

RFS 21-67773  
Mobile Swine Euthanasia Unit  
Attachment F: Technical Proposal

Please supply **all** requested information **in the yellow-shaded areas** and indicate any attachments that have been included. Document all attachments and which section and question they pertain to.

#### 2.4.1 General Information

1. Please provide a brief history of your company, including the year it was established, the range of your company's services and capabilities, and any examples of similar work that is available for review.

Established in 2013, we are a manufacturer of factory automation with specialization in controls.

2. Please provide a list of the personnel that will be assigned to lead the work on this project and their professional qualifications and applicable experience.

William Derrer, President – Senior Controls engineer

#### 2.4.2 Compliance

1. Please explain how you plan to comply with Indiana laws governing the design and use of vehicles / trailers on public roads?

We will purchase DOT approved trailer. It will be used to transport the equipment just like any other trailer.

2. Please explain how you plan to comply with AVMA guidelines for euthanasia of animals?

By using techniques recommended in the publication "AVMA GUIDELINES FOR THE EUTHANASIA OF ANIMALS: 2020 EDITION"

3. Please explain how you plan to comply with State and Federal safety standards for construction of the unit as well as safety precautions while in use?

All OSHA safety standards are followed in our facility.

#### 2.4.3 Mobile Unit

1. Please provide a detailed description of your proposed unit to include how many animals per hour can be processed, the minimum and maximum weight of an animal, confirmation animal is deceased, and disposal.

We will design the system to allow a ¾ ton pickup to pull it to the required job site using a standard bumper hitch. The system will allow complete setup within just a few minutes by a single person. The hogs will be funneled onto the 1<sup>st</sup> conveyor which will have four areas of electric euthanasia, 3 automatic and 1 manual. Once the hogs have been euthanized, they will drop onto a 2<sup>nd</sup> conveyor that will transport them into a rendering truck or other disposal unit. The trailer will be approximately 28ft long and weigh around 10,000 lbs. 220 VAC external power and water will be required on site. Once plugged into power, the trailer can be manipulated into the functional system. Using the hydraulics on the trailer, the 1<sup>st</sup> conveyor can be offloaded and positioned where needed. The 2<sup>nd</sup> conveyor is then raised and locked into place. Once this is done, the trailer is moved under conveyor 1 and the trailer leveled and stabilized at the push of a button. The automatic euthanasia area of conveyor 1 will be covered by a clear, protective Lexan cover so that operators can safely inspect the operation if needed. There will be indicator lights when each station goes active. Contact with the hog will be across the head and sides of the hog with a slight delay after initial contact before being energized. An optional water spray can be added to each station if required. The 4<sup>th</sup> euthanasia area will be for use of a manual stunner similar to the Best & Donovan model ES electric hog stunner. There will be safety rope pulls along both sides of each conveyor that will stop all operations instantly if pulled. The 2<sup>nd</sup> conveyor which transports the hogs off the trailer will clear a 13' rendering truck. The unit will handle about between 120 and 180 per hour depending on the weight of the pig. Minimum of 50lbs, maximum of 350lbs. Confirmation is visual by a veterinarian.

2. Please explain how your proposed unit will guide animals from the stall into the MSMEU?

There will be a chute and ramp that will guide the animal onto the feed conveyor. Getting the animals from the stall to the chute will be up to the site as each site will be different.

3. Please explain storage requirements of proposed unit when not in use.

Recommend that the unit is stored in a building of some type.

4. Please explain the cleaning procedure after usage.

Hose down with water

5. Please provide a sample instruction booklet explaining operation of unit, maintenance of unit, and any set-up and tear down procedures before and/or after usage.

See attached

#### 2.4.4 Timeline / Testing

1. Is the proposed unit prefabricated or built to design? If built to design, please provide an estimated design timeline.

Built to design – design time is 3 to 6 months depending on when PO is issued

2. Please provide an estimated construction timeline.

Build time is 6-18 months depending on when PO is issued

3. Please explain the unit testing procedure for safe and effective operation.

Simulations will be done prior to the build and then staged testing after the unit is built.

#### 2.4.5 Warranty

1. Please explain the terms and conditions of the warranty.

Unit will have a 1 year warranty against defects in manufacturing.

2. Please explain any know recurring unit defects/issues.

N/A – custom machine built to order.