

# Integrating Science and Mechanics for Optimal Installations

Gyver Industries provides a unique perspective for Level 2, Level 3 and Level 4 lab staff and the contractors that install tissue digesters in those labs. Gyver has worked on both sides, and fully understands what is required to execute installations that make optimal use of both facilities and machines. Lab staff and contractors alike have benefited from Gyver's ability to see the big picture, and ensure 100% integration of scientific and mechanical considerations.

## A Unique Skill Set

This level of understanding requires the specialized skills of someone who has both lab and mechanical experience. The Gyver Industries team provides this unique combination of skills. Gyver owner Mark Muth is a master electrician, certified welder, and industrial control engineering programmer who is trained to work on all aspects of a lab setting.

At the same time, Muth has 12 years of experience in alkaline tissue digestion design, development, and operations. He has done more runs than anyone else in the field, developed the dry discharge method, and has exceptional knowledge of maintenance and operational procedures for bio-containment and quarantine facilities, including transmission of infectious wastes, facility inspection, waste disposal, and emergency response.

### **Vital Input**

The Gyver team, which has been trained by Muth to bring together both sets of skills, is able to understand the unique needs of each lab, AND how to meet those needs.

This knowledge is invaluable to engineers and lab staff in the initial stages of designing a lab, which is the time when costly and time-consuming installation errors can most easily be avoided. For example, they may be thinking of a particular methodology for handling the waste stream from a necropsy suite to digesters; often, Gyver can suggest better alternatives.

By providing vital input, the Gyver team can help customers create an environment in which the facility and the digester work together seamlessly. Gyver's years of lab experience allow them to make machines function in any kind of environment through specialized equipment design, custom designed programs, installation of multiple HMI control cabinets for ease of operation, maintenance, safety, and everything else needed to make the machines do what they're meant to do. The following list includes some of the considerations that Gyver can help identify:

- How large a digester is needed
- Whether or not effluent waste disposal is needed
- What kind of equipment is needed to meet municipal requirements and codes
- Best configuration to suit the needs of the lab
- Future considerations based on how the lab is expected to grow

### Valuable Recommendations

Customers can benefit from Gyver's expertise by involving them at the beginning stages of lab development. Their process includes meeting with all the parties involved to develop design recommendations:

 Architect and engineering firms – to discuss the dimensions and configuration required for the digester to fit



- Mechanical engineers to determine the equipment requirements, best waste handling methods, air handling, and venting solutions (key for managing odors)
- Municipalities to learn what discharge permits are required, if any
- Scientific staff to understand the waste composition and volume generated by the lab
- Operations and maintenance personnel to discuss maintenance issues
- Agronomy farm personnel to find out the best ways to convert discharge into compost

Customers who work with Gyver in this capacity end up with a lab configuration that is built within a reasonable timeframe with no excess costs, and is ready to handle all their biological disposal needs safely and efficiently.

#### To learn more about Gyver Industries,

please visit www.gyverindustries.com, or call (970) 567-7249 or (970) 568-4220.