

GREENTECH - BioFuels and Renewable Chemicals

# Genencor, Inc.

## Biolisoprene™ Project



### OVERVIEW

The Biolisoprene™ project is a joint effort between Genencor and Goodyear Tire & Rubber Company using biological processes to produce precursor compounds for synthetic rubber manufacturing.

IES provided complete design & construction drawings for the fermenter and recovery skid installation, and provided complete Construction Manager for the installation of the Biolisoprene recovery skid.

### PROJECT DETAILS

- Retrofit existing lab spaces to allow the installation of several fermentation vessels with chemical feed and controls units
- Install sample recovery hood
- Design and install abatement system
- Design and install isothermal piping collection and distribution system to prevent condensation
- Design classified area electrical services for new power feeds and dedicated transformer devices
- Coordinate all phases of design, permitting and construction
- Extensive and Complex PHA team support

### IES SOLUTIONS

- Facilitated initial Process Hazard Analysis (PHA) study to establish the basis of design and controls.
- Provided EH&S Construction Safety
- Negotiated with City for permit issuance on this difficult to permit installation, the first of its kind in Silicon Valley
- Assuming GC role achieved a savings of 25% off construction costs
- Precision placement of cast-in-place anchors to match recovery tower footings from an international vendor, allowed complex dual crane lift install to proceed without delays and rework.
- Coordinated tie-ins that eliminated shutdowns and process interruptions
- Sizing and selection of Isoprene abatement unit

### LOCATION

Palo Alto, California

### TEAM (PARTNERS)

Architect: Oculus Architects

Structural: Rivera, Inc.

### PROJECT DURATION

Design & Permit: 16 months

Construction: 2 months

### PROJECT VALUATION

\$1,000,000 - \$5,000,000

### ABOUT IES

Integrated Engineering Services (IES) is an established firm providing innovative and cost-effective solutions to meet your complex engineering, design and operational needs.

**When experience, knowledge and innovation matter most.**