

## **The Early History of Deep River and “the Plant”**

### **The DIL-NRC-AECL Evolution**

In 1910 five Canadian explosives companies merged to form Canadian Explosives Limited (CXL). This company then established a series of explosives-manufacturing facilities across Canada, including a new factory that was built in Nobel ON in 1914. The Nobel facility was largely destroyed by fire in 1923. In 1927, when CXL began to produce paints and varnish as well, the name was changed to Canadian Industries Limited (CIL). During this period DuPont, a large USA company acquired a large portion of the CIL shares. As WWII became imminent a new Crown Corporation, Defence Industries Limited (DIL) (a federally-owned, privately-operated company), was spun off as a subsidiary of CIL in 1939. DIL was staffed largely by former CIL personnel and its mandate was to handle the construction and operation of Crown-owned munitions plants. DIL re-established a large explosives complex at Nobel and started a number of other factories including a huge complex in Ajax ON where munitions were assembled.

When the decision was made to locate a site in Canada for a pilot plant for the production of plutonium using heavy water as a moderator, DIL was the natural choice of a contractor to carry out this task. A contract was drawn up between the Federal Department of Munitions and Supply and DIL, dated 07 July 1944, even before the final decision of a site location had been made. On 19 August C.J. Mackenzie and others presented C.D. Howe, so-called “Federal Minister of Everything”, with cost estimates for the Nobel and Chalk River sites and he accepted their recommendations of the latter as the better site. DIL now looked for a sub-contractor to carry out the actual construction task while it would remain the prime contractor and project manager. The subcontract to build the plant itself was awarded to Fraser Brace Limited on 23 August 1944. By 29 August 1944 an area of 550 acres had been expropriated by the Department of Munitions and Supply for the Deep River residential site [1] and by early September Professor Bland of McGill was commissioned to prepare a layout of the town. Expropriations of property for the Plant site had already occurred.

With the end of WWII approaching, surplus housing was available at a number of the munitions facilities operated by DIL throughout the country. Many of these so-called Wartime Houses that had been built at these facilities were cut in half and transported to the Deep River site by train and trucks from Nobel, ON, Arvida, QC, and Brownsburg, QC starting late in 1944 and continuing in 1945. Bothwell [2] reports that 120 W-4 (wartime, four-room) houses were brought in from Nobel and that thirty new houses were built in Deep River in the first pass of construction. Eggleston [1] reports that the first ten houses in town (late fall of 1944) were ones that had been transferred from Brownsburg and rebuilt in Deep River.

Deep River and the Plant site would soon be inundated by a large number of new people – research personnel employed by the National Research Council (NRC) (as well as by the UK government in some cases) and construction and operating personnel employed by DIL and Fraser Brace. The first two “residents” of Deep River are claimed [3] to have been D.S. Kirkbride and Bill Linton – both believed to have been DIL employees. Kirkbride is identified elsewhere as General Superintendent of the Petawawa Works (as the Chalk River project was first designated) and was housed after a short while in one of the preferred houses on Beach Avenue with his family.

DIL administered all of the town facilities including housing and medical facilities. T.W. Morison came to Deep River from Nobel in 1945 [4] to be the Administrator of both the Plant and the Town for DIL while

F.J. Hammond, who also arrived in 1945, was appointed Superintendent Administrator of the townsite. Dr. Wilfred Park was a DIL employee designated as Town Medical Officer and Manager of Hospital and Sanitary Matters. None of the houses within the “town” were privately owned.

Over the next 15 years Deep River continued as a “company town” with no private ownership of housing. NRC continued to be responsible for research at the Plant and DIL continued to be responsible for the operation of the Plant and the Town. DIL however, was terminated as a Crown Corporation in 1947 and its responsibilities for the Plant and Town were transferred fully to NRC. A significant number of DIL employees transferred to NRC at this point. [4]

In 1950 NRC turned management of the Town over to the Central Mortgage and Housing Corporation (CMHC). This arrangement proved to be unpopular and did not work well; the following year management reverted to NRC.

In 1952, A new Crown Corporation was formed – Atomic Energy of Canada limited (AECL), with responsibility for both the Town and the Plant. It took over the responsibilities formerly held at Deep River and Chalk River by NRC. Several years more were to go by until Deep River began to lose its “company town” label. In April 1956 some of the AECL houses were offered up for sale to their occupants. This coincided with Deep River being declared “an improvement district” under provincial legislation. Self-government and incorporation as a Town did not however occur for two more years until the Town of Deep River officially came into being 01 January 1959. AECL gradually sold off more houses but retained ownership of some of the housing in Deep River until the 1980s.

### **Fraser Brace’s Involvement**

*(The following information was gained from a conversation with Margaret Cook on 20 September 2017. Margaret was the first female to work for Fraser Brace – in the village of Chalk River, and then later at the Plant site.)*

Fraser Brace was a large, Montreal-based, engineering company awarded the construction contract for both the Town and the Plant. Major J.H. Brace was the President of Fraser Brace and took an active part in the execution of the contract. He was originally a USA WWI veteran (hence the Major title) and oversaw all the Canadian projects of Fraser Brace. Fraser (first name unknown), was a Canadian who oversaw all the company’s American contracts but had very little direct influence in the Chalk River contract.

Charles Gray, Office Manager for the Fraser Brace operations at Chalk River, offered Margaret Cook, a local woman who had attended business college in Montreal, a job as “teletype operator”. She accepted the position and on 06 September 1944, at the age of 18 years, she started work. She was the first female employee for Fraser Brace on the Chalk River contract. An office was initially set up in Chalk River on the north-west corner of the intersection of Hwy. 17 and the Plant Road in what was then Harper’s “garage and barbershop”. (Harper later also had a motel at that location but it was demolished when Hwy. 17 was widened in the 1980s). As Margaret recalls, her first stool was an empty keg of nails with a rudimentary cushion– a far cry from today’s “lumbar-support” chairs. The office space at Harper’s was also shared by the RCMP who were responsible for security of the highly-secret

undertaking. Margaret recalls a Corporal Lockwood of the RCMP as being responsible for fingerprinting all potential employees. The barbershop section was turned into the employment office and was used to process the hundreds of construction workers who soon began to pour in.

Fraser Brace's main office moved to the Plant site in January 1945, when the road from Chalk River was still in a very rudimentary state particularly in the area of the Maskinonge Creek which joins Maskinonge and Sturgeon Lakes. The drive to the Plant in the early spring often involved a drive from Chalk River to the Creek area, a trudge through the mud (sometimes in high heels) and then a continuation of the journey in a second truck located on the Plant side. Margaret followed the move to new Fraser Brace offices, which were located below the brow of the slope south-east of what became Bldg. 412.

As Margaret recalls, the person in charge of construction at the town site was Bill Muir while F.J. (Jeff) Palmer was in charge of construction at the Plant. Fraser Brace's efforts at the Plant and Deep River wound down by 1947. Margaret transferred to NRC for a short time before rejoining Fraser Brace in Montreal for an extended period. The company worked on numerous contracts, particularly on behalf of CIL and DuPont, until it ceased to exist a short while after the death of Major Brace in the early 1960s.

From about 1946 until 1970 the Fraser Brace employment office remained unused behind the garage from where it was recovered and, after minor repairs, was moved for a short time to the town campus in Deep River to celebrate the Silver Jubilee of the town in 1970. It is shown at that location in the photograph below.



Photo source – AECL.

#### References

1. "Nucleus" by Robert Bothwell
2. "Canada's Nuclear Story" by Wilfred Eggleston
3. "A History of Deep River" put together by the 1970 Silver Jubilee Committee
4. "Deep River" by Joan Melvin.