OBJECTIVE: The Defense Logistics Agency seeks to develop standardized and Additive Manufacturing (AM) production methods for certified Industrial Rubber Gloves for the Nuclear Enterprise Support Office (NESO) and related parts in the DoD supply chain. This project must demonstrate a standardized method for certifying Type I and Type III Industrial Rubber gloves and related parts for the DoD supply chain in a manner that is rapid, reliable, and scalable, although does not require production/purchase volumes beyond demand.

DESCRIPTION: DLA Logistics Operations has the goal of purchasing Industrial Rubber Gloves and related rubber protective equipment apparel in the DoD supply chain:
1. In monthly to quarterly quantities that meet but not exceed demand, estimated at 1300 pairs of gloves annually
2. With competitive pricing and enhanced performance
3. Timely delivery
4. Ability to rapidly transition chemistry and product through fused filament fabricated (FFF) 3D printed mandrels

Industrial rubber glove production is currently limited in part due to Berry amendment sourcing and production limitations. Consequently, DLA is looking for qualified companies and production methods that can address both small and large volume quantities. Ideally, glove, apparel, boots and parts may all be produced using natural rubber or polychloroprene chemistry.

PHASE I: Provide justification to bypass Phase I (Not to exceed twenty pages)

PHASE II: To qualify for the Phase II effort the proposer should possess a technology with proven feasibility – i.e. demonstration of Type I and Type III Industrial Rubber Gloves that meet the requirements outlined in MIL-DTL-32066A. Proposers should develop and propose a plan to enable certification of gloves and related parts using a flexible manufacturing process that allows for immersion production based on varied polymer chemistry and varied shapes using additively manufactured lost cost mandrels. Commercialization is expected shortly following the Phase II effort.

PHASE III DUAL-USE APPLICATIONS: At this point, no specific funding is associated with Phase III. Progress made in D2P2 should result in a functional Open Source System which can transition into the Government or the commercial markets.

COMMERCIALIZATION: Expand and enable a flexible and scalable supply chain where qualified gloves and related parts may be produced in reasonable quantities and with rapid reliable delivery.

REFERENCES:
3. wbparts.com/rfq/8415-00-266-8675.html

KEYWORDS: Industrial Rubber Gloves, NESO, Type I and Type III, MIL-DTL-32066A, Immersion, Seamless Processing, Additive Manufacturing, and 3D Printed Mandrels