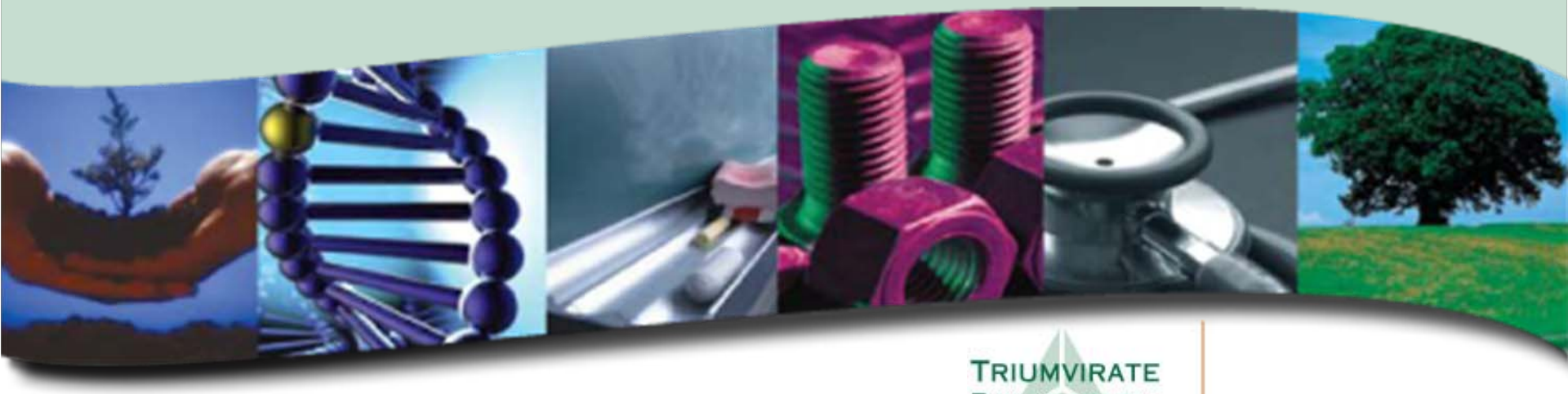
# Laboratory Renovation Project
# Expecting the Unexpected



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# Key Elements to a Successful Laboratory Renovation

1.) Get Involved in the Planning Stage

2.) Do your Homework Upfront on History of Lab Activities

3.) Identify the Use of the Newly Renovated Space

1+2+3=

4.) Completed Project on Time, Under Budget and Free of Any Hazards

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# Definitions

- Decommissioning – those processes necessary to ensure a facility meets all applicable Environmental Health & Safety requirements (as specifically established by Agency policy or Federal, State or local law).
- Decontamination - the process to reduce risk from "known" hazardous substances to an acceptable level.

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# Key Decisions

- What's staying and What's Going?
  - Complete Gut Renovation
  - Remodeling of Space
- Limitation of Decontamination Methods
  - Sink Traps (flush or remove)
  - Fume Hoods (test and surface wipe or total removal)

# Key Decisions (continued)

- How Clean is Clean? (Internal, Agency or Regulatory Driven)
  - General Cleaning
  - ANSI Standards
  - OSHA Demolition Standard
  - Brookhaven National Laboratory BMP's
- Site Logistics and Planning
  - Access to Space and Utilities
  - Night or Weekend Project
  - Lead Time versus Completion Time
  - Future Use of Space

# Common Areas of Concern

- What is on the Laboratory Work Surfaces?
- What is in the Drains?
- What is in the Local Exhaust Ventilation?

# Confirmation

- Confirmation Methods
  - Visual Inspection
  - Field Screening
  - Wipe Sampling
- Documentation
  - Summary of Activities
  - Certified Analytical
  - C.I.H. Verification / Report

# Other Areas of Concern

- WWT Tanks/Systems
  - Proper Closure of Permitted Systems
- Fluorescent Bulbs and Ballasts
- Mercury Switches
- Transformers
- PCB Caulking
- Asbestos / Lead
- Mold

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# Lessons Learned - flexibility

- Initial Facility Assessment ***should*** be performed for all projects
- Need for additional steps depends on results of the Initial Facility Assessment
- Contamination assessment and remediation phases may be separate or concurrent with other construction activities
- Combining decontamination with demolition of laboratories may be more efficient than attempting to delineate and treat specific surfaces or features only to find “hidden” sources

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