

REFERENTS

MEMÒRIA HISTÒRICA, CÚPULES DE CONFINAMENT I RECUPERACIONS AMBIENTALS D'ANTIGUES ACTIVITATS EXTRACTIVES

MEMÒRIA HISTÒRICA



CONFINAMENT DE RESIDUS NUCLEARS A WELDON SPRINGS, MISSOURI

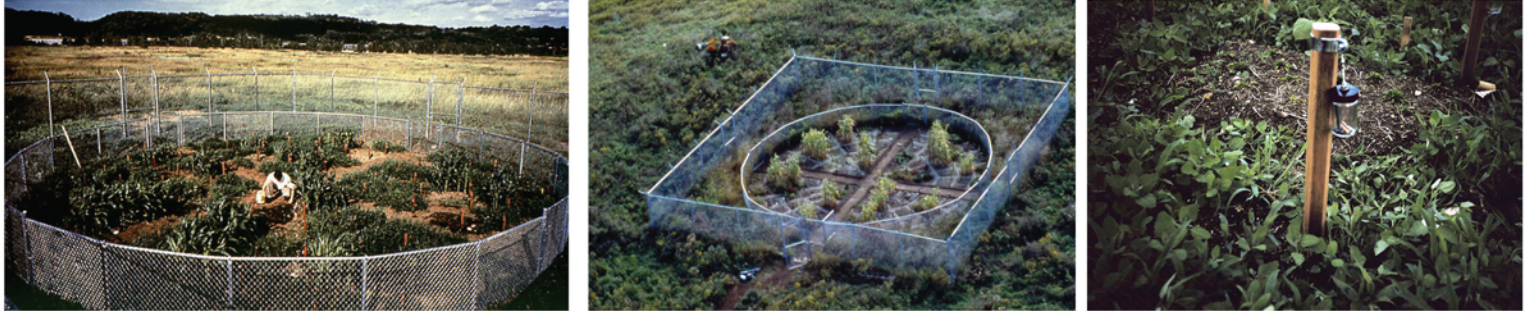
In Saint Charles County, Missouri, near Weldon Spring, adjacent to Highway 40, lies an enormous mound of rocks, rising out of the ground like an ancient burial tomb. Underneath it lies tons of hazardous waste produced by a chemical plant that once stood in its place. Today, Weldon Spring draws thousands of curious visitors each year. They climb to the top of the 75-foot tall dome to read the placards that tell the story of the sad history of communities that disappeared in 1940 to make way for the world's largest explosives factory.

Between 1940 and 1941, the US Army purchased over 17,000 acres of land in Saint Charles County, just outside of St. Louis. On those land happened to sit three pretty towns with rolling wooded hills - Hamburg, Howell, and Toonerville. They were immediately evacuated. Hundreds of homes, businesses, churches, schools and any other buildings in the area were either demolished or burned and within a few months the three towns ceased to exist. A massive fac-

tory was erected to manufacture TNT and DNT in order to supply Allied troops in the Word War II. The Weldon Spring Ordnance Works, operated by Atlas Powder Company, employed more than 5,000 people and contained more than 1,000 buildings. By the time the plant ceased production on Aug. 15, 1945, the day the Japanese surrendered, it had produced more than 700 million pounds of TNT.

After the war the Army began selling off pieces of the land. The State of Missouri acquired 7,000 acres, while the University of Missouri bought another 8,000 acres, which was later sold to the Conservation Department. These pieces of property are today the Busch Memorial Conservation Area and the Weldon Spring Conservation Area.

A small patch of land - about 2,000 acres - was retained by the United States Atomic Energy Commission. It was there the Commission built a uranium ore processing plant in 1955. The Weldon Spring Uranium Feed Mill Plant, operated by Mallinckrodt Chemical Works of St. Louis, processed raw uranium ore into "yellow cake," or concentrated ore which was shipped to other sites.



REVIVAL FIELD

Revival Field va començar com una obra d'art conceptual com a intent d'escopir l'ecologia d'un lloc. Al 1993 es va treure la primera conclusió positiva de la primera part d'aquest esforç col·laboratiu. L'experiment inicial, localitzat al abocador de Pig's eye, St. Paul, Minnesota, va ser un camp de proves replicat on s'usaven plantes especials hiperacumuladores per a extreure metalls pesats del sòl contaminat. L'anàlisi científic de les mostres de biomassa d'aquest camp confirmaven el potencial de la "Remediació Verda" com a alternativa in-situ i de baix cost als mètodes més cars i insatisfactoris de remediació. Tot i que les condicions del sòl són adverses a l'absorció, una varietat de Thlaspi, la planta

testada amb major capacitat d'acumulació, va mostrar concentracions importants de cadmi a les seves fulles i talls. En paraules de Mel Chin: "Conceptualment aquesta obra és concebuda com una escultura que tracta del procés de reducció, un mètode tradicional en la talla de fusta o pedra. Aquí el material al qual ens apropem no és vist, i les eines són l'agricultura i la bioquímica. L'obra, en la seva encarnació més completa (un cop les valles s'han retirat i les plantes acumuladores s'han segat) oferirà uns efectes visuals i formals mínims. Durant un temps, una estètica intencionadament invisible existirà i podrà ser mesurada científicament per la qualitat de la terra revitalitzada. Amb el temps, aquesta estètica serà revelada en forma de retorn de capacitat de creixement al sòl.

CÚPULES DE CONFINAMENT



SOIL REMEDIATION PROJECTS

Whether is pouring a concrete foundation for a residential home (10,000 square feet) or a mayor construction project for the Mining, oil and gas or other industry (500,000 square feet or more), all of these projects could be interrupted or shut down completely due to winter weather conditions or summer rains.

Air supported structures have been the product of choice by every major construction and project management company worldwide. The savings in construction time and increased efficiency of the labor force working in ideal indoor conditions, more than justifies the investment in a Big Span construction dome.

Southern Inflatables build the installation of the largest span air supported structure ever constructed in the world, 215m x 215m x 45m high (705' x 705' x 150' high). The structure was installed over a waste disposal site, 45m deep (150') in South Korea.



MILLENNIUM DOME

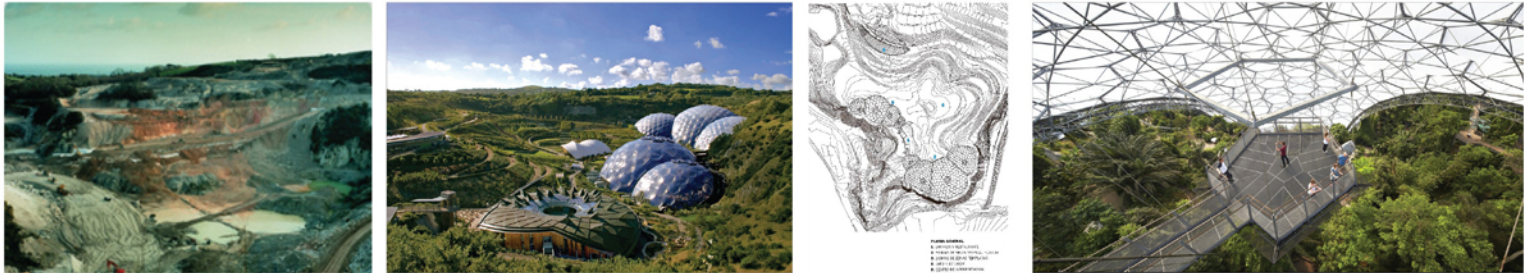
In plan view it is circular, 365 m (one metre for each day in a standard year) in diameter.

Apart from the dome itself, the project included the reclamation of the entire Greenwich Peninsula. The land was previously derelict and contaminated by toxic sludge from East Greenwich Gas Works that operated from 1889 to 1985. The clean-up operation was seen by the then Deputy Prime Minister Michael Heseltine as an investment that would add a large area of useful land to the crowded capital. This was billed as part of a larger plan to regenerate a large, sparsely populated area to the east of London and south of the River Thames, an area initially called the East Thames Corridor but latterly marketed as the "Thames Gateway". 7 million litres of tar was removed, 30,000 m3 of soil was "washed" and 66,000 M3 of contaminated ground water

was treated. As mentioned previously 200,000 tons of lethal waste was taken off site. The operations cost pounds 21.5 million and were carried out over a period of 14 months.

The main objective was to remove the risk to human receptors and controlled waters through removal of key contamination, including volatile organic compounds (VOCs), cyanides, heavy metals, sulphur compounds and ammonia. The development would provide the venue for the Millennium Experience site, with the principal features being the Millennium Dome (a 26000 capacity arena), sports, leisure and retail outlets, over 3800 affordable dwellings, over 10000 new homes (including student and specialneeds housing); over 3000 m2 of office space, a new business park, community uses including new schools and health provision, 194200 m2 (19.5ha) of open space, 300- and 500-bedroom hotels, 25000 jobs in commercial and retail enterprises.

RESTAURACIÓ DEL PAISSATGE ANTIGUES ACTIVITATS EXTRACTIVES



EDEN PROJECT

The Eden Project (Cornish: Edenva) is a visitor attraction in Cornwall, England, United Kingdom. Inside the two biomes are plants that are collected from many diverse climates and environments.

The clay pit in which the project is sited was in use for over 160 years. In 1981, the pit was used by the BBC as the planet surface of Magrathea in the 1981 TV series of the Hitchhiker's Guide to the Galaxy. By the mid-1990s the pit was all but exhausted.

The initial idea for the project dates back to 1996, with construction beginning in 1998. The work was hampered by torrential rain in the first few months of the project, and parts of the pit flooded as it sits 15m below the water table.