



DEPARTMENT OF HEALTH
INTER-OFFICE MEMORANDUM

FROM FOR K.P. COOK	OUR FILE DATE 2-2-79	YOUR FILE DATE 2/2/79
SUBJECT: Jetty Operators handle Fuel Refinery Jetty		

1.8.79 The Joint Union Council of the Stevedores and Packers Union became alarmed at the possibility of exposure of the Jetty workers to dust from the "Fuel No. 1" due to built at 2200 1.8.79 and he demanded that Williams & Reckless Ltd. (Contractors for the Jetty, supervision) should make arrangements for the Jetty operators to have "lead tests" before and after loading the ship. All the Jetty Operators are members of the Stevedores and Packers Union.

Williams & Reckless Ltd have a contract from the oil refinery to manage the Jetty, and all Jetty operators. They are not oil refinery employees.

- Staff:
- 1 Manager & Contractor Capt H Williams
 - 2 Day Supervisors
 - 2 Evening & night Supervisors
 - 2 Day workers
 - 8 Ship workers

FILE
HON
K.P. COOK
2/2/79

THERE IS NO NEED TO HAVE THIS MEMO TRANSMITTED IMMEDIATELY IF ACCEPTABLE

DEPARTMENT OF HEALTH
INTER-OFFICE MEMORANDUM

FROM K.P. COOK	OUR FILE DATE 2-2-79	YOUR FILE DATE
SUBJECT: Jetty Operators handle Fuel Refinery Jetty		

- Working hours:
- 1 Manager - 5 day week 8am-4pm
 - 1 Day Supervisor - 5 day week 8am-4pm - work alternates
 - 1 Evening and night supervisor cover 4pm - midnight
 - 2 Day workers - 8am-4:30pm 5 day week - occasional overtime on shift work
 - 2 Ship workers Relative 12 hour shift
 - 3 days 7:30am - 7:30pm then 4 days off
 - 2 nights 7:30pm - 7:30am then 4 days off
- All operators may be asked to work overtime according to shipping movements.

Job description:

Consists and disconnecting 10 inch rubber hoses between ship and shore. Hoses carry crude oil that is discharged, and refined products for coastal distribution. The jetties are manned when tugs are alongside. Samples are taken and tanks "slipped" for water as

THERE IS NO NEED TO HAVE THIS MEMO TRANSMITTED IMMEDIATELY IF ACCEPTABLE

DEPARTMENT OF HEALTH
INTER-OFFICE MEMORANDUM

FROM FOR K.P. COOK	OUR FILE DATE 2-2-79	YOUR FILE DATE
SUBJECT: Jetty Operators handle Fuel Refinery		

required from ships tanks and from Jetty Sampling points. The operators hose down the jetties and are responsible for cleaning up oil spills on the jetties using Granulin oil spill remover. They are also responsible for monitoring the Refinery water ballast tank and slop tanks. (Ships carry ballast water as ballast & this is discharged before loading is possible). The men occasionally do check "drips" on refinery tanks to measure the amount of oil in the tanks.

The Jetty hoses carry

- 1 CRUDE OIL (No lead content)
- 2 FUEL OILS (No lead content)
- 3 DIESEL OILS (No lead content)
- 4 PETROL (Contains lead)
- 5 BITUMEN - No lead - this is 1500

THERE IS NO NEED TO HAVE THIS MEMO TRANSMITTED IMMEDIATELY IF ACCEPTABLE

DEPARTMENT OF HEALTH
INTER-OFFICE MEMORANDUM

FROM FOR K.P. COOK	OUR FILE DATE 2-2-79	YOUR FILE DATE
SUBJECT: Jetty Operators handle Fuel Refinery		

Bulk lead shipments: Every 2-3 months there is a bulk lead shipment in special ships. The ships crew are trained to do all the work attached to discharging and they wear protective gear and have their own Safety Supervisor on board.

The only duties undertaken by the Jetty Operators are:

- 1 handling the Jetty telephone
- 2 handling a radio telephone to pass messages between ship and shore.

In the event of a "lead spill" the ship's crew are trained to deal with it and Williams & Reckless Jetty operators have orders to immediately evacuate the area.

THERE IS NO NEED TO HAVE THIS MEMO TRANSMITTED IMMEDIATELY IF ACCEPTABLE

Above, 19790302 Jetty Operators at Refinery working hours & job description and Bulk lead shipments every 2-3 months.



Address all communications to
Teletype Address
H. Auckland

DEPARTMENT OF HEALTH
RECEIVED
21 MAY 1979
DEPARTMENT OF HEALTH
ENVIRONMENTAL LABORATORY
3 FENTON STREET, AUCKLAND 3, NEW ZEALAND.

20/2
Reply reference
340/3/164.

P.O. BOX 8944
SYMONDS ST.
TELEX NZ 2573
TELEPHONE:
775 978

17 May 1979

The New Zealand Refining Co. Ltd,
P.O. Box 44,
WHANGAREI.

ATTENTION: Mr Keith Allum

Dear Sir,

CLEAN AIR ACT 1972 - LEAD-IN-AIR TESTS DURING LOADING OF CONTROL TANKER

The following are the results of lead-in-air tests obtained by Dr Graham during the loading of coastal tanker "Kuoka" with premium mogas on 10 April 1979:

Site	Time	Concentration (mg/m ³)
1	0934-1056	0.4
2	1106-1155	< 0.02
3	1214-1327	< 0.01
4	1340-1433	< 0.04

... The sites are indicated on the attached diagram. They are -

1. At end of jetty, about 20m from Mogas lines and 15m from nearest vent on tanker.
2. Half-way down jetty, about 150-175m from tanker vents.
3. Beside control valves for storage tanks being emptied.
4. On beach, downwind of jetty and tanker, about 300m from tanker vents.

Sites 1, 2 and 4 were selected as positions of maximum mogas odour, downwind of the tanker. Wind speed was a steady 5 knots for test 1 and 5-10 knots for the remainder.

Threshold limit values for alkyl lead compounds (as Pb) are as follows -

Tetraethyl Lead - 0.10 mg/m³, time-weighted average concentration for a normal 8-hour work day or 40-hour work week (TWA)
- 0.30 mg/m³, short-term maximum concentration for a period of up to 15 minutes (STEL).

Tetramethyl Lead - 0.15 mg/m³, TWA
- 0.45 mg/m³, STEL

Handwritten signatures and initials: P.I., S.I., etc.

Above and below, 19790517 Lead in Air results done while loading the MV Kuoka:



The results show that the lead-in-air concentration at site 1 exceeds the TWA limits for both tetraethyl and tetramethyl lead and, in the case of tetraethyl lead, the short-term exposure limit is also exceeded. The worker located in the hut at the end of the jetty, adjacent to site 1, is therefore at risk.

As requested a copy of these results have been sent to JASMAD Research (Attention: Mr J.R.P. Clarke).

Yours faithfully,

K.A. Rolfe
Regional Air Pollution Control Officer

ENCL.

Medical Officer of Health,
Department of Health,
P.O. Box 137,
WHANGAREI.

Copy for your information.

K.A. Rolfe
Regional Air Pollution Control Officer

Lead in Air 0.4 mg/m³.
Maximum allowable 0.1 mg/m³. Limits exceeded by 400%.

Despite these hazardous air lead results in May 1979, lead hazards for refinery workers were not mentioned in an otherwise “comprehensive” Advocate newspaper article (at the end of this article).

General Comment: What were we exposed to sitting on the end of the Drums to drain the last of the TEL liquid and another open drum beside us ready to place the Education Tube to keep up speed?

Also see the statement about 5 Staff at the Refinery notified to Joint Meeting of having TEL Poisoning 6/3/1981 (in 19810306 NZ Refinery has 5 workers with TEL poisoning notified to Depts of Labour & Health article in this newsletter – excerpt below).

A general discussion was held on the notification of T.E.L. poisoning at the refinery; Five staff being notified - Of these, only one having a higher than average lead blood.

7
Surely I didn't say that.
[Handwritten signature]

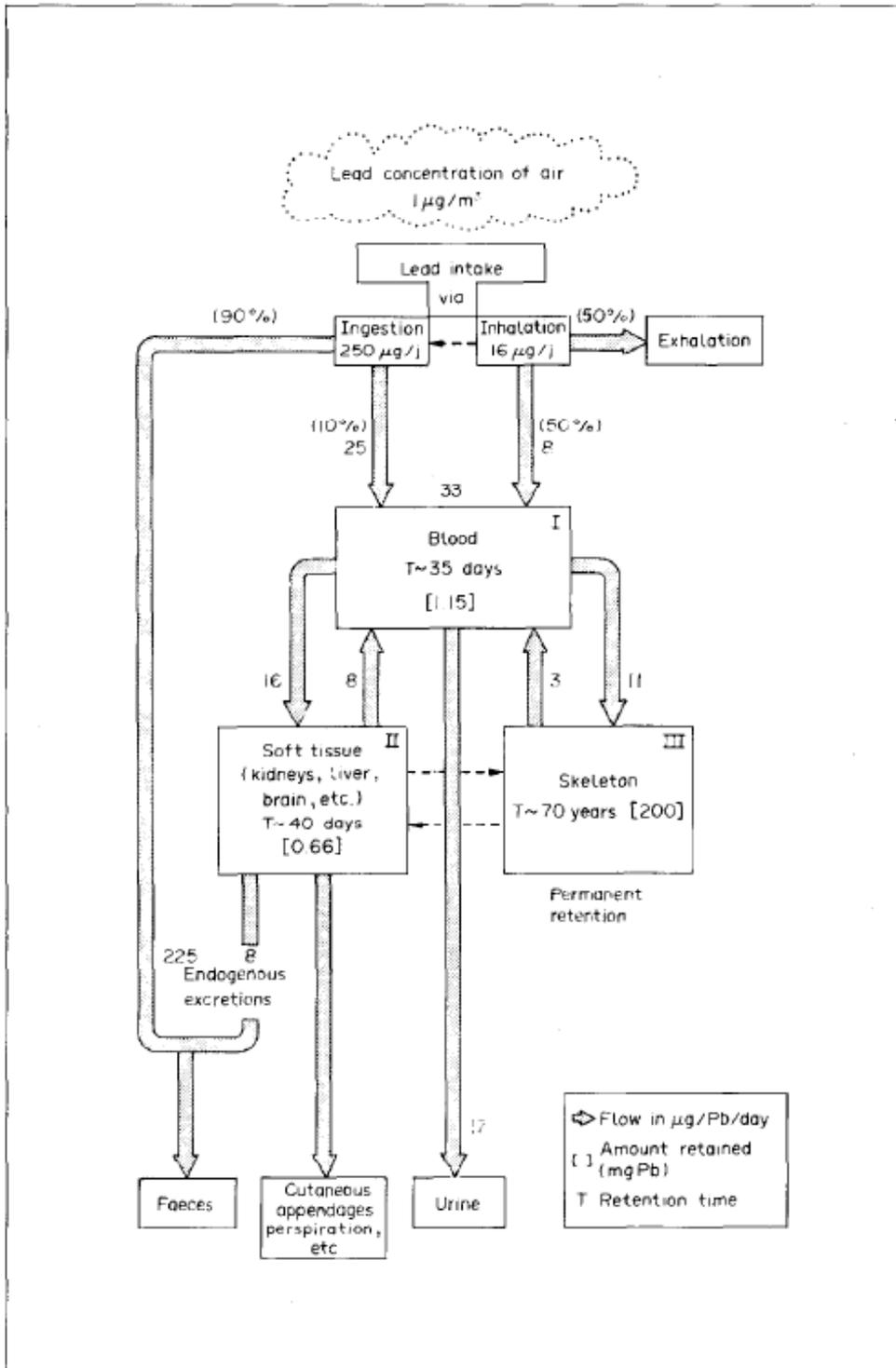
Q2. did you ever receive my email of Tuesday, December 5, 2017 which included the following:

If a person happens to be going to Canada, or can afford to go for the purpose, they can undergo x-ray fluorescence (XRF) testing of their bones for lead. Contact details of Professor Hu and Professor Chettle [included].

and did you ever contact Prof Howard Hu or Prof David Chettle, and if so, how did they respond? [Editor's note: see the graphic on the next page and associated text on bone lead from *Lead in petrol* (Caplun et al 1984) to get a better idea of why The LEAD Group has for many years recommended that people who were lead poisoned decades ago should go to Canada to have XRF bone lead testing done.]

A2. Yes I tried to contact but at that time we now have pretty clear evidence that my emails were being hacked and I never got a reply from either.

Q3. When did you have the bone XRF test done for which you never received the results? Who paid for your trip to the US for that bone XRF test? Who was the doctor/researcher you were scheduled to meet, and where, for the half day appointment that was cut short after the first bone XRF was done?



Editor's note:

The graphic at left: *Schematic representation of fate of lead in the human body* and the following text are from *Lead in Petrol*, by Elisabeth Caplun, Daniel Petit, and Edgard Picciotto, Endeavour. New Series, Volume 8, No.3, 1984. Pergamon Press. Printed in Great Britain.

<https://www.sciencedirect.com/science/article/pii/0160932784900073>



Compartment III comprises the skeleton, which contains almost all (more than 95 per cent of the body burden of lead, amounting to 200 mg for a male 70 years old (the total weight being approximately 7 kg, not counting the spinal cord). Lead uptake increases constantly with time since, with constant exposure levels, lead intake exceeds the lead eliminated. The gradual accumulation of lead in the skeleton has been demonstrated in several studies, which correlate* the increase in the burden of lead in the bones and the age of the individuals observed [1X]. That is why the concentration of lead in a tooth or the amount of lead released from bones into the blood or urine under the effect of chelating agents provides an accessible indicator not of an individual's recent exposure but of the cumulative effects of exposure. Furthermore, the rate of accumulation and the lead concentration in the bones are observed to be considerably higher in men than in women.

A3. I paid myself a total cost of NZ\$6000 and have emails confirming I was going for a half day of Testing with Prof. A R Todd. I had used a friend's computer to organise to get these tests done and Prof Todd had booked the lab from 0800 to 1130. Half way through the first XRF he said "sorry I have to go to a meeting - Kelly my Assistant will finish this off. By 0845 I was walking out the door and looked up at the Lintel seeing a bold shield saying "This Research Establishment Proudly Supported By ExxonMobil"....! The Tests were done at Mt Sinai, New York. Professor Todd said after several emails that perhaps as we wore Knee High Rubber Boots this may account for the lower Lead Levels in the shin. I never got a report in writing just a lot of algorithmic numbers that I couldn't find anyone to read. When I tried to get a written report I was told by email under USA Security Laws they were not allowed.....??.....!!!!

Q4. Have you found or received from anyone by email, any information on your non-cancer health issues and how they might be associated with lead exposure? I could spend the rest of the weekend just researching this question so if you have already gathered information, please email it to me pronto!

A4. Multiple documents from IARC, American Agencies, Canadian Researchers all saying that Organic Lead is readily dermally absorbed, damaging 2nd and 3rd epidermal layers resulting in skin cancers. Then is carried in the blood causing Neurological Damage, Psychotic Dreams, Sperm Damage, Sexual Dysfunction then becoming lodged into the bones. It remains there for up to decades where it metabolizes into 2 Ionic Lead Compounds that are recognized as being Class 2a Carcinogens. IARC also states that in the absence of Human Testing, Testing done on Animals is deemed to apply to Humans.

Q5. How is it that your non-cancer health issues seem to have been dismissed by the Accident Compensation Corporation (ACC), New Zealand?

A5. The health problems I have had have been studiously ignored by their Occupational Physicians, I have witnesses to this happening. They even got a Doctor to write a report talking glowingly about how well the Refineries Health checks etc were done yet the Doctor wasn't even at the Refinery at the time. In fact he was in short pants at Secondary School when the Manual Transfer and Blending Plant was in operation, up until 1977. The Refinery also shredded all Employment and Training Records etc when the Manual Plant was removed. Dr. Jim Mcleod started as Company Dr. in late 1988/89 period.



Q6. Is it the case that you already had one child when you began working at the refinery and no further children after your employment there began?

A6. My Wife had a second child while we lived there but I was NOT the father. I was totally sexually dysfunctional. When I got married the second time I went to the “Men’s Clinic” who said they had never seen someone like me and made up a “Penile Injection” that I was only allowed to use a maximum of twice a week. My second wife said it was too “Artificial” and ultimately that marriage failed too.

Q7. Have you been tested for infertility or would erectile dysfunction (or something else) on its own explain why you had no more children? Is your child still alive and still in your life?

A7. Fully covered in A6. If I had fathered more children there would have been high odds the child would have had problems. My only Daughter is still alive and she with her Husband and Family live approx. 1 km from me now. She is a lovely girl and a great mother.

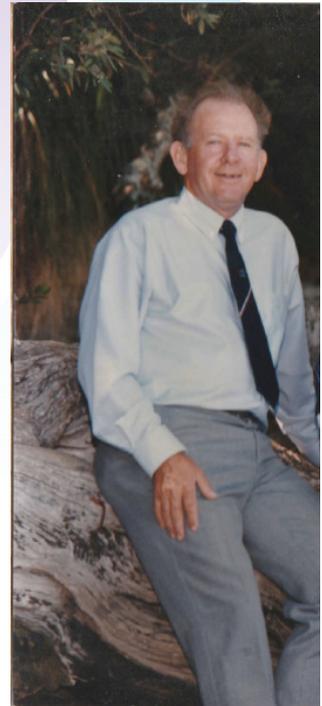


Photo (above) of Brian Arndt in 1998

Q8 Would you say that it is highly likely that you were constantly exposed to refinery fumes for all the time you lived at the refinery site (when did that finish?) and all the hours you were working there? Did you wear any protective gear when you weren’t working with the TEL/TML barrels?

A8. You could smell “Refinery Smells” 24/7. When the Lead Transfer was being operated and wind/breeze in the South/East the smell of Lead was very noticeable at our home in the Staff Area. We shifted into our own home which I built in 1969 around September if I recall. The only low lead petrol that came in direct was imported by Europa Oil which was finally taken over by I think Caltex. When the shipments arrived the Ship would berth at the adjacent Harbour Board Wharf and it would be unloaded at night by the Ship’s Crew and 2 Refinery Operators would unload the drums off the truck into the Lead Compound. There was no safety gear used at all. I have statements from 2 other Employees who verify there was no Health Checks done.

Q9: Did you work at the refinery during turnarounds? If you did, please give approximate dates / frequency of turnarounds you worked at. I hope I’m right in thinking that a turnaround is the same as a shut-down, which you said the refinery strongly resisted doing because they lost production during it...

A9: During my 10+ years I was involved in at least 6 shut-downs and was placed as “Night Supervisor” in at least 3 of them.

I was on Shift when an emergency call came in re: a fault had caused a Fire in the Refinery in South Africa. A product tube collapsed in one of the Crude Heaters, Furnaces named as the F100’s. As our plant was the same design we went into a “Crash Shut-down” at approx. 0200 hours in the morning. Yes there was a fault with the Tube Supports.



[Editor's note: It is easy to imagine that when Brian was working in the New Zealand refinery, precisely none of the following hazard warnings were heeded.

Management of Occupational Health Risks during Refinery Turnarounds, by M. Molyneux, D. Bonte, P. De Wilde, J. Ilinyi, T. Kaitale, A. Tiltnes, B. Simpson, J. Urbanus (Technical Co-ordinator), CONCAWE (established 1963), Brussels 2000, <https://www.concawe.eu/wp-content/uploads/2017/01/2002-00233-01-e.pdf> states:

During a TA [refinery turnaround or shut-down], delays in completing the work can result in significant costs in lost production. It is essential, therefore, to check the availability of likely additional resources, such as occupational hygiene specialists, so that they can be called upon as and when required. The nature of the work pattern, for example shift work covering 24 hours a day, should be taken into account.

The presence of large numbers of contractors on site for the duration of a TA has significant environmental health and welfare implications. Provision needs to be made for temporary office and living accommodation plus amenities for personal hygiene, protective clothing and equipment used at work. Easy access to dedicated clean areas for eating and drinking is essential.

Q10. You asked in your 29th July 2019 Memorandum to the District Court at Hamilton “can Court Orders be Given for Files that are Restricted until 2043/48 and some for 100 years to be released to be read by your Honour or a Court Authorized Officer to enable the Truth to be told” – do you know why the files are restricted?

A10. The Files that are Restricted I believe hold details of Workers Health and their ultimate Death. The files that are restricted until 2043/2048 are “Commercially Sensitive”.

There also are files that have 100 Years restriction on Privacy Grounds, these I believe are details of Workers who have died. Accident Compensation Corporation (ACC) have as their Head Spokesman on Toxic Problems a Mr. John Monigatti who says quite blandly that Organic Lead is not a Carcinogen. He totally ignores IARC Monograph, Vol. 87 that explains in clear detail the route that this material takes through the skin and ultimately ends up in the Bones where it Metabolizes into 2 particular Ionic Lead Compounds that are a Class 2a Carcinogen.

He has also stated that no one died of Cancer at the Refinery.....

I have the Medical Reports that show quite clearly that one of the Employees who Died of Cancer - being Ductile tumours - where the Refinery Medical Team told his Family that he had “Mesothelioma”.....

He also said that the high lead levels in my Teeth were caused by Lead Fillings.....



Other general comments from Brian Arndt:

Feel free to use anything I have written. I strongly believe everything I have written in all my emails is true and correct and have backup emails to prove it. It's astounding that workers health issues as in general have gone under the radar.

You must have had "Manual Plants" in Australia same as here, where have all the records gone I wonder. The absence can almost be taken as guilt because if it was so safe as Kehoe and his cohorts said they would have kept them.

Talking of Kehoe I read the article *Hunter's The Diseases of Occupations - Lead Poisoning 1955-1975* (in this newsletter) and it is of great historic interest and certainly shows up the falsehoods they spread and most likely were paid to fabricate.

My latest tests have had one bright side in that my Prostate looks to be all clear in my recent PET/CT Scan. On the negative I have to go to a Heart Specialist and Neurologist, there is a suspicious something on my brain, Bugger! For good measure to make my day I have to have a Colonoscopy as soon as, life never gets dull and boring.....I am not too well this morning - woke up with BP [blood pressure] 202/97 and feel bloated and thick in the head. I cooked a slow cook lamb dish with vegies it was yummy but food is obviously not agreeing with me.

The story just goes on and on, I just want to see the Truth come out.

Brian Arndt
