in August 1st in 2007, after 25 years. I started as a contractor in Firebag in September 24th in 2007. As far as I remember those seven weeks of retirement were wonderful, but that's all I got. And so I started off there as a contractor. They were looking for an instructor. So there was another instructor and myself that were there doing basically what we did at the Risk Management Learning Centre. You know, everything to do with fall protection training and gas detection and H2S Alive, and all those kinds of courses. And so I did that. Then I had a personal injury and I was off work for about six months, and that left me without an income for six months, and I thought, "You know, I really don't like being without an income." So Suncor was gracious enough to hire me back as an employee for the second time in April of 2009, and I've been working out there since.

So what I'm doing out there now is hardly any teaching at all. I'm developing training programs for whoever the client happens to be, whatever training programs that they need. But I can remember my first trip out to Firebag. We had to fly up to McMurray, and then we had to take a company truck. I was working for a company called HSE (Health Safety Integrated). And Health Safety Environment Integrated. And so we had to drive out to the Firebag site. So I'm driving out to the site—never been to it before—and it's got a flare stack and it's got flame and black smoke coming



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out it like mad. I thought, holy cow, that's really bad. They must be having a bad day in the operations. So I was working two weeks on and two weeks off. Two weeks, when it was time to go home, the stack was still like that. When I got back, it was still like that. When I went home, it was still like that. There was some real ... there was some real errors made in getting Firebag up and operating.

The original thought was, "Well, we'll make it up as we go along." There didn't seem to be much oversight from the government. We, in fact ... this is the only case that I can think of, that I can think of, where Suncor was patently not in line with their environmental requirements was that part of our licence that we had to build a sulphur recovery plant. And we didn't build one. Somehow, it didn't get built. The reason for that is that we had another in situ operation that we were working at, and it had quite a different geology than what Firebag had. And, at that plant, hydrogen sulphide wasn't an issue at all, so the thought was, "Well, we don't need one of those. We'll save ourselves a few bucks." And we didn't. We ended up in 2007, we were hit by the Alberta government with a production restriction. They restricted our production to, I believe it was the May daily average, which is somewhere in the neighbourhood, if I'm correct, of about 30,000 barrels a day. And we were able to produce 50,000 barrels a day.

Now you remember the price of oil back in September of '07, so that shut in per day was a very large fine. So we had to put together a plan to fix this. We had to build ... we had to fast track the construction of a sulphur recovery plant. We had to make all the other changes to the operation that it took to get in line with our environmental commitments, and I can remember seeing Rick George being furious. He was just beside himself. We had dropped the ball on this one. And, again, it's where I talk about environmental stewardship being good for business. It cost us \$200 million in order to fix that, which we could have fixed if we read the paperwork correctly when we started up the plant site. We could have avoided all of that if we simply met what our obligations were, and that's really the only time that I can ever think of that I've seen in Suncor that has blatantly missed something in terms of environmental stewardship. I mean, other things we've learned as we've gone along. Like I said, the Horse River spill, for example, is one I know, we dropped the ball on that one. But as long as you learn from something it's not really devastating. But this particular one was bad in that it was something that big that we had missed; it cost a lot of money to fix; and it was at the time when environmental concerns about the oil sands were really starting to come to the forefront. So it was a bad decision. It was bad timing and it was expensive.

AD: But it has been sorted out.



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DR: It has been sorted out. We've conquered the problems with hydrogen sulphide. There's very little hydrogen sulphide there. I've just finished doing a program, a training program, on our environmental commitments. And, for example, we are not allowed to flare at all. Period. Anything more than about seven minutes of flaring has to be reported to the Alberta government. I mean, our environmental requirements at Firebag are very, very tight. For example, in the wintertime when we scrape snow off the roads, we're not allowed to dump it anywhere. We have to take that snow, put it in the melter, melt it down, and put it into a deep underground injection well. We're not allowed to put that snow out into the bush anywhere. So our environmental requirements at Firebag are, as they should be, very, very tight.

AD: Now some of the accusation are that, you know, a) either the companies aren't taking it seriously enough and you've given some instances that it is really human error, largely, by and large. But that maybe government isn't taking the regulatory framework seriously enough and it's leaving it to the companies.

DR: Well, the oil sands found itself going from an orphan to a pop star almost overnight. You know, I can remember back in the '90s, when Suncor was really struggling, we had groups of our chief executives going around the world. They went to China. They went to South Korea. They went to any place that they could find investment in the oil sands. They didn't get a dollar. They didn't get anything. And so when the oil sands production rates all of a sudden started to take off; truck and shovel was really being felt; we were meeting our production goals, and exceeding our production goals; and then when Prime Minister Chrétien came out and made his, you know, his presentation about the oil sands, all of a sudden things started to focus. And the industry and the corporations weren't proactive enough. They had been ignored for so long. Nobody was interested in their story. Nobody was interested in what they were doing outside of the petroleum industry and the government. Nobody really cared what they were doing.

It was a niche market, and that was the attitude until all of a sudden they went, "Holy cow. We're being beat to death by organizations from basically around the world. A lot of them don't have a basis for what they're trying to say." And so we've been trying to play catch up ever since. It's been a ... you know, it's been a difficult time. As someone who's spent his whole career in the oil sands and really feels personally that we did the best we humanly could during the entire time. I was there. To see our whole industry derided as being a bunch of care-nots, of, you know, nukers of the environment, that really bothers me, and that really hurts, because that's not what I've seen the oil sands being, not what I've seen the oil sands doing. We made mistakes. Well, of course we have. Everything human has some kind of fault in it somewhere, but I think we've done the best that could be expected. And we're not getting benefit for the things that we do very, very well.



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AD: Now, you've mentioned that you lived in Fort McMurray for 25 years. Do you want to talk about what it was like living in the community from the beginning and its development and, you know, the quality ...

DR: Well, Fort McMurray in '81, '82, Adriana, I think probably the population was about 32,000. And it was a very tight-knit community. When you were going to go grocery shopping you had to give yourself an extra half hour because you were gonna, you were going to run into six people that you knew in the isles and you'd have to stop and play catch up. You couldn't move anywhere without coming across somebody that you knew. The Suncor cafeteria, I can remember sitting down and going, hmm, there's somebody over there I don't know. I wonder who the heck they are. Especially in my position with the audio-visual and public affairs, I was really fortunate enough to get to know so many of the Suncor employees.

And when it started to grow, and grow, and grow, ... Fort McMurray is bounded by Crown Land, which means that they aren't in a position to grow without having to go through all the hoops that you have to go through to get the land released. And the government was slow to react. It was slow to do that. And so what happened is that the population in Fort McMurray and the surrounding area kept going up, and up, and up. I would say, it was a wonderful place for my daughter to be born and to be brought up. I really enjoyed being in McMurray from '82 until probably, oh, '95, '96, '97, maybe somewhere in there. And then it started to become so busy and the traffic became so bad that it was no longer as pleasant. Frankly, I was kind of glad to go in 2007. It has just become too stressful. I mean, you'd go to Walmart to pick something up, and nothing was on the shelves because they had nobody that would stock the shelves for them. It was just in big bins, you know, most of it was down the aisles for you to go root through and pick up, because they couldn't hire anybody to be stockers for them. So it really changed its tempo. It really changed its face. You know, in '82, '86, '89, '90, the people that were there wanted to be there. They were people that had an attachment to the community that had been like Bert McKay, for example, who had been there since the start, who had helped build the community, who had helped fund the community, who had helped put together all the boys and girls clubs, and that sort of thing. And then you got the people ... More and more people came who didn't have an attachment to the community. I'm going to be here for six months. I'm going to be here for a year, so I'm going to party hearty. I'm making lots of money, and then I'm going to split. So its character really changed. I was glad to get out in 2007.

AD: The whole issue of how you manage a boom town that then becomes a boom city and all of that is still a huge issue, isn't it?



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DR: Ya, it is. Because you never ... That's the thing about a boom. You're never sure when the boom is going to bust. So how much money do you spend on developing the infrastructure based upon the knowledge that about every eight to 10 years everything goes into the toilet and you're left with a community that is now oversupplied with housing, with roads, with hospitals, etc.? But I feel that the oil sands are not going to go through a bust period. They may quiet a bit, but I don't think you're going to see anything more than continued growth in the oil sands for probably the next 25, 30 years.

AD: It's interesting that, you know, people extrapolate back from the successes in terms of profits and so on, profitability of the last, say, 20 years and extrapolate that back. Well, in fact, of course, huge money was not made ...

DR: No.

AD: ... for many years.

DR: No. When I started in '82, it seems to me the price of oil was about \$34 a barrel, if I remember correctly. And we were making, we were making ... we were selling it for about 38, so we were not making a lot of money. We were making enough money to make payroll, but maintenance, for example, when I first started at oil sands, maintenance was negligible in a lot of ways because we didn't have the money. You know, the philosophy was patch it up as best you can, run it until it breaks, fix it up and run it until it breaks again. Maintenance that was done before things went bad was not an option, because we didn't have the money to do that. Now, of course, we tend to do a lot of pre-emptive maintenance and things are scheduled, because we have the luxury of the time and the dollars to do that. But there was a time when that wasn't a philosophy because we simply didn't have the cash flow in order to be able to do that.

AD: The other thing that I've heard is that ... I mean in terms of the level of education in Fort McMurray is that it's the highest of any community in the country. Did you ever come across any information that cited that?

DR: I heard that, and if you have a look at the number of engineers, the number of MBAs that we've got in that area, you know, I've always accepted that as fact. There's a lot of very high-powered intellect in and around that community, because it takes that in order to manage a business that large and to keep it running and to keep it oiled and to keep it making a profit and to try to solve some of the issues that we've had to solve. Take for example, the tailings problem. You know, that took a lot of man-years. That took a lot of grey cells and a lot of greenbacks in order to make that come to a point where it was a successful technology.



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AD: What about Aboriginal People? I mean, and I'm thinking of two things, both in terms of employment and benefit to the Aboriginal People. Not only those that work at Suncor but others that live the area.

DR: Well, it would be interesting to look at the Aboriginal employment figures for the Fort McMurray area as opposed to say some of the Native reserves in Ontario, for example. It would be interesting to look at that, because I have a feeling that the employment level for Aboriginals in Fort McMurray is considerably higher than average.

AD: It is, from the statistics that I've seen. I think that ... Recently I read that it's only the Potash Company of Saskatchewan that now has higher stats, so working for Suncor did you get a sense that Aboriginal People and Aboriginal Relations were important?

DR: They were. I mean, we had a gentleman who was working with Aboriginal Relations back when I was in Public Affairs. And his job was to work with the Aboriginal communities. He helped developed businesses that Suncor would supply seed money to them, etc., so they could get started. And he would work with them to help them get the required education that they needed to help them get their jobs, etc. Yes, I think Suncor's put a lot of effort into trying to benefit the Aboriginal People in the area. And like you said, I think that the outcome of that is that there's a much higher job rate for Aboriginals in McMurray than there are in other areas.

AD: Now, we've had a very wide-ranging conversation. Have I missed anything? Is there anything that comes to mind? Any stories, anecdotes that you want to share with me?

DR: Do you have that photograph that I gave you, Adriana? That one of the sizer?

AD: I think I left it out there.

DR: Okay, I can tell the story anyway. When we were making the transition from bucket wheel to truck and shovel, what we wanted to do was we wanted to build a scroll sizer. Now, a scroll sizer, if you can imagine, two counter-rotating axles with big fingers that stick out on them. And you drop the oil sand in, these sizers turn around, and the fingers scrunge up the oil sand, and sends it down to the extraction plant. So the original idea was that we would load up our big heavy haulers with the shovels and they would go out to the sizer and they would dump it in. Well, the sizer was designed by an English company, and I don't think anywhere in England you get minus 40 very often. So one of the things that they hadn't appreciated was the changeable nature of oil sand. I mean, it goes from literally as hard as cast concrete in the wintertime to the consistency of molasses in the summer. I mean I've seen heavy haulers drive by and, on a rich oil sand area, they're actually driving in a dimple. If you can imagine taking a balloon and putting it over top of a salad bowl and dropping a



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marble on it, that's what they're doing. They're driving and you can see the bow wave in front of them as they go by. So this huge gigantic sizer, probably, oh gosh, a good eight to 10 stories tall was built, and I was asked to go and set up my video cameras to take pictures of the very first day that we were going to christen this new sizer with oil sand. So a heavy hauler was loaded up in the morning. It was brought out ... Well, typical in these kind of things, there was one delay and another delay and another delay. And it wasn't until late afternoon that it was time to actually take the truck and to dump that load of oil sand into the sizer.

Now this was in the summer, and it was hot. It was very hot. And the oil sand that we were taking was particularly rich. So I'm about a kilometre away or a kilometre and a half away, set up with my camera, and you can see all the VIPs and the guests and their white lab coats and their white hard hats, all overtop of the sizer. They're going to watch how this all goes. The truck backs up like this, and it lifts up and it lifts up. And there's nothing coming. And there's nothing coming. And there's nothing coming out of the back. And it finally gets to the top, and all there is is one great big lump. The entire back of that huge haul truck came out in one piece and struck the far side of the sizer, causing it to shake probably a couple of feet back and forth. You could actually see it from a kilometre and a half away. And all you could see of the VIPs and guests was their little white coats going toodle, toodle, toodle, trying to get back to solid ground. So they ... What they had to do was to build a number of pylons, very deep concrete pylons, down into the ground, and brace them up against the side of the sizer like this. Because the nature of the oil sand is there are times when it comes out as a great big slab instead of as a ... instead of like unloading gravel. So it was a pretty interesting occasion.

AD: And of course, having done the research on the early oil sands history, you know, Karl Clarke and R. C. Fitzsimmons, of course this happened all the time.

DR: Well, oil sands is a very interesting material. There's really nothing else that you can come across that's like it. I mean, you can go in the summertime ... I lived down in Grayling, as I said before, and the Grayling River, Grayling Creek runs through there. And I used to love to walk up there, because within five minutes of being out my front door, I could be lost in the bush. Wonderful. And the Grayling River is typical of rivers in that area, in that it has a very steep bank. It's cut its way through the muskeg, so you've got a very steep bank on it like this. McMurray is built on some of the richest oil sand deposits that we know of, running sometimes as high as 18 percent. And there were spots up the River from where I lived where there were huge deposits of oil sand. And you could go up there in the summertime and you could see where the weight of the overburden was actually squishing the bitumen out of the side of the hill and it was flowing down the side of the hill and it was ending up in the water. It was flowing down into the water. Like it or not, the Athabasca River has been naturally polluted by bitumen for several, for several million





years. And you go up there in the wintertime and you could go to that same bank where you could see a drip. And you could try to get it to move, and like I said it was like cast concrete. It's a very malleable, very changeable substance that goes from soft and mushy to like a hockey puck, for example.

AD: Anything else?

DR: No, I can't think of anything else.

AD: Well, thank you so much for allowing us to interview you for this project. As I mentioned, the video will reside at the Glenbow Archives, which has a very large collection of other oral histories, done for the conventional industry, and other holdings. Thank you very much.

DR: Well, I'm very pleased to have been asked. Thank you, Adriana.



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