

## Surge Capacity and Project Plan

### Surge Capacity Certification:

Renco Corporation and our subsidiary APP in Colebrook, NH is currently in process for adding manufacturing capacity for a variety of PPE gloves. Our plans include both High speed (High volume- Low Mix) production lines and Lower speed Flexible (Low volume – High mix) production lines capable of meeting all our customer demands. As Renco continues our journey toward lean manufacturing, we will utilize tools such as level scheduling, capacity planning, customer forecast demand planning, and safety stock inventory levels. Renco has begun implementing an ERP system and other customer/supply chain tools for our APP operations. Our long-term relationships with our supply chain partners allow Renco the flexibility to meet our customer demands. Renco and our supply chain are committed to further domestic (reshoring) manufacturing of critical chemical components. Reshoring the supply chain will take some time as outlined in the project plan below. After reshoring efforts are completed, our inventory planning and lead time will be enhanced.

Renco has a well-established logistics network for domestic and international customer/ supply chain in order to meet NIH delivery schedules. Renco has the capability to ship and receive up to 24 hours/day and 7 days per week depending on demand schedules. In addition to our in-house shipping and receiving capabilities, Renco has established relationships with strategically located outside warehouses. Our ability to temporarily store Finished goods inventory (safety stock) and long lead time materials at contracted warehouses was proven during the COVID-19 pandemic. Utilizing outside warehousing to supplement our internal plant warehouse is a critical capability to meet surge and high-volume demands. Renco's lean manufacturing philosophy has a planned Finished goods inventory of 1 week or less in our internal production plant.

Renco's APP manufacturing facility has or will have capacity for 2 to 12 mil PPE medical and other PPE gloves as outlined in NIH's planning documents. APP's full capacity plan will be 1 billion 3-4 mil medical grade Nitrile gloves annually. At full capacity, APP will have 10 flexible production dip lines and 4 high speed production dip lines. Each flexible dip line production line will have capacity of 20-25 million gloves per year. Each high-speed production line will have capacity of 200-250 million gloves per year. Renco Corporation's philosophy of having no one customer takes more than 60% of our planned production capacity. This philosophy allows Renco to service other customers and add additional capacity up to 25% for one customer during surges and high demand requirements. Doing the math at 60% capacity the capacity for NIH would be on average 672 million nitrile gloves per year with a max output of 806.4 million if needed for surge demands. The following details a capacity ramp up plan based on 3-4 mill gloves at 60% capacity for APP production facility. Other plans can be easily developed based on customer requirements.

Production Dip Lines	Timing	Capacity Plan (Annual)
4 Flexible	30 days	52.8 million
6 Flexible	90 days	79.2 million
10 Flexible and	180 days	402 million
2 High Speed lines		

10 flexible and 4 high speed      360 days      672 million

Based on this plan and other initiatives outlined above, Renco can certify its capability for meeting any Surge demand and delivery schedule requirements.

### **Project Plan**

#### **Each company will need to provide their plan for items they manufacture.**

Description: This factor considers the Project Plan that the contractor proposes to successfully provide the products under this multiple award IDIQ. The Government expects the contractor to have a plan for completing this work timely, efficiently, and to specification standards, while minimizing costs and supply chain disruption.

A written plan, up to 5 pages, (no smaller than size 11 font Times New Roman), consisting of a narrative explanation of how the contractor intends to perform the work, manage subcontractors/manufacturers, ensure quality assurance through its manufacturing and distribution networks, ensure supplier agreements are enforced, mitigate risks, so as to complete product deliveries on time, efficiently and effectively to meet government standards and specifications.

The offeror has responded to the above requirements and provided detailed descriptions that evidence a firm understanding of the project, risk mitigation, and a satisfactory approach to provide value to the customer and project in performance of domestically sourced PPE production and delivery to ensure the health and safety of customers through an uninterrupted supply chain.

Renco Corporation and our subsidiary American Performance Polymers (APP) have completely read all the requirements in NIH's RFP for American made and sourced Personal Protective Equipment (PPE) documents. Renco has submitted some questions and is awaiting answers. Our project plan is based on the information provided to date. With any answers to our questions provided and new information released by the contracting team will reserve the right to adjust our project plan accordingly. Our project plan detailed in this document includes the following areas: Quality Management System, Testing and Product certification process, Production and Plant expansion buildout plan, Customer service communication scheduling and delivery plan, Production Plan and capacity, Supply chain management plan, risk management and mitigation, and continuous improvement plan. Renco can and will provide additional information and supporting documents as needed to meet NIH's requirements. Renco and APP have been manufacturing and distributing Personal protective equipment for 60+ years.

## Project Plan

### Quality Management System

Currently our APP operations are in the middle of improving our Quality management system with ISO certification completion set for 2023. All processes, procedures, work instructions, and controlled documents will be stored securely in a cloud-based data collection system as well as critical back up documents from outsourced suppliers. After completion of the ISO audits and certification process, our APP facility will have a robust quality management system. Our quality management systems include all aspects of our operations including but limited to process control, testing, certifications, training and many others.

Our Quality management system along with other operational tools allows Renco to ensure quality products are manufactured and delivered to our customers. Traceability is documented from raw materials to finished goods. The traceability system allows complete transparency for our customers.

Based on the information provided in the RFP, Renco is confident that our processes and procedures will meet or exceed any requirements.

### Testing and Certification Plan

Renco's APP facility currently has a testing facility on site, and we plan to build a state-of-the-art new testing laboratory in 2023 with new and more equipment. Our in-house testing laboratory has the capability to meet 95% of all testing requirements. The remaining 5% of the testing is performed at outside certified laboratories. We have a long- term relationship with our USA certified lab suppliers and have used them for many years. Our in-house laboratory monitors and performs inspections for all our raw materials, in process control sampling and testing, and final product certification and testing.

In addition to our in-house lab, we utilize process control testing such as FDA compliant water and air leak testing, in process online testing and controls along with chemical monitoring.

The PPE gloves that we have and will produce have physical property specifications and a shelf-life meeting or exceeding the requirements stated in the RFP. Renco is confident that our robust testing and certification process, equipment and procedures will continue to meet all requirements. Renco sees no significant changes to our current testing and certification plans are needed.

### Production Capacity and Plant Expansion Plan

Renco's APP facility currently has 4 fully operational flexible production dip lines. The flexible dip lines are designed for lower volume high mix as well as steady volume low mix production. Our APP plans to expand capacity for PPE glove manufacturing by adding 6 additional flexible dip lines and 4 high speed production dip lines. The high-speed lines are designed with state-of-the-art automation and controls for high volume low mix production running 24 hours/ day 7 days a week. After completion of our production line build out, APP will have capacity to produce up to 1 billion PPE gloves annually.

Production and ramp up plan for this RFP will be explained in the Production and capacity plan section of this document.

The build-out of production dip lines will occur throughout the year period. APP will add 2 flexible dip production lines within 90 days. We will another 4 flexible dip lines and 2 high speed production dip lines within 180 days. Our final phase of production line capacity expansion will be concluded within 360 days for 2 additional high speed production lines. The construction and build of additional production lines will be performed by USA contractors along with our Malaysia subject matter experts guiding the process. Gantt charts and other project plan documents have been created. All additional production capacity buildout will occur will funding from private sources as well as long term contracts from our customers.

In addition to production dip lines, expansion of our chemical compounding, mixing and delivery to line system must be completed. A new centralized chemical compounding and delivery system is designed for our APP facility. Centralized chemical compounding and delivery is critical to any expansion requirements. The new area and equipment will have very modern control systems and long-lasting mixing tanks and pumping systems. The centralized chemical compounding area will take a minimum of 6 months to be fully operational and at maximum capacity with a staged approach to ensure ramp up schedules can be met.

The APP facility infrastructure plans are in place. Our plans include wastewater treatment and recycling system additional equipment, additional incoming water expansion, added fire suppression systems, electrical controls, chemical scrubber and boiler systems, additional offices and locker rooms, outside road improvements and other worker environment systems. A staged implementation will occur simultaneously with the production line and chemical compounding area build out.

Our project plant expansion will cost an additional 40-50 million on top of the 40 million that we have already spent. The expansion will bring new jobs to the area during the construction/build phase along with new production and support jobs as we complete this project. Our goal is 75% USA sourced equipment and systems. Renco believes this goal will be met or exceeded upon project completion.

Our planned expansion is needed for American- made and sourced PPE products goals to be met. Renco is committed to obtaining financing and working with our current and potential new customers on their needs.

#### Customer Service Communication Scheduling and Delivery Plan

Renco is committed to customer service and communications with our customers. Our plan for customer service is for a dedicated person to handle orders, production releases and communicate with all the NIH order and receiving plants. After receiving customer forecast and production releases, our customer service person would enter the information into our ERP system and communicate with our Production scheduler and shipping personnel. Our scheduler will communicate to our production people on which production line to run via our ERP system. Once an order is ready to ship and our logistics person would prepare the necessary documents outlined in RFP attachment. The customer service

person would communicate and send notification to NIH receiving facility. Our standard operating procedures would be followed and compliant with all RFP requirements. When our customer has any changes to orders or delivery needs, our customer service person would point of contact for NIH personnel. Our customer service person would handle internal communications within the APP operations. Invoicing and other document requirements would be loaded into our ERP system for distribution within the NIH payment system according to RFP attachments.

For packaging and labeling requirements, our customer service person would load that information into our ERP with the orders. Our automated packaging and labeling equipment are designed to handle various customer requirements. After reviewing information in RFP, Renco will have no issues complying with the various packaging and labeling requirements.

Our standard delivery plan would be direct ship from our APP operations according to schedule provided by customer. In the event of unforeseen surge demands or other emergency situations, Renco would release safety stock from our strategically located warehouses to meet customer delivery schedule and requirements.

#### Supply Chain Plan

Renco has long term relationship with our supply base. We will modify supplier agreements to accommodate volume and other requirements provided by NIH. Renco will utilize our ERP system for supply chain planning, inventory control and consumption. Renco will notify our suppliers electronically and as needed through other communication methods of our needs and requirements.

A complete list of supply chain sources and country of origin will be provided with RFP in another document.

Chemical raw materials and packaging/shipping materials are the highest volume in our glove making process. The chemical NBR is our highest usage material. Our plan is dual source NBR from 2 different regions overseas. No current NBR chemical manufacturing is currently available in the USA to meet our production and your NIH needs. Other chemical additives are currently sourced from outside the United States. Our long-term plan is to bring the chemical additives manufacturing back to the USA. The plan is part of our continuous improvement plan outlined in the section below. Packaging and shipping materials will have multiple sources both domestically and overseas to meet the requirements outlined in RFP.

Our communication with our established supply chain is continually ongoing as we ramp up production capacity at our APP and other manufacturing facilities. Our supply chain has documented that at our maximum capacity, we would see no issues from them. The supply base is our partners and Renco has no plans to change suppliers for this project. Renco has committed long term to support chemical additive and NBR manufacturing in the USA. The process to reshore chemical manufacturing in USA will

take some time. No current glove manufacturer has the capability of using 100% chemicals made in the USA for the required capacity outlined in this RFP.

#### Production Plan and Ramp Up Plan

After reviewing the information provided in the RFP and the wide range of different PPE gloves needed, Renco Corporation is best suited to meet all the production requirements from low to high volume. Renco uses two styles of production for manufacturing PPE gloves. Our flexible production dip lines are designed to handle a wide range of sizes, length, and thickness of gloves. The lower volume high mix production allows us to quick changeover between products in addition to dedicating portions of the capacity for steady medium level volumes. Our second type of manufacturing production line is called our High-speed Production Dip Line. The production type is designed for high volume low mix products. The production process is highly automated and capable of running continuously 24 hours/day 7 days a week with limited downtime for maintenance and product changeovers.

As Renco and APP completes construction and build of new production lines, complete validation and testing procedure is completed for each machine. The validation process includes machines, systems, and process validations steps before being released for production. The timing plan below reflects the inclusion of these validation plans.

APP's full capacity plan will be 1 billion 3-4 mil medical grade Nitrile gloves annually. At full capacity, APP will have 10 flexible production dip lines and 4 high speed production dip lines. Each flexible dip line production line will have capacity of 20-25 million gloves per year. Each high-speed production line will have capacity of 200-250 million gloves per year. Renco Corporation's philosophy of having no one customer takes more than 60% of our planned production capacity. This philosophy allows Renco to service other customers and add additional capacity up to 25% for one customer during surges and high demand requirements. Doing the math at 60% capacity the capacity for NIH would be on average 672 million nitrile gloves per year with a max output of 806.4 million if needed for surge demands. The following details a capacity ramp up plan based on 3-4 mill gloves at 60% capacity for APP production facility. Other plans can be easily developed based on customer requirements.

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#### Risk Management and Mitigation Plan

Renco takes risk management seriously and continues to review all risks from the corporate level down to the operational level. After reviewing the RFP document provided and our internal risk management reviews, we will outline three higher risk items as examples for your review. More documentation and other information about risks can be provided as needed.

##### Risk #1 – Utility Water supply from Town of Colebrook

The Glove making process requires a high volume of water usage in our process. Any disruption in the water supply is seen as a high risk. Renco and APP continue to communicate our plans and needs with the town of Colebrook and the state of New Hampshire. The town and state have concerns about their ability and capacity to support our needs. Plans have been developed for expansion of the water supply with timing and funding potential issues.

Our mitigation plan for this risk includes recycling 80% of the production waste water at our in house waste water treatment and recycling center. 80 % recycling use is in our production expansion plans with high levels of confidence that we can achieve this goal. Another mitigation plan is tapping water wells located on our property to supplement the Town utility water supply. We have completed the surveys and piping to tap our well water supply as needed. We only need to electrify the pumps and complete internal production process supply lines. Other plans are being investigated for additional water supply as needed.

##### Risk #2 – Labor Pool and Continuous supply of People needed to run our manufacturing facility.

Since our APP Colebrook facility is in a small town in Northern New Hampshire, we run the risk of labor shortages to meet our customer demands. Our mitigation plan has included communications with various state and local officials related to labor requirements to bring manufacturing jobs back to the area. Currently, APP has agreements with state and local unemployment agencies to help get people off the unemployment system and back to work. We have communicated with temporary labor agencies throughout the state and surrounding states to help provide APP with need labor pool. In addition, we have ongoing communications with local community colleges and universities to help supply new graduates and interns for our advance manufacturing technologies.

##### Risk #3 – Weather related events and transportation risks

With our geographical location, weather related utility and transportation risk exists for APP. We cannot control the weather, but our mitigation plan is to have enough safety stock located at our off site warehouses in order to meet customer schedules and demands.

## Continuous Improvement Plans

Renco has several continuous improvement actions planned for APP operations. The first initiative is implementing the plan for USA manufacturing of chemical additives. This plan will further meet the obligations outlined in RFP. The second initiative is additional automation for our flexible production dip lines. We have automated glove removal equipment designed and purchased for our high-speed lines. We must implement automated glove removal from our flexible dip lines. This will greatly reduce the number of workers needed for flexible dip line production. Our last initiative is implementing CHP (combined heat and power) supply. This is an environmentally friendly source of power and heat for our facility and can help alleviate reliance on current power grid in region.

## Conclusion

Outlined throughout this project plan is our commitment to American Made and sourced PPE. Additional details can be submitted as requested by the contracting officer and the NIH team.