

The story of the Tacoma plant, largest on the Pacific Coast, differs in many details from that of the Baltimore refinery. Here were no beginnings rooted in the dim past, no decades marked by financial upsets. The Tacoma plant came into being following the completion of the Northern Pacific Railroad to Tacoma in 1887. This brought an influx of people. At that time there was considerable prospecting in the state of Washington. Much of the ore produced was basic. The need of a smelter was apparent.

With this was coupled the need for tonnage for the Northern Pacific.

A St. Paul capitalist, Dennis Ryan, visualized the opportunity that lay in the new and up-and-coming town. In 1887, he formed the Tacoma Milling and Smelting Company with a capital of \$1,000,000. Organization was not completed until the following year, when work on the smelter began. Operations started in 1889.

In the same year, when the stacks of the Tacoma smelter first belched smoke, there appeared on the scene the man who was to be the motivating factor in the expansion of the plant. He was William R. Rust, a native of Philadelphia, who had roughed it in mining camps, engineered in stamp mills, and built the first sampling works in Denver. He recognized that Tacoma was the natural focus to bring together the high lead ores of the Coeur d'Alene, the necessary iron flux from the concentrates produced at the Great Treadwell Mine, at Juneau, Alaska, and the lime rock which could be delivered by scow from the San Juan Islands. Coke was abundant within thirty miles of Tacoma. The location had the added advantage of deep salt-water frontage which facilitated boat shipment of lead bars to the principal market, in San Francisco.

Rust bought the controlling interest in the Tacoma Milling and Smelting Company. In April, 1890, he reorganized the company under the name of the Tacoma Smelting and Refining Company. About the same time he became a stockholder in the Bunker Hill & Sullivan Company and the Alaska Treadwell Company, making it more easily possible to get the necessary ore shipments from these properties. After a three-year lease to the Tacoma Smelting Company, the property returned to the Tacoma Smelting & Refining Company, and the latter came again under Rust control. He was in command when the company was acquired in 1905 by the Smelters Securities Company.

It was at Tacoma that Harry Walker first came into conspicuous notice in the organization. When the Guggenheim interests acquired control of the Federal Smelting and Refining Company, he had been sent to manage the Everett smelter. Upon its demo-

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lition, he went to Tacoma in 1907, first as Assistant Manager and later as Manager. In the post of Manager, he demonstrated the high qualities as executive that eventually advanced him to the presidency of ASARCO. Among other things, Walker directed the building of the copper refinery at Tacoma.

In sources of material, Tacoma is one of the most international of all the ASARCO properties. It has received shipments of arsenical copper concentrates from Sweden, concentrates from Korea, and ore from British Columbia, South America, Japan, Mexico, and the Straits Settlements of Malay. A large amount of Alaska ore is treated at Tacoma. Thanks to the foresight of the Guggenheims, the plant was available when the Alaskan area became highly developed.

The fifty-acre site of the Tacoma plant is peculiarly advantageous. Located near Point Defiance, five miles north of the city, on the west side of Commencement Bay, it offers wharfing facilities for vessels of any size. It is also accessible to all the principal railroads, thus making it possible to handle ores shipped either by rail or by boat.

Tacoma is the only electrolytic copper refinery on the Pacific Coast. The refinery treats custom tonnage of blister copper as well as the blister from its own converters. In addition to the smelting and refining plant, there is an arsenic plant which produces 50,000 tons of refined arsenic a year. The white arsenic is shipped in large quantities all over the United States and to England and Hawaii. One of the striking details of the Tacoma plant is its smokestack, one of the highest in the world. It rises 572 feet 10 inches above the top of its foundation, which is sunk 45 feet in the ground. The plant has an annual capacity of 500,000