

Piqua Nuclear Reactor Encapsulation Project



ABOUT THIS PROJECT:

Market Segment:Engineering:Products Used:Power and UtilitiesWoolpert Inc.Xypex Admix C-2000

Location: Ready Mix Supplier: Piqua, Miami OH, USA Ernst Concrete

DESCRIPTION

In 1957, the Atomic Energy Commission designated Piqua, Ohio, for a groundbreaking project: the construction of a nuclear power plant dedicated exclusively to generating electricity. The reactor became operational in 1963, marking a pivotal moment in the use of nuclear energy for electricity.

However, the plant's operations were halted in 1966. Following the shutdown, from 1967 to 1969, an extensive and careful dismantling of the reactor took place, ensuring the safe removal of fuel, coolant, and radioactive materials.

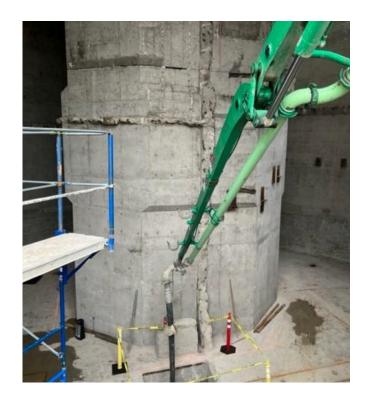


THE XYPEX SOLUTION

For the next fifty years, the Nuclear Regulatory Commission oversaw the site's condition, ultimately deciding to permanently seal it.

With a need to limit peak temperature rise and thermal stresses within the structure, 2000 yards of concrete incorporated Xypex Admix C-2000, following specifications from Woolpert Inc.

This admixture is known for its ability to self-heal static cracks up to 0.5 mm (0.02 inches), making it particularly suitable for projects requiring slower hydration rates and a permanent waterproofing solution.







Xypex Crystalline Technology plays a crucial role in protecting concrete power and utility structures against hydrostatic pressure, chemical attack, freeze-thaw cycles and sulphate attack, thereby waterproofing, protecting, and enhancing the durability of critical concrete elements.

To learn more about how Xypex protects and waterproofs concrete in power and utilities, click here.

