

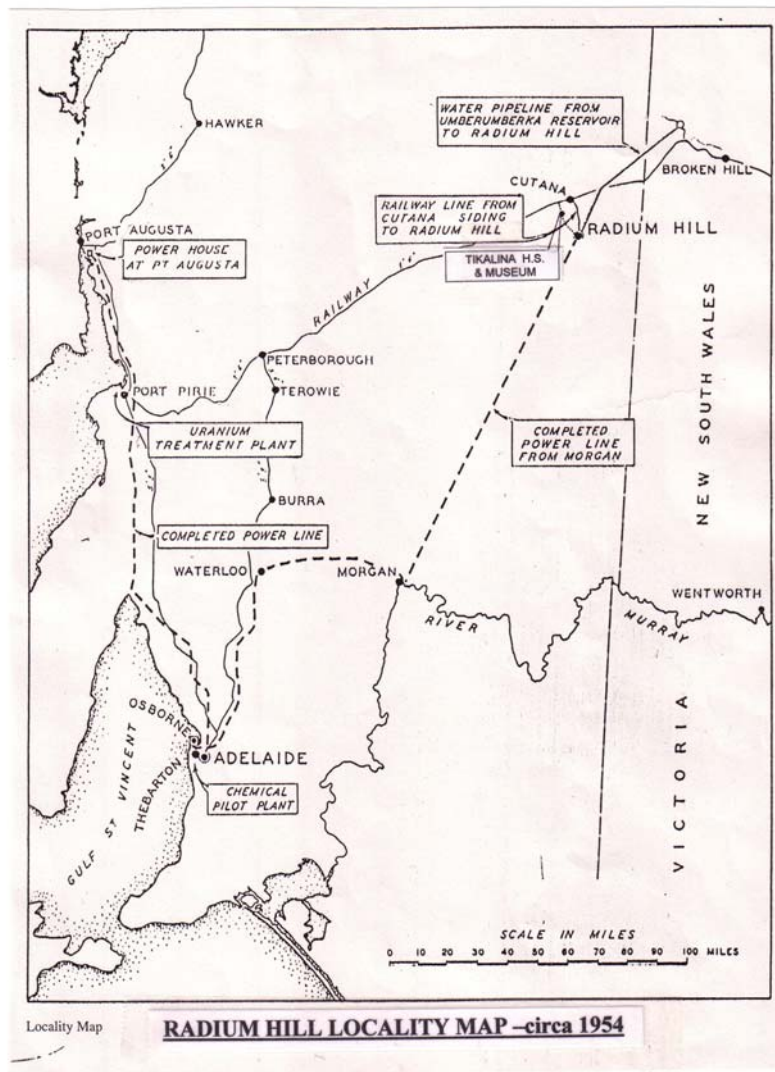
“A Clouded History”

RADIUM HILL AUSTRALIA’S FIRST URANIUM MINE ITS BIRTH, DEATH AND LEGACIES

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I have prepared this version of the Radium Hill story to give an overall picture and context, bearing in mind that there is no absolute truth. It will explore the good, the bad and the ugly.

The good, well nearly everyone wants to talk about it and claim ownership
The bad, don't talk too loudly about it.
The ugly, well: I didn't know anything about that.



Radium Hill is located 460km Northeast of Adelaide and 110km Southwest from Broken Hill in an isolated saltbush and bindii environment which received on average 190mm of rain per year but had an evaporation rate of nearly 2 5m.

A prospector named Arthur Smith pegged a claim on what he thought was a wolfram or tin oxide bearing lode of ore in March, 1906 at a location approx. 24 miles E.S.E. from Olary. Samples of the ore sent to Adelaide were identified as being radioactive and containing Radium/Uranium. The ore type was named Davidite by a young geologist from Sydney named Douglas Mawson who worked at the University of Adelaide.

Initially the site was known as "Smith's Carnotite Mine" and later that year (4/9/06) Mawson proposed the name Radium Hill, possibly the only eventual town site to be named by him. He also had a half share in one of the many early mines stretching for 3 miles along the line of lode.

Radium was the most costly and sought after mineral in the world at the beginning of the 20th. Century and Uranium the most sought after in the 1950's for military and energy purposes. Intermittent mining occurred between 1906 and 1931.

An article in the Adelaide Register of 1913 stated, "one ounce of it would be sufficient to drive or propel three of the largest battleships afloat for a period of two thousand years".

The article went on to state, "it will mean that foreign nations will be obliged to seek from us the power wherewith to heat and light their cities, and find means of defence and offence...".

How prophetic ninety years on.

That same year of 1913 a baby boy was born at the mine and his proud parents named him **RADIUM** Keith Lively.

During this early phase of mining the miners and their families had it tough. Rabbits, kangaroo and the occasional jumbuck were the main sources of meat, and stew the main dish. They lived in tents and humpies.

In March 1952 an agreement was entered into whereby the S.A. Government would re-open and operate the mine and the uranium output would be purchased by the Australian, U.S.A. and British Governments. A section of Maldorkey Stn was annexed and proclaimed a Uranium Mining reserve.

A tent town sprung up and the lure of earning big money proved to be a magnet for the workers and miners many of whom were migrants from the war torn ravages of Europe.

Having just turned 16 and left school, I started work at Radium Hill in early March 1953.

I was about to be educated at the university of life.

Hours of work were 10 hrs. per day. If it wasn't for being paid a camp allowance I would have had to pay the mines for working there as my wages as an apprentice didn't cover the cost of renting a tent, blankets and the food I ate from the camp mess. One Sunday lunch time I had my first experience of mob rule. Cold pork was served and a maggot was seen galloping across the

top of a fellow's plate across from me. "Look a maggot", my brother along side me screamed. Well, all hell broke loose with the noise of cursing and swearing in a couple of dozen languages plus smashing dinner plates of 300 men being thrown back through the servery at the cooks. What a din, what a mess in the mess. That night we had roast lamb and beef, and a variety of sweets. The cooks were trying to curry favour.

Beer tickets were issued at two per day, per man, perhaps. I'd sell mine to help pay my way. No spirits or cameras were allowed on the field, which boasted four private cars, two of which were engaged in sly grog running to satisfy an eager black market.

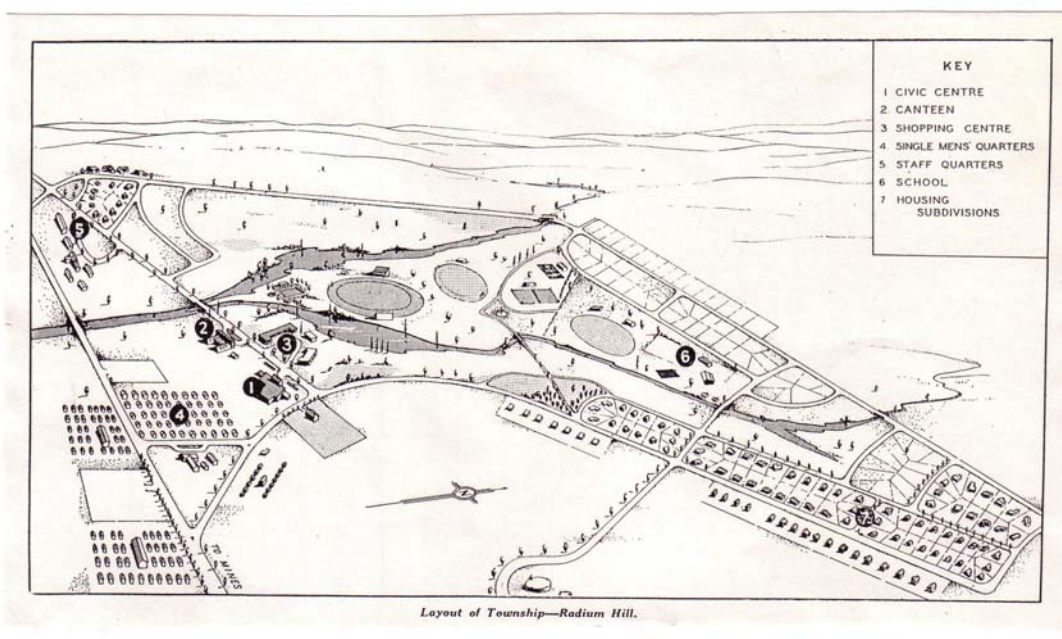


In those early days it was a rip roaring tent camp inhabited by many rough diamonds who would rather have a fight than a feed and would gamble a fortnight's wages on the throw of the dice at one of the many gambling tables that operated in the evenings.

For all of that, one of the gambling venue operators went on to become a Member of Parliament for seventeen years and was also a Government Minister.

Over a reasonably short period of time a model town was established containing 165 houses and 220 two-man cubicles. Many migrant families had arrived, lured with the promise of a new home, good paying job, no rationing, adventure, sunshine and a new way of life. Within a few days they had learnt the outback Australian salute and the phrase "blutty vlies". At one stage the total population was 1200 people. A high voltage transmission power line from Morgan 201km away supplied electricity and fresh water was piped in from Umberumberka Reservoir near Broken Hill some 85km distance.

Road, rail and air services were provided which lessened the feeling of isolation. No longer was Radium Hill a rough and tumble tent town, it was developing a multicultural community spirit, the people had a sense of belonging, for many it was their first home in Australia. The first train into Radium Hill arrived in Oct. 1953 and was called the, "Atomic Comet". May have been called something different today?



The town was built as three sections, staff, married daily paid and single men's cubicles around the central sporting and shopping venues. The mine manager's house was located near the top of a hill where he had a view of the distant mine and all parts of the town. The four senior staff were located directly below him and other staff below them again. The section housing the married daily paid workers was about half a km distant and lower again whilst the single men's cubicles were approx one half a km distant from both the staff and married daily paid houses.

Garden competitions were conducted to promote a greening of the townsite and to lessen the effects of dust storms. Boulders and beer bottles were used to great effect to border the garden beds and 5000 trees were planted along the streets and in the recreational areas.

A rather unique organization called The Radium Hill Social Club grew up in the community to encourage social and sporting interests in the town, surrounding pastoral district and townships. It played a major role in the development of the close knit community spirit of Radium Hill and was financed partly through the profits made by the wet canteen or "boozier" as it was affectionately known.

The Social Club also produced a weekly information/newsletter called the "Radio Activity". Once again the name is a reflection of our views at that time. The Radium Hill Football Club had a monogrammed pocket on its blazer depicting an exploding atomic bomb mushroom cloud as its motif. A unanimous choice by the club members: we reckoned that we were great.

As a country town Radium Hill was very active in most sporting and social activities. If you wanted some sporting facility, building or equipment for a particular activity then get some like minded people and volunteers together, raise some money by putting on a keg or two, running a fete, a bug evening, dance or raffle and just do it. A humid crib for the A.I.M. Hospital where 117 babies were born, two churches, Olympic size swimming pool, ovals and change rooms, Kindergarten and many other facilities and equipment were obtained using this approach with some help from the Social Club.



As Frank Pignitter a migrant said, “we were strangers when we arrived and became friends, from being individuals we built a community spirit that was Radium Hill”.

In 1961 the fateful announcement was made that the export contract for supplying uranium was not going to be renewed and that the mine would close at the end of the year.

Feelings of shock, anger, sorrow and disbelief swept the town, they can't do this, where will we go, what will happen to our homes, our lovely gardens, they've spent too much money here, they just can't close it down,.....but they did.

“Who killed Radium Hill, I said Tom with my atomic bomb” painted on the side of the coffin carried in the Labour Day Sports parade of 1961 was a sign of their anger.

By the end of 1963 the mine shafts had been capped, houses, mine buildings and everything else had been removed or flattened, except the Catholic Church building walls which were saved by divine intervention, the Staff mess walls and the concrete ore bins in the Mine area which survived a number of explosive demolition attempts. The people were found jobs in other locations, towns and cities where their skills and labour were required.

LEGACIES

- Perhaps the most tangible and longest lasting relics of the Radium Hill ghost town will be the concrete head frame ore bin, claimed to be the biggest in the southern hemisphere, the 2000 ton mill concrete ore bin and the concrete 2,000,000 gallon water tank on top of tank hill, a great aerial land mark.
- The gum tree lined bitumen streets and beer bottle and boulder bordered garden beds where only bindi now grow are in sharp contrast to the tended gardens of yesterday and the harsh surrounding country side.

- Sixty-six house number and occupant name plaques have been erected on former house and business premises around the old town site.



- The Radium Hill Pioneers Cemetery with its unique entrance portal, cairn and plaque recording some of the tragic deaths of infants who now lie in peace, their passing caused by drowning in a bath during a hot spell, another by dehydration caused during a heat wave when the Flying Doctor was grounded at Pt. Augusta by strong 54mph winds, 109F temperature, a raging dust storm and so couldn't make it to the ill baby. Another being killed in a road accident. Gelnite explosives or fracture boxes were sometimes used as coffins for the infants. It is claimed to be the most cared for and best looking cemetery in outback Australia

Radium Hill was the catalyst for other developments in the Australian mineral industry.

- It was the first uranium mine in Australia to enter into an export agreement for selling its product overseas.
- It was the first time in the world that the boiling concentrated sulphuric acid technique was used to further process Davidite uranium bearing ore.
- At Radium Hill the heavy media milling process was used for separating hard rock ore for the first time in Australia.
- A barite mine was established near Quorn to provide material for the processing of uranium concentrate at Pt. Pirie and later to be a source of dense aggregate for the Lucas Heights Project.
- A pyrite mine was opened near Nairne as a source of base materials for the manufacture of sulphuric acid, which was also used in the processing of uranium concentrates at the Pt. Pirie Treatment Plant.
- The S.A and Federal Governments together with the mining industry established the Australian Mineral Development Laboratories or A.M.D.E.L. as it is known, to keep together the various research science specialists associated with the exploration, mining and milling requirements of Radium Hill and subsequently the broader Australian mining community as a whole.
- In 1953 it was envisioned that a nuclear reactor may be located on Spencer Gulf to generate electricity and desalinate water using Radium Hill uranium as its energy source. Maybe this plan will re-surface, who knows?
- The pool of experts so gathered at A.M.D.E.L. and the Mines Department prompted Professor Eric Rudd to help form The Australian Mineral Foundation in Adelaide which acts as a focus for the Australian mining industry.



- In 1981 Radium Hill became the first Australian State Government Gazetted Radio-active Waste Dump site.
- A survey of former Radium Hill miners revealed that by 1987, 54 had died of lung cancer. It indicated a significant increase in the risk of contracting lung cancer when compared to the general population. Many more have died since. The results of this survey by the Department of Community Medicine, Adelaide University and the S.A. Health Commission has led in part to the implementation of regulations for safer working conditions in the uranium mines of today.



- The Radium Hill Historical Association Inc. was formed by ex-Radium Hill residents to establish and preserve the historical and cultural heritage of the former Radium Hill town, Radium Hill Pioneers Cemetery and the Radium Hill Heritage Museum. It also acts as a focus regarding news, information and welfare of former Radium Hill residents. The Assn. will be conducting a reunion at Radium Hill during Easter, 2006 to mark 100 years since it was first mined.
- Perhaps part of the former 2000 hectare uranium mining reserve could now be proclaimed a mining heritage reserve, in recognition of Sir Douglas Mawson's involvement with Radium Hill and of its unique historical and cultural contribution to the Australian mining industry.
- Radium Hill was one of the few Government projects that made a profit.
- The first circus complete with elephant hit town in 1955. Like Radium Hill the town, it was not a white elephant.



HISTORIC LEGACIES OF RADIUM HILL

1. Australia's first uranium mine
2. The first Australian uranium export agreement
3. World first for using boiling concentrated Sulphuric acid to process davidite uranium ore.
4. First use of the heavy media milling process for separating hard rock ore in Australia
5. The establishment of a barite and pyrite mine for raw material to help process Radium Hill davidite ore
6. The catalyst for establishing the Australian Mineral Development Laboratories
7. 1953 plans to generate electricity and desalinate water using Radium Hill uranium
8. Catalyst for the Australian Mineral Foundation
9. First Australian State Government Gazetted radio-active waste dump site, (1981)
10. Ex-miner lung cancer deaths, survey and improved uranium mining safety regulations
11. Radium Hill Historical Assn. and Heritage Museum
12. A Government project which made a profit.

Together we have journeyed through the last 99 years of the Radium Hill story and "that's the way it was".