COMPANY NEWS AND UPDATES FOR THE LOGANTON COMMUNITY

WINTER 2022

Work Continues on Sustainable Resource Facility

Although visible progress may slow during the winter months, activities continue behind the scenes at the Nicholas Meat Sustainable Resource Facility (SRF) construction site. Frozen wintery conditions will prevent certain activities like earth excavation and pouring concrete from occurring. However, this is an ideal time to optimize plans for later stages of development of the SRF.

"Over the winter months, engineers will be creating and reviewing design submittals and shop drawings for the various tanks and buildings that will be erected later this year," said Brian Miller, Nicholas Meat Director of Sustainability.

All aspects of the SRF structures – including structural, plumbing, electrical and mechanical scopes – must have detailed plans that are certified by licensed engineers. By focusing on these activities, Nicholas Meat will be better prepared to continue construction when the weather allows. Of course, if the weather permits, work will continue outside as much as feasible.

Visit Nicholas Meat's You Tube Channel to watch a progress report video that highlights what was accomplished at the site June through December 2021.

The SRF features award-winning waste-to-energy technology and an advanced water treatment facility. Once fully operational, the facility will help reduce truck traffic at Nicholas Meat, minimize odor, create renewable energy, decrease the company's carbon



The heavy equipment sits idle amidst the snow and frigid temperatures at the Nicholas Meat Sustainable Resource Facility site. However, there's plenty of activity happening behind the scenes as materials and supplies are secured and plan details are finalized to ensure activities begin when weather permits.

footprint, capture greenhouse gases and reuse water.

"We've been moving at a steady pace and it really shows," Miller continued. "We've been focused on stormwater infrastructure, constructing concrete retaining walls and installing site electrical service. In late spring we plan to erect process tanks. When they are complete, we will start erecting the buildings."

When looking at the site from an aerial view, one will see three tiers being completed. Tier #1 will have the solids receiving area and structures for biogas creation; Tier #2 will be home to the wastewater treatment facility and water reclamation building. Tier #3 is being reserved for any future development that is yet to be determined.

Progress includes the completion of two large basins that capture stormwater coming off the mountain to the north and three large retaining walls are being created to provide level surfaces where the process tanks and buildings will be erected.

"We're eager to move closer to delivering the many benefits of the SRF. I personally think this is a great project for the environment, the community and the company. Being able to take waste products and turn them into a valuable renewable energy source is very exciting."



What's the Story on Winter Application of FPR?

Many have asked if the land application of Food Processing Residuals (FPR) during periods of inclement winter weather is permitted. Simply put, yes, it is. Nicholas Meat and the Pennsylvania Department of Environmental Protection (DEP) have reached an agreement that includes updated Best Management Practices (BMPs) allowing for the safe land application of FPR during inclement winter weather. The BMPs, officially approved by the DEP, outline the conditions applicators must follow if applying FPR during inclement winter weather. FPR, a byproduct from food processing, is spread on soil much like manure and helps to increase organic matter and add nutrients in the soil.

Naturally, questions may arise in the community regarding the application of this beneficial organic soil conditioner and fertilizer. We hope to answer many of the questions below.

Q: What is the agreement that was reached with the Pennsylvania DEP and Nicholas Meat?

A: The agreement updates BMPs in accordance with current technology and farming methods that allow for the safe application of FPR during periods of inclement winter weather. Appropriate land application of FPR that follows BMPs and Nutrient Management Plans has always been and will continue to be a priority for Nicholas Meat and the farmers whose fields benefit from the nutrients applied.

Q: Will FPR be applied this winter?

A: To preserve storage space and because the technology provided by the Bazooka Farmstar Shallow-Disc Injection Toolbar is effective at incorporating the FPR into the soil, land application of Nicholas Meat's FPR will occur while following the agreed upon BMP's.

Q: Does Nicholas Meat have an alternative to applying FPR to fields in the Loganton area?

A: Yes, the company has storage that may be utilized when conditions are not optimal for land application. Nicholas Meat's current storage options include two onsite tanks and an offsite tank at another location.

Weather Condition	Slope/Volume	Enhanced Setback Restrictions	Additional Notes
No Snow Cover No Frozen Soil No Ice Cover	No Slope Restriction 9,000 gallons per acre/day	None	Allows preserva- tion of storage to plan for severe or long-term, inclement weather conditions.
Snow Cover (Toolbar remains effective)	• Allowable on A and B soils • 5,000 per acre/day	None	The Toolbar injects the FPR into the soil, decreasing the risk of runoff.
Frozen Soil or Ice Cover (Toolbar remains effective)	• Allowable on A and B Soils • 5,000 per acre/day	None	The Toolbar injects the FPR into the soil, decreasing the risk of runoff.
Snow cover, frozen or ice-cover so that the Toolbar cannot be 100% effective	 Slope of land application area cannot exceed 5% Sufficient vegetation must exist Must be applied according to nutrient management plan PA-DEP must be notified Reduced volume 4,250 per acre/day 	Additional 100-foot setbacks from surface water, streams, lakes or ponds.	Storage is utilized first, but if storage will not accommodate the FPR, these more restrictive application parameters apply.

Additional offsite storage tanks are currently being constructed to increase storage capacity.

Q: Are there any special requirements that need to be followed as part of the agreement?

A: Yes. Depending on the ground conditions, decreased FPR application rates and increased setbacks may be required. Please see the accompanying table for specifics.

Q: What types of records need to be kept as part of this agreement?

A: Those applying the FPR have maps outlining setback and slope restrictions. They must follow these maps with every application. Additionally, operators file daily records when applying that identify fields, log applications volumes and weather. An annual operations report is also submitted.

Q: What are the Advantages of Using the Bazooka Toolbar?

A: FPR applications during inclement winter weather will be performed using the Bazooka Farmstar Shallow-Disc Injection Toolbar. Spacing of the toolbar injection nozzles allows for multiple applications on the same field without overlapping previous

applications. Note that application will be done on fields having 25% residue cover or a cover crop and operators will allow at least one day of rest between each application on a particular field.

Use of the toolbar helps in many ways. These include:

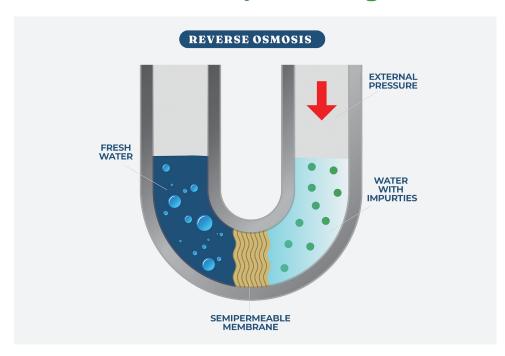
- · Low soil disturbance
- · Reduced streaking
- Even and precise nutrient coverage and placement
- · No additional tillage is required
- · Incorporates FPR into the soil



Still have questions? Please email us at info@nicholasmeats.com or go to www.NicholasMeat.com for more information.

Thanks for Asking:

How will water be recycled through the Sustainable Resource Facility?



Recycling water (also commonly known as water reuse or water reclamation), according to the Environmental Protection Agency (EPA), is the practice of reclaiming water from a variety of sources, treating it, and reusing it for beneficial purposes such as agriculture and irrigation, groundwater replenishment, industrial processes, and environmental restoration. The EPA states, "Water reuse can provide alternatives to existing water supplies and be used to enhance water security, sustainability and resilience."

These benefits, as referenced by the EPA, are at the focus of the Nicholas Meat Sustainable Resource Facility (SRF). This first-of-its-kind facility for the U.S. meat processing industry features award-winning waste-to-energy and water reuse technology and is being constructed on a 40-plus acre site, located across Hwy. 80 from the main Nicholas Meat facility.

Process water, which is water that has been used in the processing facility, will be piped from the plant to the SRF to undergo advanced treatment including biological denitrification, disinfection and reverse osmosis. This will enable Nicholas Meat to reuse up to 90 percent of the water within our operations.

Reverse osmosis is a purification process that uses a membrane to filter the water and remove any impurities. The membrane contains thousands of very tiny holes that are just large enough to allow water molecules through. Anything that's larger than a water molecule is trapped by the membrane. The smallest forms of bacteria are approximately 0.2 microns in size. This is very small, but still much bigger than a water molecule which is approximately .0001 microns in size. The holes in reverse osmosis membranes are slightly larger, thus allowing water to push through while all other content is removed. This process results in producing purified water.

In biological water purification, nitrification plays an important role in the removal of nitrogen out of the wastewater. That is followed by denitrification. If you want to learn more about these technical aspects of wastewater treatment, visit the Nicholas Meat website. For more information, check out our latest Information Brief. You can also learn more about water reuse by visiting this website: www.epa.gov/waterreuse.



Meat our People

Employee Feature

Position: PLC/Material Handling Technician

Years Employed by Nicholas Meat: 6+

Favorite book/movie:

The Elmira Express

Person most admired: My grandfather because he was always working and was full of energy.

When it comes to beef: I like a nice piece of prime rib. Cooked medium please!

We're Hiring!

Consider joining the Nicholas Meat team for a rewarding career at a company providing safe, delicious beef products for customers. We now offer a \$1,500 sign-on bonus for new employees after 90 days of employment. You must have good attendance and no disciplinary problems to qualify. If you already work at Nicholas Meat, don't forget about the referral bonus of \$300, too! To apply, visit our website at NicholasMeat.com/careers or in person at the plant today.





At Nicholas Meat we are all about the beef! We hope you enjoy this recipe from the Pennsylvania Beef Council.

Beef Steak & Black Bean Soft Tacos

Take care of your heart in February by eating beef! This steak taco recipe gets extra flavor from a black bean and salsa paste and fresh toppings. This recipe is also certified by the American Heart Association[®].

Ingredients:

- 1 lb. beef Bottom Round Steaks, cut 1/4 in. thick
- · 1 c. salsa, divided
- · 2 t. chili powder
- 1½ t. ground cumin, divided
- · 1 can (15 oz.) no-salt added black beans
- · 8 small corn tortillas (5 to 6-in. diameter), warmed
- 1 c. diced tomatoes
- ½ c. shredded lettuce
- · ½ c. diced red onion
- 2 T. plus 2 t. chopped fresh cilantro leaves
- 1 medium ripe avocado, cut into 8 thin slices
- 1 lime, cut into 8 wedges

Cooking:

- 1. Combine ½ c. salsa, chili powder and 1 t. cumin. Place beef steaks and marinade in food-safe plastic bag; turn to coat. Close bag securely and marinate in refrigerator 6 hours or as long as overnight, turning occasionally.
- 2. Combine 1 c. beans, remaining $\frac{1}{2}$ c. salsa and remaining $\frac{1}{2}$ t. cumin in medium microwave-safe bowl. Mash with fork into chunky paste. Cover and microwave on HIGH 1 to 2 min. or until hot, stirring once. Keep warm.
- 3. Meanwhile, heat large nonstick skillet over medium-high heat until hot; remove from heat and coat with nonstick spray. Remove steaks from marinade; discard marinade. Cooking in batches, if necessary, place steaks in skillet (do not overcrowd) and cook 2 to 3 min. for medium rare (145°F) doneness, turning once. (Do not overcook.) Remove steaks from skillet; keep warm. Repeat with remaining steaks.
- 4. Spread bean mixture evenly on tortillas. Cut steaks into 4 pieces each and divide evenly among tortillas (Steaks may be cut into bite-sized pieces). Top beef with remaining ½ c. beans, tomatoes, lettuce, red onion, cilantro, avocado and lime wedge, as desired. Fold tortillas in half to serve.

Find more beef recipes and information at www.PABeef.org.



