VIOLENT REACTIONS:

The following is a transcript of a telephone interview I did on March 24th 2013 with my father, Joachim (Jim) Kellhammer who worked in a factory near Preston Ontario that manufactured polystyrene pellets. He worked there from 1959 (the year I was born) until 1963 at which point he quit the job to take another in Cooksville Ontario to help run a plant that made plastic fronted concrete blocks. These were widely used as an inexpensive substitute for wall tiles in constructing the kitchen areas of McDonald's restaurants around that time. Now 81, he has suffered from Non-Hodgkin's lymphoma and colon cancer but is currently in remission from both. Dad volunteers at the Credit Valley Hospital cancer ward in Mississauga Ontario one day each week.

DAD: I've finally found some information... You know it's such a long time...it's a half a century..since I did this stuff but you know what I did at Kayson (my brackets - the polystyrene place) was totally different from what I did at Primeau Argo (my brackets - the plastic fronted concrete block place)

O: Yeah...What did you do at Kayson...? Did you make styrene or *polys*tyrene?

DAD: Yeah we made polystyrene thermoplastics, which can be extruded or pelletized and then you know like it can be re-shaped into anything...now with Primeau Argo, it was different, we used a thermo *set*, which is resin and it cannot be re-shaped into its original compounds.

O: Right... So tell me about the plastic factory in Preston.... what was your job there?

DAD: Well... I was... When I started there ... I didn't know anything about anything...so anyway, I ended up as a foreman when you were born.

O: In '59?

DAD: Yeah... so I was more... I was running the reactor room... and what happened was we got tank cars from Dow and Polymer Corporation in Sarnia and we had those big storage tanks outside and we had four reactors that took about ten to twelve thousand pounds of styrene each.... and we pumped this stuff into those reactors but it of course was catalyzed... We had like a catalyzer and we had to put butyl peroxide in there in order to speed up the reaction.

O: And that's a catalyzer? The butyl peroxide?

DAD: Butyl.....butyl perbenzoate and butyl peroxide.

O: And what did that stuff look like? Was it like liquid or how did you handle that?

DAD: It was liquid. It was actually an accelerator...without this stuff... well we cooked, we cooked

we cooked the stuff in the reactors for X number of hours and then we baked it... and then we put water into the outside of the frames and cooled it off and we ended up with heavy blocks... you know about two hundred pound blocks.

O: Of styrene...

DAD: Yeah, polystyrene and these blocks were ground up and sifted and we... actually we ground this material after a few days...

O: Yeah...

DAD: The blocks have to be cooled off at first and then it was ground off and we had a sifter with medium, coarse and fine.... and it was bagged into bags.... we had a bagging machine there.... and most of that stuff was sent to Hong Kong.

O: What did they use it for?

DAD: Well... I think they did use if for....You know the inside of a hubcap of a car? It's plastic and they used it there. Or we...what we did also is we used the material and extruded it and then of course it can be shaped into anything..and can be sold... the extruded materials... to other companies.

O: So tell me about the working conditions? Like you're the foreman... this raw material comes in on the railway car right?

DAD: Yeah, Yeah...

O: And what was that... a liquid or a powder?

DAD: It's a liquid that was called *monomer*.

O: And that's the raw material

DAD: The raw material and we had storage tanks outside. They took about two or three railroad cars each. That's around forty thousand pounds of stuff.

O: So the stuff comes ... you then.... you pump it out?

DAD: You pump it into the storage tanks outside and from the storage tanks it was pumped into the reactors.

O: Right and then you add the catalyst.

DAD: We add the catalyst to it.

O: Right. So was that dangerous? I don't remember exactly but you did tell me a story when I was a kid that there was... sometimes things were kinda' dangerous... like...

DAD: *Violent* reactions... Oh yeah.....it was very dangerous... and of course we didn't have the safety precautions what we have now, you know... and it was a dangerous job. Sometimes you had a..... it was like a... for instance if you had a spill you know... this stuff *goes* and you can't stop it.... it doesn't matter how much water you put on it you know...

O: You mean if it starts to *burn*?

DAD: It burns....yeah.... No it spills all over the place.... you can't stop it... it's like a reaction, you know... it's like a... you cannot stop it.... and sometimes if the catalyst wasn't distributed right... it has to go in an equal way, an equal measure to what you put into the reactor. So the catalyst fed into it....

O: Right

DAD: It fed into the reactor together with the raw materials.

O: So if it went wrong then, if it didn't mix properly or something... you would have what? An explosion or was it gas giving off.... or *what* happened?

DAD: Well it could have been an explosion but it was what we called a 'violent reaction.' And so, you... it was so powerful you couldn't do anything about it you know... you just keep on putting water on it and you run around with gas masks... it wasn't very nice I tell you!

O: So...So they were poisonous fumes then.... you had to put a mask on to um....

DAD: They had fumes... yeah...

O: Yeah.... so what did it smell like... did it smell like styrofoam or what was the smell like?

DAD: Well like... you know how styrene smells.

O: Yeah.... a plastic smell...

DAD: Yeah and your clothes stinks and you have to take your shoes off when you come home.

O: Yeah, I remember the smell from when I was a little kid. You used to come home and I could smell the smell....um... but....how many people worked there? You were the foreman. Were there lots of other crew?

DAD: We had three shifts because you know like...you do the cooking for about six hours and then the baking on a reactor and it never stopped...it was a twenty-four hour cycle....

O: Right... Wow!

DAD: And then you unload one reactor... the other one is starting to cook and it was... I tell ya...it was like a war zone out there sometimes.....

So when I started with Primeau Argo (the block place) it was like.. well I mean... totally different materials and it was a cakewalk really in comparison to this.

O: To Kayson...

DAD: Yeah.

O: Okay....So tell me more about Kayson before we finish up then... Did they go out of business or did you just move on to the other job?

DAD: Well, we had a lot of business and then later on I think the building was condemned... it was like a little bit of a homemade job you know with wood in there and.... so anyway.... it was a dangerous job but we had extruders downstairs.... so what happened is the molding powder.... which means the crystals... they come out of the run up blocks and were blended with different colors and then you run it through an extruder heated up and it comes out and it's pelletized. This is what happens there.

O: Yeah.... So then did it get put back on the train then and taken to Hong Kong... or how did you get rid of the stuff?

DAD: Well we had a boxcar... we had a siding... a railroad siding there and boxcars came in and we had to bag this stuff and put it on skids and put it into the boxcars.

O: So.... Do you think that.... in terms of.... you were talking about the safety environment being not so good... Do you think that... you know... was there ever a time when you thought that: this is really dangerous...you know, it's kind of *unsafe*?

DAD: Oh yes! And then we had a plant engineer... this guy he came from England and he must have gotten a bonus or something you know.... he wanted more production all the time but you can't rush these things you know... So it takes a full cycle... X number of hours to finish the product... and he wanted to do it faster... and then I had a few arguments with him and then I finally quit..... I was fired and then I was re-hired by the owner and then... but I quit on my own.

O: Yeah..

DAD: And then I started at Primeau Argo... Such a long time... That was a long time ago.

O: Yeah... Did you feel it was unsafe...that you were in an unsafe working situation?

DAD: Oh definitely. It wasn't safe. And well... in those days...you know everything wasn't....we had people from Cape Breton and they used to work in the mines and they were used to unsafe conditions...And so these guys.... they really... they were just glad they had a job.

O: Now... what about your health? You know... you had cancer a couple times....do you think that ah... maybe that plastic exposure had something to do with it?

DAD: I personally think so.... I think so....like my non-Hodgkins lymphoma....definitely...l... but...you know you cannot prove anything....

O: No

DAD: So because it was unbelievable fumes...it wasn't a... it wasn't a healthy environment.... This is how you did things in those days...you know that was the fifties and early sixties...

O: So... fifty-nine till... when did you quit? Sixty-five?

DAD: Sixty-three

O: Oh sixty-three... So I was only four years old!

DAD: Yes..oh yes...

O: Just a little kid...

DAD: You were just a little shaver...

O: Yeah (laughing...)

I still remember the smell.... I remember that smell....you know I don't remember that factory but I certainly remember the smell of styrene...

DAD: Well I had... I left my shoes in the hall...remember we lived on Montgomery Road?

O: Yeah... I remember the smell of the shoes...(laughs)

DAD: And these were my regular shoes... these weren't my work boots...my work boots I put on at work... I left my work boots at the place of work...they were just my street shoes...

O: Yeah...

DAD: And then you had to test the material you know...you had thermocouples in the top of the reactor...once it's baked you have to pull those thermocouples out and see if the material is consistent enough to put the water on and then really....it wasn't a nice job I tell you...Oliver...In those days you did anything you know...

O: Yeah:

DAD: Just to get a job... but I didn't know anything about...when I started there, I didn't know anything about plastics...but I mean I could read formulas and stuff like this so I know.... I know what went in there...and you learn fast...

O: Yeah.... Now Dad you...if I remember correctly...you broke your toenail... you had to get your toe operated on...

DAD: Oh, you remember that!

O: Yeah....I remember in the bathtub as a kid seeing you without a toenail...

DAD: Yeah, yeah....They had to take the nail off....

O: Yeah.... what was that all about?

DAD: Well you know, when the material is all cured and you put water on it and then you opened up those different frames....they were like huge wine presses....you opened those frames and have to remove those blocks and they slide out and you put em' on two-wheeled carts and move em' into a storage room to cool them off... you grind em'... they're all one hundred and eighty to two hundred pound blocks and one fell on my toe and I had a safety boot on but it didn't help much...it slid back and still broke my toe.

O: Oh my God! (shuddering)...It must have hurt like hell!

DAD: (laughs) Hurt!.....you wouldn't believe!.....it's one of things, you know like.... it was part of the job.... There were more guys losing their toes and fingers and whatever have you..

O: Yeah...What was the worst thing that ever happened there?

DAD: Burns...You know sometimes you have a 'violent reaction' and then... and then the top of the reactor blows off and then all the styrene runs out and runs runs onto the ground... and runs out the....we had holes in the walls... and it runs out down the walls and into a ditch...we had a settling ditch...and once a week I went out there with a scoop and you know once the material gets into the water...of course it gets cold right away....so I fished out all the residue.... and put it on the side... but we must have poisoned the Grand River...

O: Yeah?

DAD: It wasn't very nice...But anyway, I started at Primeau Argo and it was different materials....it was resins....we just used it for a coating....on concrete block...and you know it wasn't styrene....it was mostly resins.....and this material cannot be reshaped into its original components. (note to self: Dad seems to be concerned that I really understand this)

O: It's like fiberglass isn't it. It's set..

DAD: Once it's set... It's set....

O: So what was the idea there?.... Was it to create a washable surface?... Why did they want to stick plastic on to...

DAD: Well to create a washable surface....a tile effect really...on a block...so you don't have to use tiles....We did all the original McDonalds...hamburger joints...we did all those...There's still one...I think there's still one on Dixie and Dundas...it must have been still there...I haven't been there for a while but we...it's just to....you know...if you usually have a concrete block wall you have to tile it... this way you have an eight by sixteen surface and it's already a tile on it...

O: That's great.... saves money....

DAD: Yeah...it does a lot...

O: So do they still make that product or was that discontinued?

DAD: No....the resin started to get too expensive....it was back during the oil crisis...

O: In the seventies?

DAD: Yeah....and I don't think they do make this product anymore.

O: I see....So...you say it was better....you figure it was a safer working environment then? Is that what you mean?

DAD: Oh definitely... So what I did there...I got a set of drawings and – "here... do something with it!" so I had all the welders and the guys at my disposal and I built a line and then some of the owners went to the States...they didn't know much but they looked at it and then....as long as we worked according to the specifications and built the line then it was okay.

O: Great!

DAD: But it was a long time ago...you know.

O: Yeah...well how long did that last then? You would have started in '64...'63?

DAD: (Counts)..... about five, six years... we made those things and then it petered out.. I think General Concrete in Hamilton had a similar process... it was a little different...called a different name...some brand name...But it was a big thing in those days....

O: So you went from plastic to concrete? eventually....

DAD: Yeah...and then of course when I started at Kayson I didn't have a clue about plastics... I didn't know anything....

O: How did you get that job?... I mean... there you were..a young immigrant from Germany...How did you get a job in a plastic factory...

DAD: Yeah...Well it was a job you know....First you do the 'joe' jobs, you know and then you just have to unload reactors from morning to night and then crush the material. We had people like this doing it there. And then you know, like if you could read a formula and you had a little bit of an education, a little bit of chemical background....you...you...as long as you knew what to put in there and then...how to handle things...and you had to get along with the people too....

O: What was that like? What were the other guys like who worked there?

DAD: Oh excellent! most of them...they were all either working in the coal mines..or they were fisher...fishermen...so really they were a good bunch...they were all from the East Coast...Some of them were pretty violent you know like....they tried to kill each other every once in a while...but ah, in general they were a good bunch of guys....just have to keep them under control...

O: (laughs) Well um... did you ever keep in touch with any of those guys... I mean after you quit...

DAD: No... no...Most of them lived around Preston and so...I think a lot of them died now....they were as old as I or a little older.... who knows what happened to em'?

O: So did that company go out of business - Kayson?

DAD: Oh...it was actually taken over by Monsanto and then they tore down the whole works...they tore down the building...You go by there now on Eagle Street there is nothing left...it's just like a field....

O: So Monsanto.... When did that happen?

DAD: Oh it happened around...right after I left...They couldn't make a go of it...so...there was no

money in it anymore....

O: So the sixties then....

DAD: In sixty-two..sixty-three...

O: I see... so the factory got demolished and its just an industrial waste site then now... right?

DAD: yeah...

O: So you talked about the river - was that the Grand River?

DAD: It was the Grand River.... that's right...

O: That's a pretty nice river....so you think there was pollution....

DAD: Oh *definitely....* And you know the inspector...in those days they were not that rigid....He was the dog catcher and the environmental inspector...everything in one...Anyway...these guys...I don't know what they did but....there weren't real guidelines in those days....It was pretty sad what we did to environment...

O: Yeah... So did you think...I mean... did you see *fish* die? I would have thought the plastic would have just hardened up...and not done anything...did it actually... How did it poison the river?

DAD: Well..it went down there and then of course...you have a liquid...it gets into the water and hardens right away...it's like a skin...and you have to get in there and remove the skin from the water...

O: So did you ever see that?... Did the skin form on the river?

DAD: It did form in the water...yeah...and it must have killed a lot of fish...

O: Oh my god!

DAD: (chuckles apologetically)...

O: So you were close to the river?... That must have been what?.... A hundred yards or something?

DAD: Yeah... we were actually on a creek, which was a tributary to the Grand River... The Speed River and the Grand River...

O: The which river and the Grand River?

DAD: One was called the Speed River and the other was called the Grand River...

O: Oh yeah... The Speed... The Speed goes through Guelph too....

DAD: Yeah...Yeah...Yeah...

O: That's a nice river...

DAD: It's a nice river....

O: So it's good that...you know....in some ways.... that they're not polluting the river anymore.

DAD: No...it's all different now....You cannot do things like we did in those days...See...we had...actually..... these reactors were actually old wine presses...used big things...and they weren't actually tried before...The owner thought...well, he could make a go of it....

O: So how do you spell 'Kayson"

DAD: ...K-A-Y-S-O-N...

O: Did that mean anything? Was it 'K and Son' or something?

DAD: No... the owner's name was Kaufman...and sons...

O: 'Kaufman' with 'K-A-U-F-M-A-N?'...

DAD: 'K-A-U-F-M-A-N'...

O: Yeah...they owned it....Wow...so that's really interesting... The reason I'm asking you all this stuff is I have a friend...you know....she's an artist and she's doing a lot of work about the history of plastic in North America...and you know... they do some research...but I said...I actually *know* somebody who made plastic you know...so she wanted me to interview you because...nowadays most of the plastic gets made...you know... in Asia or elsewhere....you know...it doesn't happen that much in small town Canada...you know?...I think it's interesting...

DAD: No... Well I don't know....I think they still make it in Sarnia....

O: Do they?

DAD: I think they still do....

O: Chemical Valley....yeah....

DAD: But what I did at Primeau Argo was totally different....we had a pan, which was sprayed with some mold release....it smelled like bananas.... and then on top of this you spray a gel coat...and then you run the line and then after a while you put a slurry in it...and into this slurry you put a concrete block...

O: Yeah... and it sticks somehow?

DAD: It sticks right onto it....and the next morning you knock the pans off with a rubber mallet...and then you have a finished face on a concrete block...

O: So the slurry is the glue?.... Or is the whole thing just sticky?...

DAD: What did you say?

O: Well you know...when you have the slurry...and you pour it into the pan...

DAD: The slurry is basically the stuff which penetrates into the block somehow.... you had to use lightweight block....you couldn't use concrete block (my note: these are made from fly ash, pumice etc.)....and because it penetrates into the block itself and then... so it's just something upside down...and then you knock the pan off and you have a finished face....you have a tile face....which is actually the gel coat between the slurry and the block...

O: Right...yeah...

DAD: And this gel coat is either high gloss or it's medium gloss or whatever you want...and this is the way production was....

O: Was done....I remember that... Now that banana oil stuff is pretty toxic... right? Wasn't that...

DAD: Oh yeah!.... We had guys that....you couldn't smoke there you know but you had guys addicted to it...There was one guy...he was smiling all day long...he put the banana oil onto the...the mold release...I don't know what it consisted of really....He put it onto the pans...and he was in good spirits all day long...

O: (gasps...)

DAD: But I think he must have died of cancer sometimes...

O: Yeah.... I think, Dad, that that stuff is PCB...

DAD: Yes...yes...

O: I think that's what it is...

t's used for mold release... or it was...it's not now...it's very...it's very toxic...um....But you think it made him *high*, while he was working?

DAD: Oh yeah!...yeah...yeah...but you know...he was a heavy smoker....but you couldn't smoke there of course...so that made him high during the day...and he walks out of the plant at nights and he had his cigar already in his mouth...you know...and so...when he walked out the door...he lit his cigar...

O: Oh my god! oh...

DAD: So anyway...people were crazy in those days...

O: Yeah... Jesus!... that's something else...that's really interesting...so after that though...you just dealt with plain old concrete, which was not as toxic...right?

DAD: Oh, no, no....this was nothing in comparison...Concrete and testing and later on marketing...you know...

O: So...all told...you were making plastic for what...seven or eight years?...something like that?...from fifty-nine till sixty....

DAD: I was making plastics from fifty-nine till sixty-three... and if I wouldn't have had the argument I would have been there till I died...

O: Yeah..and then what...'Decker Glaze' (my note: the tile-faced block product) was from sixty-three to when?

DAD: To sixty-nine, seventy and then I got into sales...

O: Right...right...right....Well that's a long time though...that's...you know.... a good chunk of your working life...

DAD: oh yes...

O: So, um....how are you feeling now?

DAD: Oh....I'm feeling fine...I have nothing to complain about...you just...you just get older you know and it's a little harder to get up in the morning...but I'm eighty-two now...in August I'm going to be eighty-two...

O: Yeah...So you're feeling healthy enough and...you know...those kind of.... the exposure to

plastic hasn't done you any more harm...you figure?

DAD: Not so far... you know...I had this...when you came down...I had this...colon cancer...or rectal cancer it was...there was something different...but I think I'm not too sure that had something to do with it....

O: And then you had the non-Hodgkins lymphoma...

DAD: I had non-Hodgkins ten years ago....

O: Yeah...What was that?... I can't remember.... Was it your back? or I can't remember exactly what that was....

DAD: Well it was...it was just horrible...I was on...on...on...I wasn't on radiation...I was on....

O: Chemo?

DAD: Chemo yeah....and I got my injections once or twice a week....and it finally...it finally left my body....

O: What was it though?.... Was it a tumor?.... What was the source of the pain?

DAD: No..it was...it wasn't a tumor....it was just all over the blood....all over the place...it got into your blood...you know?...it was like a mild case of leukemia...

O: Oh... Oh I see...Oh...okay... so there was no growth or anything...it was just in the blood....

DAD: It was just in the blood....

O: Oh I see... wow... gee..

DAD: It makes you very sick...I couldn't...you know like you....I couldn't even sit in a car...I was laying down...put my seat back....and lay down...

O: Yeah...Just because of the pain?

DAD: There's the pain....yeah...pain all over the place.....

O: Yeah.... Everywhere.... so....in the back...in the feet....everything?

DAD: Yeah...not so much on my head but my body...

O: So how long did that take to clear... everything....

DAD: The chemo? The chemo for about half a year...

O: Oh!...that's pretty...

DAD: They did a pretty good job...

O: Yeah...that's pretty quick....

DAD: Oh yeah...we had top guys here in Mississauga...one guy....they're all Jewish doctors but they're excellent!

O: Sure... That's great... That's great that they cured you of that....I had no idea...I thought you had some sort of a tumor....I couldn't remember....

DAD: No...no... and I was on all those different pills and what have you...you know....it wasn't nice that's for sure.

O: No... No....No.... that's for sure...I just wonder... I mean I know that you haven't been in touch with your old work mates much...but I wonder...you know...how much this exposure to these chemicals....you know.... whether there is any connection...I mean nobody seems to know...between the chemicals and...you know.... cancer...

DAD: Well nobody wants to know really...you know like it has something to do with it -definitely...

O: You think so?

DAD: Oh yes....

O: Yeah...I mean that's interesting....I mean because you probably just have an 'instinct' about it...you know...more than anything....

DAD: Oh yeah....

O: Well that's great Dad... you know... this is really helpful... I've taken like... a lot of notes and so I'm going to turn this into a report for my friend...and I might call you back at some point to double check some stuff...

DAD: Of course....anytime...you know....whatever I can remember....I just found some old stuff again...I went through my old records....but I couldn't find them anywhere....it was such a long time ago....

O: It's okay....you know....just the way you remember it is fine...It's not so much a scientific article but an article about... what it was like...you know... to work under those conditions...like the sort of human interest more than anything...

DAD: Oh yeah... And you know the people who owned the factories...they didn't know much about it...because they....they just...they saw the money....and saw that they could make a few bucks...in those days plastics was the thing you know....

O: Yeah...It's like that movie you know... 'The Graduate,' when Dustin Hoffman talks about 'plastic' at the end... I remember that...it was the big thing... Plastic was the future!

DAD: Yes..Yes...

O: Well and all the little toys you know... when I had as a kid... we used to build those models...and they were all made out of styrene...Do you remember that....those little plastic airplanes and everything?

DAD: The many... the many (note to self: mini? not sure which he meant here) toys....

O: Yeah! It was all styrene....and it had the same smell...I remember the smell...

DAD: polystyrene...

O: Yeah!... I remember opening up one of those models those kits...you know... for an airplane....a WWII fighter plane or something...and you would open up the box...and it would smell the same as your shoes used to smell...and your coveralls used to smell...

DAD: Yeah...oh yeah...well you can't get rid of the smell you know...

O: It was in your skin!

DAD: But you know it was such a long time ago...so it's fifty years...fifty years now...

O: Fifty years! I know... that's a long time...I mean...it was just when I was very young so I barely remember...you know....I was just three or four... so...um...

DAD: You were young... you were very young...

O: Yeah...like... a toddler....So you were living... Where were we living? We were living on Queen Street in Kitchener....

DAD: On Queen Street and then we moved to Montgomery...Do you remember the little guy

downstairs? Poncho?

O: Yeah, Yeah, Yeah...

DAD: He was your friend...You used to be on the tricycle together....

O: And you made us a sandbox in the yard of the...I remember that...

DAD: Yeah...Yeah... You know what?... I used the monomer... the styrene... I killed weeds with it in the backyard...

O: (shocked)...Really?

DAD: We had a parking lot there and those weeds coming out all over the place....so I just took a five gallon can and took some stuff home with me at nights...and I dumped it on the weeds and...

O: You killed em!

DAD: You could see it die in front of your eyes....

O: Wow!... That was the liquid....

DAD: That was the liquid... yeah...

O: Wow...And that's called 'monomer.'

DAD: 'Monomer'....'M-O-M-O-M.'...

O: So that would be the styrene before it was cooked into the *polymer*...right?

DAD: Right...

O: And that's a liquid... And that came from Sarnia from the chemical factory?

DAD: Yeah it came...we got it in the tank cars...We did everything there you know...like we moved tank cars at two o'clock in the morning...You know how to move a tank car which has sixty-thousand pounds of stuff in it?...You take a crowbar and go under the wheel and just...push it... and then when it starts rolling you make sure you're on the tank car.... because they didn't always stop in front of the outlet...

O: yeah....

DAD: And they... you had a brake on each tank car....you just hope for the best...you stop...right where you're supposed to stop....

O: Oh god!...So did anybody get hurt doing that?... It sounds incredibly dangerous...

DAD: Oh it is dangerous....Yeah well....So I did this job and I never let somebody do it...you know...

O: Oh, I see... That was the foreman's job....

DAD: Yeah...we had guys getting hurt inside the plant... so there was...But you know these Newfies and the Nova Scotians....they never complained about anything...In comparison to the mines....where they worked before...you couldn't compare it....you know it was very dangerous too in those days....you know like....people died like flies....

O: Yeah, yeah sure....wow!....Well that's really interesting Dad...I have to say....I'd forgotten a lot of this stuff...you know you told us when we were kids but I'd sort of forgotten all the details... but it's really interesting... so..a...like I said...I'll get back to you and do a little bit of fact-checking...like once I've written this thing up I'll have a few things that I will have forgotten to ask you know...but I have to...

DAD: Yeah...well you know that basically... the system is still the same....to make thermoplastics but they have safer measures now....

MOM: (Comes on the line...) This is costing you a million....Oliver!

O: No.. No... It's okay... I have a... I have a plan! So it's okay... It's not a problem...

MOM: No...I just wanted to...you know.... I worry about your finances....

O: No...No... It's okay...I have a plan... It costs me the same to call you as it does to call somebody here in New York...so it's okay...

MOM: (a little astonished) Oh really?

O: Yeah...and I hardly ever use my cell phone so it's fine....so, no it's good.. I'm almost done...I just wanted to thank Dad and give you guys...just tell you that I'd probably call you back at some point just to double check some facts...but it's been very helpful...

MOM: Yes...Really? Good...

DAD: Well...I just told you what I know...

O: Yeah..well... that's good!...that's what I want to know....that's great...Personal experience is the most interesting thing for me...so um...

MOM: What are you doing? Are you writing a paper or?

O: Yeah... I'm working with somebody who is doing research on plastic...she's an artist...and she's doing work about petrochemicals....and we're looking for stories...you know...of people who've worked with plastic...in some way...

MOM: oooh!

O: you know...and some people make art with plastic....some people use it in their... I don't know... to wrap food or something...but...Dad actually *made* plastics...so I thought that would be kind of interesting...

MOM: Yes....And I think...and some people have said that some of his cancer can come from being exposed to plastics...so long...

O: Yeah...Maybe...

DAD: I think so too...

O: Yeah....Yeah...Well it's hard to say... but it sounds...probable...

DAD: Well...the working conditions weren't the safest....

MOM: Very primitive....yes

DAD: Of course nobody knew anything about anything...We had a guy from South America come and look at our place...and he said to me well these guys some of them have no shoes on...how can you have no shoes on...if you have to go on top of a reactor?....

MOM: Safety boots....yeah....

DAD: It was about 300 degrees Fahrenheit up there....

O: In South America?

DAD: Yeah...

MOM: No!...on the reactor!

DAD: He wanted to start his own plant...

O: Oh I see oh... So...people didn't wear a lot of clothes 'cause it was so hot?

MOM: Yeah...

DAD: Well... we wore shirts...no like...if you have a blowout...you get a chemical burn...that's it...l had a shirt once, which was red...a checkered shirt...and all the dye went into my skin....

MOM: It was awful...

O: (shudders) Ugh...

DAD: And you end up in the hospital pretty fast....I had to go to the hospital a couple of times...

MOM: Well...the safety regulations....There weren't any....so they just went on... they had to...

DAD: Well we had safety regulations but they weren't adequate...

O: Yeah... Oh god!...So you had to go to hospital for chemical burns?

DAD: Yeah... a couple of times...

MOM: And the breakage of bones...

DAD: Yeah... You just drive yourself, you know....nobody drives you...you go yourself...

O: Well that was a long way to go to the hospital...You had to go all the way to Kitchener...didn't you?

DAD: No...no...they had one in Preston...In Galt....

MOM: Just a little...first aid... more or less...

O: Yeah... So what did they do with the chemical burns... Did they put they just put some stuff on...or?

DAD: Yeah....they put some stuff on it....and then the management complained and said that, well, that Kellhammer is accident prone..

O: Oh jeez...

DAD: Well...the system was screwed up....that had nothing to do with me....you know....but anyway...

O: Wow... Well thanks a lot Dad...this is great....I really appreciate this...um...it's so interesting to

hear all this stuff....You have such a good memory too...that's good...I'm glad you a....

MOM: There's nothing wrong with his memory....that's for sure!

(We close the interview with a few parting pleasantries...)