Air Quality Solutions: VOC, Dust, and Odor Control

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Envirocon has a long history of designing and implementing a variety of odor, dust, and emission control systems on contaminated sites across the U.S. Such systems are critical to ensure environmental compliance and safety for our workers, clients, and the residents of the surrounding communities we serve. At Envirocon, we rely on lessons learned from past project experiences, innovative technology, process improvement, and assessment of means and methods to provide our clients safe, reliable project execution. Our project team recently used a unique odor/emission control system at a former Manufactured Gas Plant (MGP) site on Lake Superior.

Data Evaluation and Management for an Odor / Emissions Control System

Envirocon recently performed mechanical dredging of impacted sediments on Lake Superior. Field crews offloaded and processed dredged materials within a 376-foot by 150-foot Sediment Processing Tent (SPT). After the screening of large debris, quick lime was used to stabilize sediments so that they were stackable within the SPT and could pass a paint filter test, allowing for transport and disposal to the landfill. The SPT was ventilated to produce approximately four air changes per hour. The ventilated air stream contained lime dust, volatile organic compounds (VOCs), and potentially odiferous compounds, and was treated before being released into the atmosphere. The main components of treatment included particulate filtration followed by granular activated carbon (GAC) media adsorption of VOCs. The vapor phase GAC is 4x8 mesh which is ideal for vapor phase applications (mass transfer), whereas liquid phase GAC is typically smaller (e.g., 8x30 mesh).

In conjunction with our joint venture partner, Foth Infrastructure and Environment (Foth), Envirocon developed a means to evaluate and manage data using an emissions monitoring program. The management effort assesses GAC media performance as an aid to determining when GAC breakthrough is occurring so that we may remove and replace it in a timely manner, thus ensuring all performance requirements are continually met.
A Historical Look at Envirocon’s Extensive Demolition Experience

Envirocon’s rich history of performing projects in the decommissioning and demolition (D&D) industry began with our first major $4.4M project in 1993. From this first facility demolition at the Broderick Wood Products Superfund site to the recent demolition of a four-unit 1760MW coal-fired power plant, Envirocon’s D&D projects span a wide breadth of sectors including industrial and manufacturing facilities, radiological, army installations, power plants, and smelters. Significant demolition projects are discussed below.

Former Chemical Weapons Dismantlement Facility Demolition
Envirocon demolished the Tooele Chemical Agent Disposal Facility at the Tooele Army Depot safely, within budget, and ahead of schedule. The Utah facility was used for dismantling chemical weapons under the Chemical Weapons Convention, processing VX, Sarin, and mustard gas. This RCRA project involved a complex 32 building facility consisting of heavily reinforced, blast resistant steel, and concrete structures. Envirocon mobilized eight excavators equipped with grapple buckets, hydraulic shears, hydraulic hammers, universal processors, magnets, and powered screen buckets. Several challenging structures were the 90-foot tall pollution abatement system (PAS) and 40-foot tall munitions demilitarization building. Envirocon designed a Felling Plan to drop the PAS structure using a PC400 excavator with shear instead of an ultra-high reach shear as was originally required. This value-added solution saved costs for our client and reduced risk to workers.

Envirocon Grows Team with Industry Experts

David Sinclair
As an internationally recognized industry expert, Mr. David Sinclair joins Envirocon’s demolition team as a Technical Director and Subject Matter Expert. Mr. Sinclair has over 50 years of demolition and dismantling experience, and has partnered with us on several recent demolition projects. He brings with him a wealth of knowledge in the development of safety methods and training, project planning, and estimating. He was recently featured in the September-October issue of Demolition & Recycling International magazine.

Tammy DeRamo, P.E.
Ms. Tammy DeRamo joins the Envirocon team as a Technical Director and Subject Matter Expert for our remediation service line. For more than a decade, Ms. DeRamo has provided technical expertise in coal combustion residue (CCR) management, permitting, and facility design. She has also managed solid waste, mining, and oil & gas projects.
Envirocon Presents at National Safety Forum

Envirocon recently presented at the RETIA USA Safety Forum 2017 in Nashville, Tennessee. Employee safety is the cornerstone of Envirocon’s culture and operational excellence philosophy, making the RETIA USA Safety Forum an excellent opportunity to share our best management safety practices with other industry partners. Operations Director Andrew Simmons and Health & Safety Officer Jennifer Simmons presented Envirocon’s integral approach to incorporating safety concepts and hazard identification into project execution.

Envirocon’s safety planning approach relies on active employee participation for hazard identification in the field. Our Health & Safety team developed seven Standard Hazard Classifications and integrated the classifications into Field Crew Activity Plans, Job Safety Analysis, and Hazard Identification on project sites. Site-dedicated experienced Health and Safety professionals complete inspections to identify, classify, and actively mitigate all potential hazards.

‘Tis the Season for Giving Back

At Envirocon, we hold a responsibility to serve our communities through volunteerism and philanthropy. Reaching out and engaging with our local communities is an integral part of who we are. In the spirit of service, our passionate employees make a lasting difference everywhere we live and work.

This year, the Dennis & Phyllis Washington Foundation donated over $200,000 to food banks, food pantries, rescue missions, and homeless shelters across the state of Montana. Many Montanans struggle to make ends meet and provide the basic necessities for their families this time of year.

Montana’s Gift to the Nation

The Washington Companies started the Christmas season early this year when asked to design and build a copper star to adorn the top of the U.S. Capitol Christmas Tree at the White House in Washington, D.C. Keeping with Butte’s rich mining history, Montana Resources (a Washington Company), along with the Missoula-based Companies’ Design Team, created a 5-foot tall, 4-foot wide copper star with eight points, featuring Montana’s state flower, the bitterroot. This year, the 79-foot, 15,000 pound tree was harvested from Montana’s Kootenai National Forest, and along with the star, will travel over 3,000 miles to arrive on the West Lawn outside the White House.

As a major sponsor of the 2017 U.S. Capitol Christmas Tree, the Washington Companies provided financial assistance to transport and display the tree on its journey across the country. The nationally televised lighting of the “People’s Tree” will take place on December 6th at 5 p.m. EST.
Personnel Announcements

Diane White

The Envirocon Business Development team recently gained a new addition - Diane White. Ms. White is responsible for business development activities associated with identifying and securing large general manufacturing and industrial commercial clients for Envirocon. Her experience includes serving as Vice President of Area Business Development in the Rocky Mountain region, as well as a Field Geologist for the United States Geological Survey.

Matt Chambers

Mr. Matthew Chambers has recently joined the Envirocon Decommissioning and Demolition team as an Operations Director. In his role, he is responsible for managing operational and business direction of multiple projects including overseeing Project Manager; safety performance; client relations; quality assurance performance; strategic project planning; cost control; and project performance in accordance with design, budget and schedule requirements. Mr. Chambers has over 20 years of experience managing large-scale projects and subcontracts.