Date: May 27, 2021

Project Title: N2004 Lab Hood and Exhaust

Project Manager:

# Scope of Work

## I. General Work Summary/Scope

The N2004 Lab Hood and exhaust replacement project consists of three parts to be completed with minimal downtime for the lab. The first part of the project is the replacement of the existing lab hood and all utilities as specified by lab owner. The second part of the project is the erection of steel, roof penetrations (2) and installation of exhaust fan. The third part consists of demolition of existing duct work and installation of new ductwork. Contractor will be responsible for daily permits and JSA's. These permits will be signed by HSE daily before work can begin and must be signed off and turned in at the end of the work day. Any environmental issues, injuries or near misses should be reported to project manager or HSE immediately. Site LOTO policy must be used. All contractors must go through the Solvay site orientation and must be scheduled in advance.

#### II. Scope Breakdown

### A. Replacement of Fume Hood and Utilities

This section includes the demo of existing fume hood and utilities tied to the fume hood. This is to be coordinated with project manager and lab owner to minimize downtime of N2004 lab. The contractor will be responsible for following all Solvay safety rules and any questions or issues should be brought to project manager or HSE immediately. When existing fume hood is removed check with project manager/HSE for disposal instructions.

Contractor is responsible for purchasing new fume hood. This does not include the base section of the fume hood, existing base will be used and only the fume hood itself is to be purchased. The fume hood to be purchased is identified as:

AirClean AirMax Fume Hood

AC8030TE

- -4 each 110v Electrical outlets(2 per side)
- -3 gas taps (Air, Nitrogen, Vacuum) all located on right side

During installation of new fume hood a spacer is to be installed to raise the height of fume hood by approximately four inches. It is very important that the demolition and installation be scheduled to minimize downtime for the N2004 lab. No work inside the lab will take place until all parts are onsite and available to be installed as to minimize downtime.

#### B. Installation of Exhaust Fan and structural steel

The new exhaust fan has been purchased by Solvay and is expected to arrive onsite in late June 2021. Contractor shall verify with Solvay when the fan arrives at the site. Contractor is responsible for purchasing steel and installation of steel and exhaust fan on the roof per the

drawings and project manual issued by DLS Laboratory Consultants titled Project Manual Lab N2004 Fan Addition. This work should be done prior to fume hood installation and duct work installation as to minimize downtime. Contractor is responsible for scheduling crane lifts for this work in advance and with approval from Solvay representatives to minimize the impact on production in affected areas. This work includes two roof penetrations for ductwork to be installed and contractor is responsible for these penetrations per drawings mentioned above.

#### C. Demolition and Installation of Ductwork

Duct work is to be provided and installed by contractor based on drawings provided in project manual. The existing duct work is to be disposed of properly after approval from Solvay HSE representative. The demolition and installation of ductwork must be scheduled and completed in a timely manner to reduce downtime for this lab. Contractor is responsible for scaffolding needed to complete these tasks. Contractor must have trained and competent employees to perform this work and must abide by all Solvay safety requirements.

### III. Summary/Clarifications

- A. Safety meeting with plant representatives to verify the scope of work(JSA) for that day's tasks is required
- B. Contractor to provide own manlifts, crane, scaffolding and any other rental equipment needed.
- C. Contractor to provide detailed schedule of project with downtime for lab N2004 being one week or less.
- D. Contractor shall be familiar with and follow Solvay's HOT WORK, LOTO, ELEVATED WORK, CONFINED SPACE WORK programs. These policies are available upon request.
- E. Contractor shall follow all site safety and environmental rules.
- F. Contractor shall report immediately any and all injuries, near misses and environmental issues.
- G. Any questions that arise during the bid process shall be submitted in writing to project manager.
- H. Contractor shall be able to provide documentation of training for employees onsite at all times.
- I. All contract employees onsite are required to wear at a minimum: Safety glasses, steel toe shoes and long sleeve FR rated clothing.
- J. Contractor proposal to include individual labor and material for each part (A,B,C) of section II.