

DICKINSON COUNTY HISTORY -- FORD MOTOR COMPANY – CHEMICAL PLANT

[Compiled and Transcribed by William John Cummings]

The Iron Mountain News, Iron Mountain, Dickinson County, Michigan, Volume 4, Number 12 [Thursday, April 24, 1924], page 1, columns 1-2

Ford Chemical Plant Will Start Operation Next June

Installations Are Rapidly Nearing Completion; Will Utilize All Waste.

It is now expected that the chemical unit of the Ford Motor company's plant here will go into production the middle of June.

Work on the distillation building is well advanced. Practically all the equipment is installed and the principal work remaining to be done is the piping, which, it is said, can easily be completed before the prospective date for starting operations.

The carbonization building and its extensive equipment are not as far forward as the distillation building. However, the huge cylindrical dryers, through which the green wood passes in the course of being seasoned for the retorts, are now in position and the motor drives with which they are revolved are being tested. There are six of these huge rotating cylinders, two rows of three each, placed one above the other.

The three vertical cylinder retorts that will receive the wood from the dryer are in position. The wood will be fed into the top of the retorts, in which carbonization occurs, and charcoal will be taken continuously from the bottom, the process requiring from two to two and a half hours.

Detail Work Unfinished.

The drivers and the retorts, the largest and most important pieces of equipment in the plant, are now nearly ready. There is, however, a vast amount of supplemental equipment, most of which is in place, but on all of which much work remains to be done. The briquetting [*sic*] installation has still to be made.

While to the layman it appears that there is several months work still to be completed before the plant can go into production, the engineers declare that the work is much more forward than it may seem to be, and express no doubt that the plant can begin the production of chemicals about June 15.

When production begins the company will have a large daily output of charcoal for which there will be no use, at this time, at the Iron Mountain plant. While it is expected that ultimately it will be consumed in a charcoal furnace, no plans for the construction of such a plant have yet been announced. It is said that there is a ready market for the charcoal, and until such time as the company can use it in its own processes much of it will be sold.

Consumes All Wastes.

The Stafford process, utilized in the carbonization building, has as its special merit the consumption of all wastes. Hog fuel and sawdust find their way into its retorts, as well as block fuel. This means, of course, that much of the charcoal product comes from the retorts in the form of dust. This dust is briquetted [*sic*] under pressure, and with use of a binder, into small bricks, those made experimentally at the plant being the size of a small biscuit. With this unit fully in operation the last of the wastes at the Ford plant will be eliminated and the company will be utilizing in one way or another all the value in the logs it hauls to its mill.

The chemical plant is designed with the purpose of minimizing labor to the greatest extent possible. The wood is handled by

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hand at no stage in the process, from the time it leaves the hogs and the machines form which the waste is picked up until it emerges from the retorts as charcoal. From the condensers through which the fumes from the retorts pass, the distillates are piped back to the distillation building without human agency. The operation of the huge plant will require only some thirty men on a shift.

Can Increase Capacity.

The carbonization building is so constructed that it will be possible to increase the number of drying cylinders to ten and of retorts to four, should this be necessary, and it is said to be likely that it will be done, as the present outlook is that the wastes will exceed the original estimates.

Work on the distillation building was begun early in the fall, but the erection of the carbonization building was not started until winter was well under way. It was pursued without a break through the severest weather of the winter months and surprising progress was made with it. The Worden-Allen company had the contract for the buildings in the unit, and the Badger company is installing the equipment in both the distillation and carbonization plants, the company controlling the Stafford process. While this process has been used successfully in Tennessee by the Eastman Kodak company, the Ford plant is far the most complete and modern in which it has been installed. Some idea of its extent and intricacy maybe gained form the statement that some 200 motors will be used in its operation.

Steel work for a shipping building for the chemical unit is now going up.

Iron Mountain News, Iron Mountain, Dickinson County, Michigan, Volume 5, Number 69 [Wednesday, July 1, 1925], page 1, column 5

HUGHES LEAVES FORD COMPANY

Becomes Associated With Manistique Lime and Stone Plant

Gordon Hughes, for the past two years connected with the chemical plant of the Ford Motor company, left last evening for Manistique where he will be associated with the Manistique Lime and Stone company.

Mr. Hughes came to the Ford Motor company from the Eastman Kodak company. He was formerly with the Cleveland Cliffs Iron company at Marquette, and ahs a wide business and social acquaintance throughout the upper peninsula.

Mr. Hughes came here when the chemical plant was built. He was in charge of this unit and supervised its development. The Ford chemical plant has only one duplicate in the country in the process used, employing a radical departure from the customary methods of wood carbonization and distillation.

The Iron Mountain News, Iron Mountain, Dickinson County, Michigan, Volume _____, Number _____ [Monday, January 28, 1946], page ____, column _____

Ford To Close Iron Mountain Chemical Unit

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IRON MOUNTAIN, Jan. 27 – Because waste-wood from the company's own operation has not, for some time past, been produced in quantity enough to keep it going – and has been obtained, instead, at prohibitive cost in the open market – the chemical plant of the Ford Motor company here, in constant production since August, 1924, will be shut down next June, Walter G. Nelson, superintendent, announces.

Of the 132 men now employed in this department, 100 or more maybe absorbed in the two body plants on a seniority basis, which may mean that some men now at work in the body plants may be released to make room for the older employes *[sic – employees]*, Nelson added. About 2,150 men are now employed in all departments of the plant, compared with the wartime average of 3,500.

Principal products of the chemical plant are charcoal briquets *[sic – briquettes]*, used widely in industry, methanol, a primary ingredient of formaldehyde, and also a popular anti-freeze solution, and ethyl acetate, used largely as a solvent in the manufacture of paints and lacquers. The average output of briquets *[sic – briquettes]* is about 100 tons a day.

Abandonment of the chemical plant, to begin early in June, will proceed over a period of about two weeks, or until all materials on hand are gone. There is no immediate plan for use of the building after its abandonment.

History Of Plant

The history of the chemical plant dates back to the early days of the popular Model-T, built largely of wood, covered by metal sheeting. Wood-working was then the principal operation in Ford car and truck construction, and large quantities of waste material were accumulated. The chemical plant was a natural – and formerly profitable – outlet for this material.

In recent years, however, as steel has gradually replaced wood in the construction of all Ford units – station wagons, coupes, sedans, trucks, etc. – wood-waste has fallen off to a dribble, and for the past two years or more the company has been buying chemical wood in the open market. “Since the plant was designed and built primarily for the use of waste-wood, its operation with materials purchased in the open market has resulted in consistent loss to the company, and it is now decided to discontinue the operation,” Nelson said.

Railroads Use It

Although some of the briquets *[sic – briquettes]* produced in the chemical plant have gone to the local market, most of the fuel has been absorbed by industry, and a large part of the railroads of the nation, the superintendent said. Briquets *[sic – Briquettes]* are widely used for cooking, in dining cars, and for heating – during the winter months – of refrigerator cars used to transport fruit, vegetables and potatoes, to keep them from freezing. Briquets *[sic – Briquettes]* are also extensively used by packing companies, to smoke hams and other meats.

Unaffected by seasonal shut-downs, when other departments of the business were being retooled for new models, the chemical plant has operated steadily, often taking up a large part of the employment slack during these periods.

This is the only chemical plant operated by the Ford Motor company.

Depends On Production

After next June, therefore, the activity at the plant will be devoted wholly to production of station wagons, the new Sportsmen's *[sic – Sportsman's]* Convertible, and trucks. This plant is the only Ford branch in the nation producing station wagons and the newly-designed Sportsman's Convertible. Comprised largely of steel, the metal parts of the

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station wagons and Convertibles [*sic – convertibles*] are shipped here, from Dearborn, for assembly.

Since freight and other costs of shipping the steel to Iron Mountain are considerably greater than a similar amount of wood-parts shipped from Iron Mountain to Dearborn, as in the past, increased employe [*sic – employee*] productivity and efficiency of operation are looked to in making up the differential. Permanency of the work depends wholly upon an economical solution of these factors.

“We do not like to see any part of the plant closed down, and the company regrets that the chemical plant must go,” Supt. Nelson said today. “However, there is no alternative, and we can only hope to make up the difference in employment through increased production on the station wagons, the Convertible [*sic – convertible*] and the trucks. We believe this can be done.”