

# INCIDENT AT DYNAMITE HILL

BY JOHN OMICINSKI

In the thick of World War I, the Split Rock munitions plant outside Syracuse called "Dynamite Hill" produced explosives to aid the Allied war effort. It also produced one of the worst disasters New York has ever seen.

*The reservoir at the Split Rock Quarry where the fatal TNT slurry was being mixed when it exploded on July 2, 1918.*

IMAGES: ONONDAGA HISTORICAL ASSOCIATION





Many of the fifty security guards who worked the 9:30 p.m. shift at the Semet-Solvay munitions plant on July 2, 1918 sat with Vernon Brens aboard the Syracuse-Auburn Electric Company trolley as it clanked along its tracks into the night. When the trolley had left Syracuse, headed for the "Dynamite Hill" explosives plant in Split Rock a few miles west of the city, Brens was already running late and getting edgy. "We were held up for about three minutes," Brens later told a reporter. He didn't like to be late.

Had the trolley left on time, Vernon Brens may not have lived to tell about it.

### TNT for the War

By 1918, World War I had been raging for almost four years and 3,200 people were working around the clock at the Split Rock plant mixing toxic acids to make tons of TNT and other explosives (ironically, not dynamite) that

fed the war machines that were killing millions of soldiers. For Brens and for many other New Yorkers, the slaughter overseas meant steady work at home.

Starting in 1914 with a million-dollar order from the Russian government in St. Petersburg, TNT became a booming business in the Split Rock Gorge, which in the nineteenth century had been a major limestone source for construction of the Erie Canal and for the soda ash produced in the nearby village of Solvay. By 1918, fully one-fourth of all TNT (trinitrotoluene) made in the United States came from the Split Rock plant, which was tucked away in a limestone quarry and surrounded by deep forest, fourteen miles of fencing, eight watchtowers topped by searchlights, and scores of armed guards like Vernon Brens. By all accounts, the plant produced as much as twelve tons of TNT a day.

Given the volatile nature of the products, working at Dynamite Hill was exceedingly

dangerous. Matches, lighters, and other flammable items were checked at the door before workers began their shifts, but fires and death were commonplace even though workers were trained in elaborate drills to fight fires. On May 22, 1915, a blast and fire had killed four men, and five had died in another blast on February 18, 1916. With each deadly incident, many workers quit, but the work was steady and well-paying and the Semet-Solvay payroll was always full.

There was also a toll on health. Many Split Rock workers were easily identifiable by the yellowish-green cast of their pitted skin, caused by close proximity to the toxic acids. Nearby crops couldn't survive the acid rain generated around the plant. But it was another era, when workplace safety came well behind the pursuit of a paycheck.

### A Fatal Flaw in Safety

Unbeknownst to Brens and the trolley riders on July 2, a

---

By 1918, fully one-fourth of all TNT (trinitrotoluene) made in the United States came from the Split Rock plant.

---



Top: A view of the Semet-Solvay yard in the days after the explosion. Note the large metal rings that had been tossed about like toys.

Bottom: The trolley station at the Dynamite Hill plant.





Above: The wreckage at Dynamite Hill after the explosion.

Left: A postcard view of the plant early in its existence.

---

Tower 1, sixty feet high and containing more than 2,000 pounds of TNT mix, roared into shooting flames and then exploded in a blast that lit up the sky for miles.

---

fire had broken out in Tower 1 at Dynamite Hill, where in one of the final steps to produce finished TNT a diabolical brew of acids was heated and mixed with a solvent called toluene. Later it was determined that a gearbox below a revolving cauldron where nitric acid was mixed into the TNT broth had malfunctioned, overheated, and caught fire.

Shortly before the trolley arrived at Split Rock, firefighters' hoses at the site started to dribble, then went dry—a fatal flaw. Workers at Dynamite Hill watched—or ran as fast as they could—as

Tower 1, sixty feet high and containing more than 2,000 pounds of TNT mix, roared into shooting flames and then exploded in a blast that lit up the sky for miles and shook the city of Syracuse like an earthquake.

"Just when we got to the gates the plant went up with a tremendous flash," Brens told local news reporters.

"Timbers and steel and iron bolts and nuts, tools and twisted metal of all kinds rained through the air. Some men were blown to atoms."

"I could see people tossed in the air, burning alive," said Ray Cole, who was the plant superintendent at the time. "It was like the 4th of July, only the fireworks were human." Bodies and limbs were later found half a mile or more away.

Skeletons were found clutching hose nozzles in a death grip, though the hoses were all burned away by the blast, reported W.S. Carter,

the general foreman at Split Rock, in a letter to a local paper forty years later. "After the water pressure failed, there was little that could be done to keep the fire under control. You could see the plant—or parts of it—rise in the air...and spread out like a mushroom."

In one of many acts of heroism, a gang of workers summoned superhuman strength and hand-pushed a rail car filled with picric acid away from the site just before the blast went up, preventing even more damage and death. In all, fifty men died and scores were injured in the blast. It remains the worst catastrophic loss of life in Syracuse's history and one of the worst disasters in the annals of New York State.

#### Pittances for the Survivors

After the blast, chaos reigned at Split Rock. Some seventy-five horses, cut free from their



stables by workers, ran wild in all directions. Hundreds of snakes, blasted from their crevasses and warrens in the surrounding rocks by the explosion, slithered in all directions, further panicking rescuers. In Syracuse, the explosion reminded many of the ammunition ship explosion in the Halifax, Nova Scotia harbor that had killed 2,000 and wiped out much of the city on December 16, 1917. Indeed, if the finished explosives had not been stored well away from the mixing plants in the forested hills north of the Split Rock plant, the blast would have leveled a far wider area.

Families of the dead and injured workers got a pittance.

For instance, after his death, James D. Ferrier's parents were awarded just \$11.54 weekly by the State Industrial Commission (in 2012 dollars, that would be about \$178.32, according to a computation formula offered by the Federal Reserve Bank of Minneapolis). Thomas Gray's mother got half that: \$5.77 a week. According to the *Syracuse Herald* newspaper, Semet-Solvay spent just \$400,000 to settle all death and injury claims—the equivalent of about \$6.1 million today. But in today's world of tort actions, individual awards would be astronomically larger after a disaster involving the failure of company safety equipment such as fire hoses.

Oddly enough, the company blamed the government and the war. "Semet-Solvay

considered giving up the manufacture of TNT at the plant at Split Rock over a year ago," the firm said in a statement reported by the *Syracuse Journal* after the blast, "...and it would have done so had it not found that the necessities of the U.S. government required its continuation..."

### Peace—with a Price

July 2, 1918 was the beginning of the end for the Split Rock plant. The Semet-Solvay company tried to rebuild, but World War I ended four months later, and by year's end the factory was shuttered. Over the years, many sinister scenarios and apocryphal stories have circulated that involve spies or saboteurs connected to the Split Rock blast, but none has panned out. By now, it's 99% certain that the water hoses died out because of malfunctions in the system, leading to a fire that got totally out of control, which led to the explosion.

Today, Split Rock Gorge remains largely as it was before the quarrying and the TNT: a grown-over no-man's-land. In 1920, a scrap dealer bought the seventy-five acres and what was left of the original buildings for \$250,000. The trolley tracks were torn up in the 1930s, and Split Rock School, built for the children of the factory workers, is long gone. Though a number of houses occupy the historic ground, a half-dozen roads dead-end at the former plant site. Until

1964, the state's Department of Transportation operated a garage there, but that too burned down. Hikers now thump around the old quarry, and some nature-lovers appreciate the rare ferns that grow in its rocky outcrops. Were it not for a state historic marker, few would know the bloody history of the place.

In the mid-1990s, when the Town of Onondaga sought the land for a park, officials thought better of it at the last minute when they realized how much cleanup the toxin-laden site would require, with the state refusing to pay for it. Perhaps the Split Rock "war wound" is still open: "The explosion blew a hole in the community psyche that's never healed," columnist Dick Case of the *Syracuse Post-Standard* wrote in 1991. As nature and the decades slowly cover over the remains of one of New York's saddest stories, Dynamite Hill lies in an uneasy peace. ■

## THE ARCHIVES CONNECTION

The Onondaga Historical Association in Syracuse has an unparalleled collection of news clips, articles, and photographs concerning the Split Rock explosion. In 1973, former Onondaga Town Historian Jasena R. Foley produced the lone booklet about the blast, *The Night the Rock Blew Up*. Reprinted in 1991, it can be purchased at the Onondaga Free Library or the Town of Onondaga Historical Society. The latter also sells a DVD about the Split Rock disaster.

*Rescue workers motored to the disaster site to help.*

