



ANIMAL INGREDIENT

Our Vision, Strategy, Method and Values



Our foundation & our strength is in our values

DETERMINATION

SIMPLICITY

AVAILABILITY

HUMILITY

SINCERITY

DISCIPLINE

OWNERSHIP



Pilgrim's Protein and Pet Food Customers

5

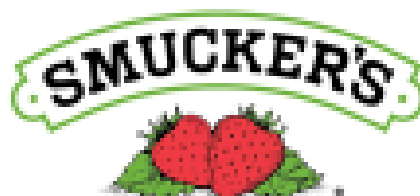
RACHAEL RAY
NUTRISH

REAL RECIPES. REAL INGREDIENTS. REAL GOOD.™

DAD'S

From
Local Family Farms

Simmons Pet Food



J. M. SMUCKER COMPANY



Love them like family.
Feed them like family.™



IAMS
Excluding Europe



What is Rendering

- **Short Answer: Rendering is Recycling**

- Roughly 50% of an animal is considered inedible by Americans. Rendering reclaims this meat, bone and fat and transforms it into ingredients for countless products-Recycling 99% of this unwanted meat.
- So, rendering is really the “Original Recycling” – but instead of recycling water bottles into plastic fibers, or steel cans into car parts; rendering recycles unutilized meat, fat and bone into things like nutritious pet food and biofuels.





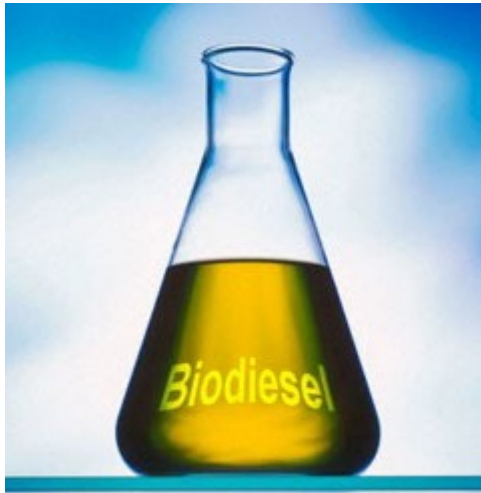
Regulated Industry

- The rendering industry is heavily regulated by a number of different regulatory agencies.
- We are audited frequently by these agencies depending on the products produced and where they are sold.
- All rendering plants are required to register in accordance to the Bioterrorism Act.
- All facilities processing raw material from cattle origin fall under the BSE rule 21 CFR 589.2000 and 2001 which restricts the use of specific animal proteins.
- New regulations through FSMA

Finished Product



Applications





Not What You Think

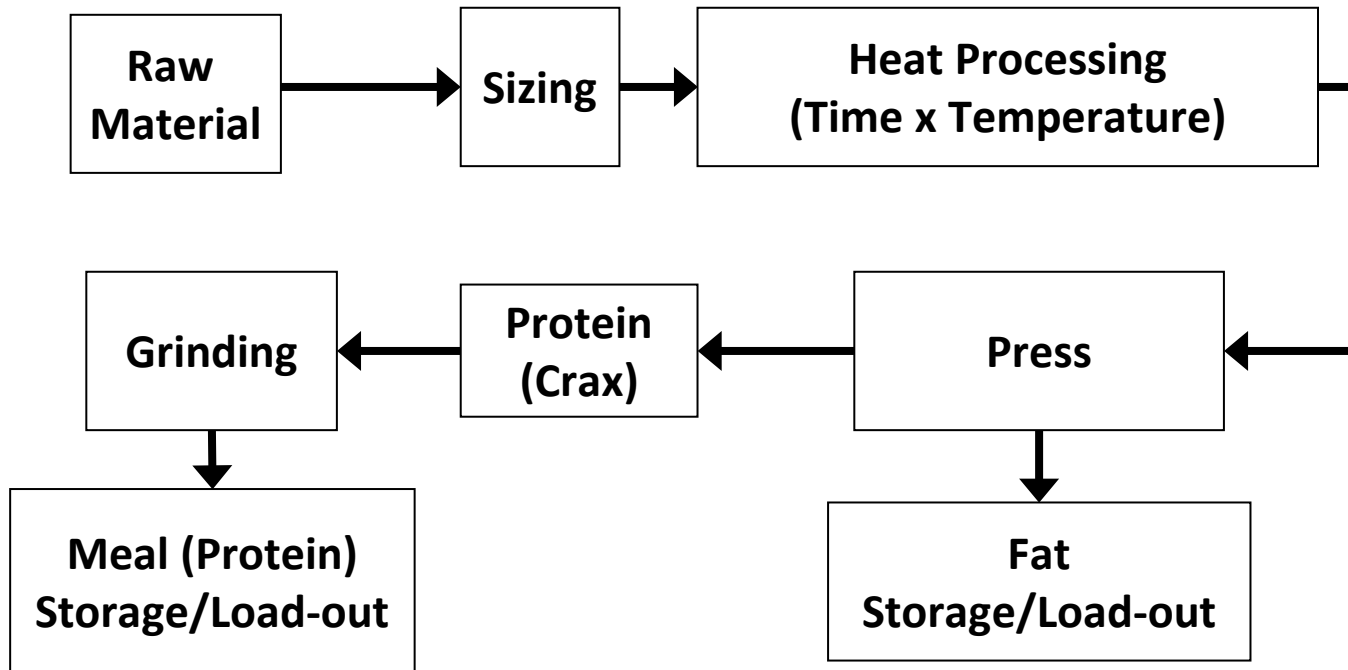


1971 Truck



2020 Truck

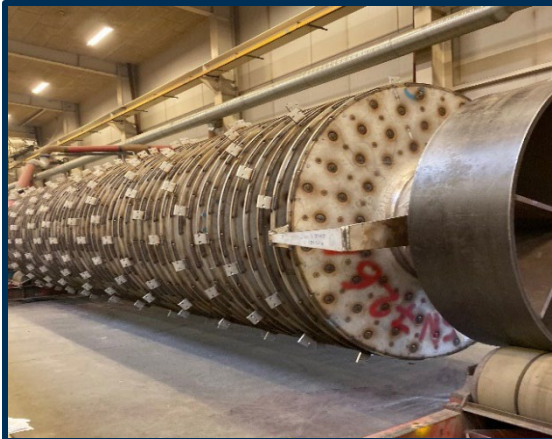
Process



Continuous Cooking



- Operating temperature to 230-300F
- Residence time 20-90 minutes
- 60% reduction in moisture
- Destroy pathogens



Press – Fat Separation



- **High Pressure Expeller Presses**
- **Separates Fat from Muscle Tissue**



Grinding & Screening



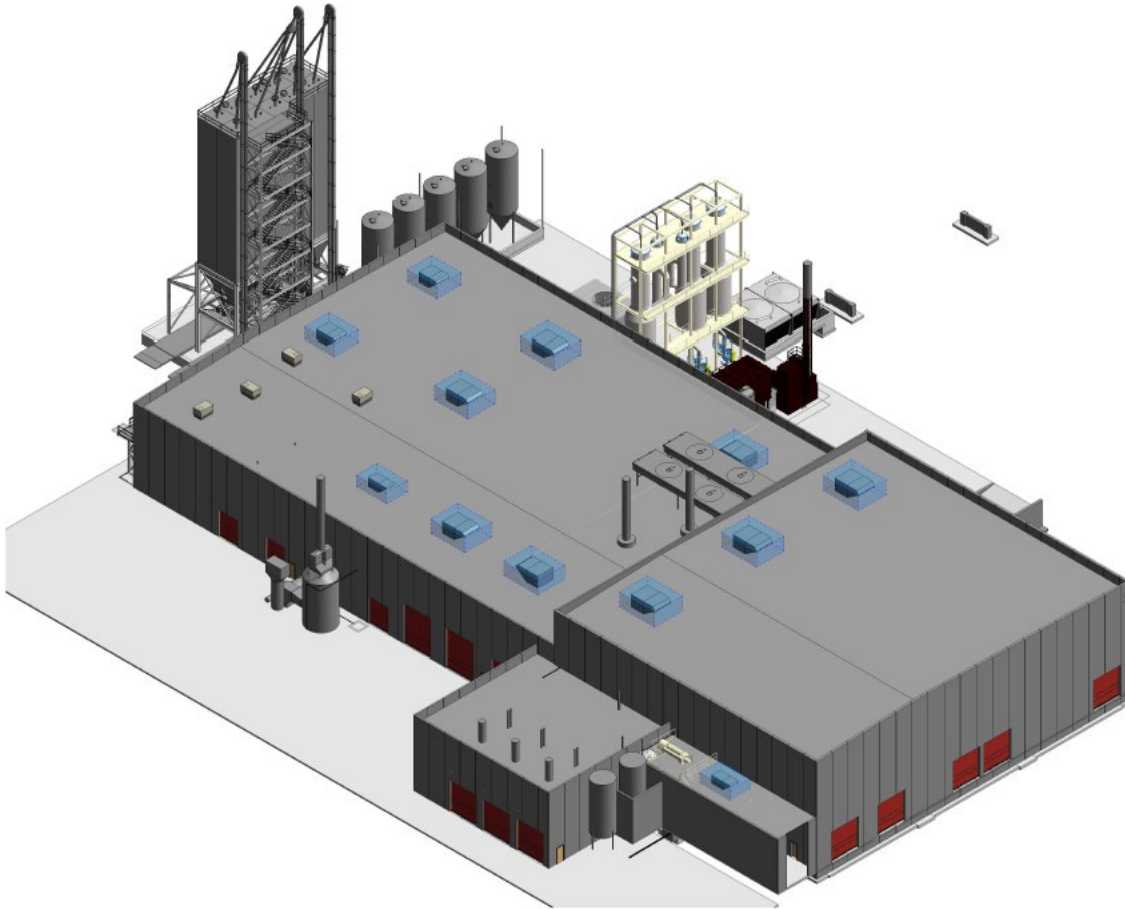
Hammermill



Sizing Screen



Typical Feed Mill System with Dust Collection



- Raw products transferred inside under odor control
- Raw and finished product has minimal exposure to air for improved quality
- Plant is under negative pressure at all times
- Airflow address team member comfort

Typical Plant



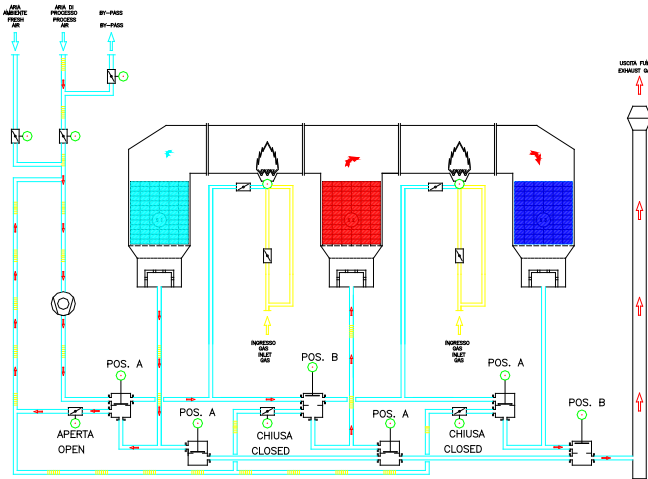
New Plant

Odor – High Intensity

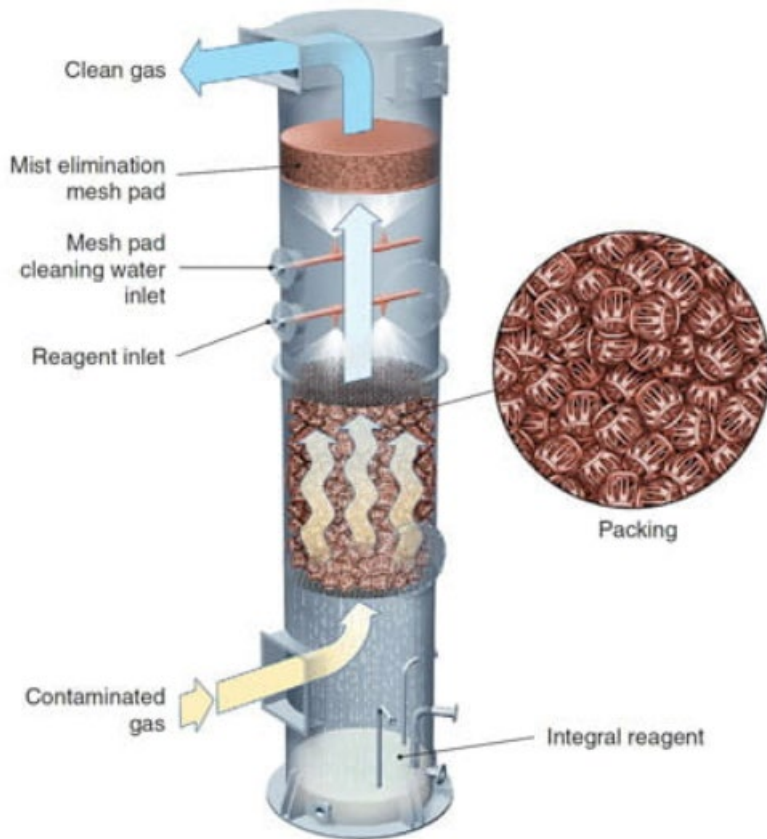


Regenerative Thermal Oxidizer

- Independent Collection & Treatment of High Intensity Odors
- 99% Destruction of VOC's
- Operating Temp 1,450 to 1,600°F
- Discharge Gas is Mostly CO₂ and Water Vapor
- Considered by EPA to be BAT “Best Available Technology”



Odor – Room Air Scrubbing



Packbed Scrubber Room Air

- Provides Negative Pressure within Building to Contain Fugitive Odors
- Chemical Scrubbers are for Removal of Low Intensity Odors

Gadsden – Site Layout



Undeveloped Land

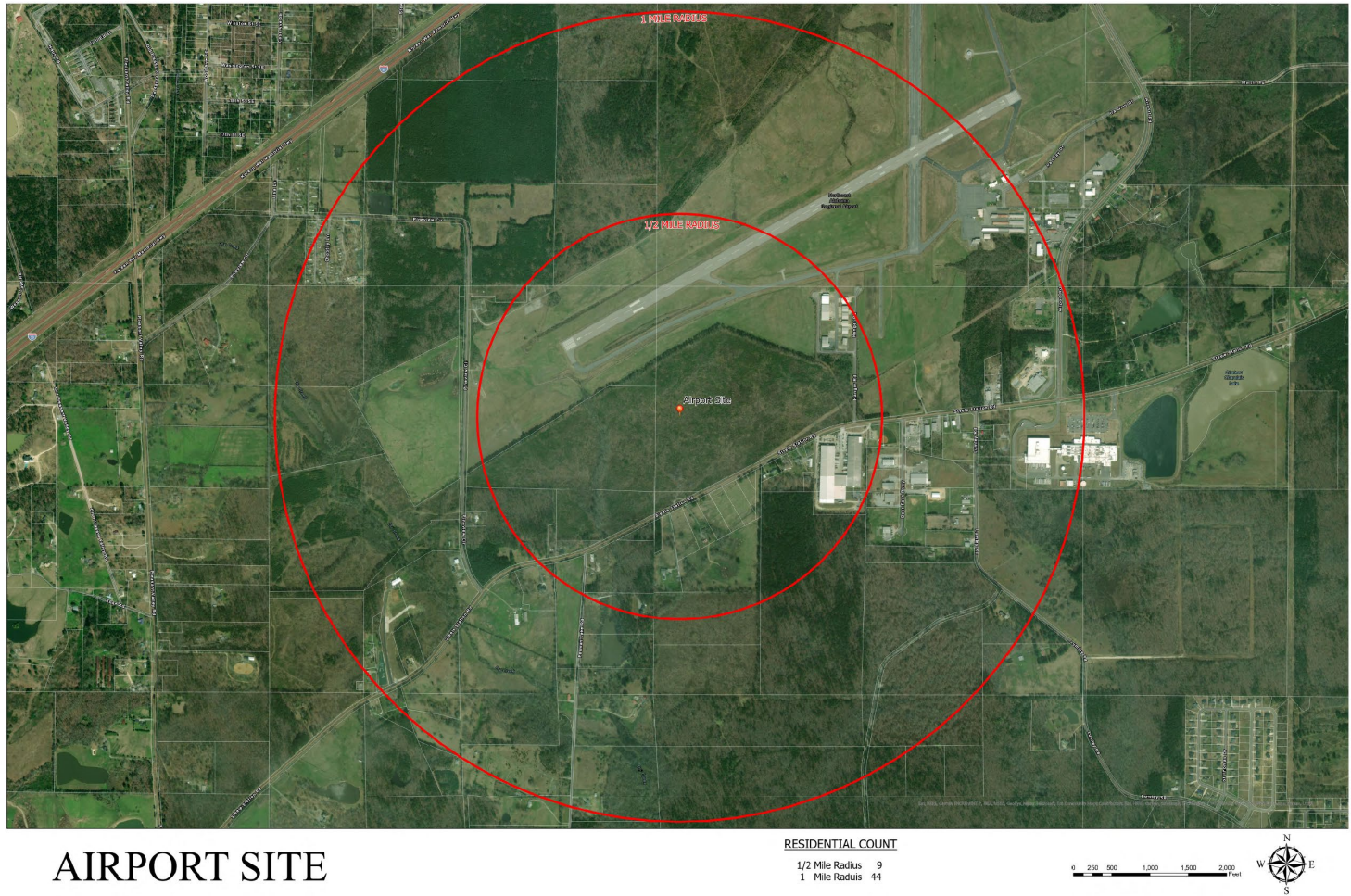
Road to Future
Hangers, Pilgrim's &
Undeveloped Parcel

Animal Ingredient
Plant

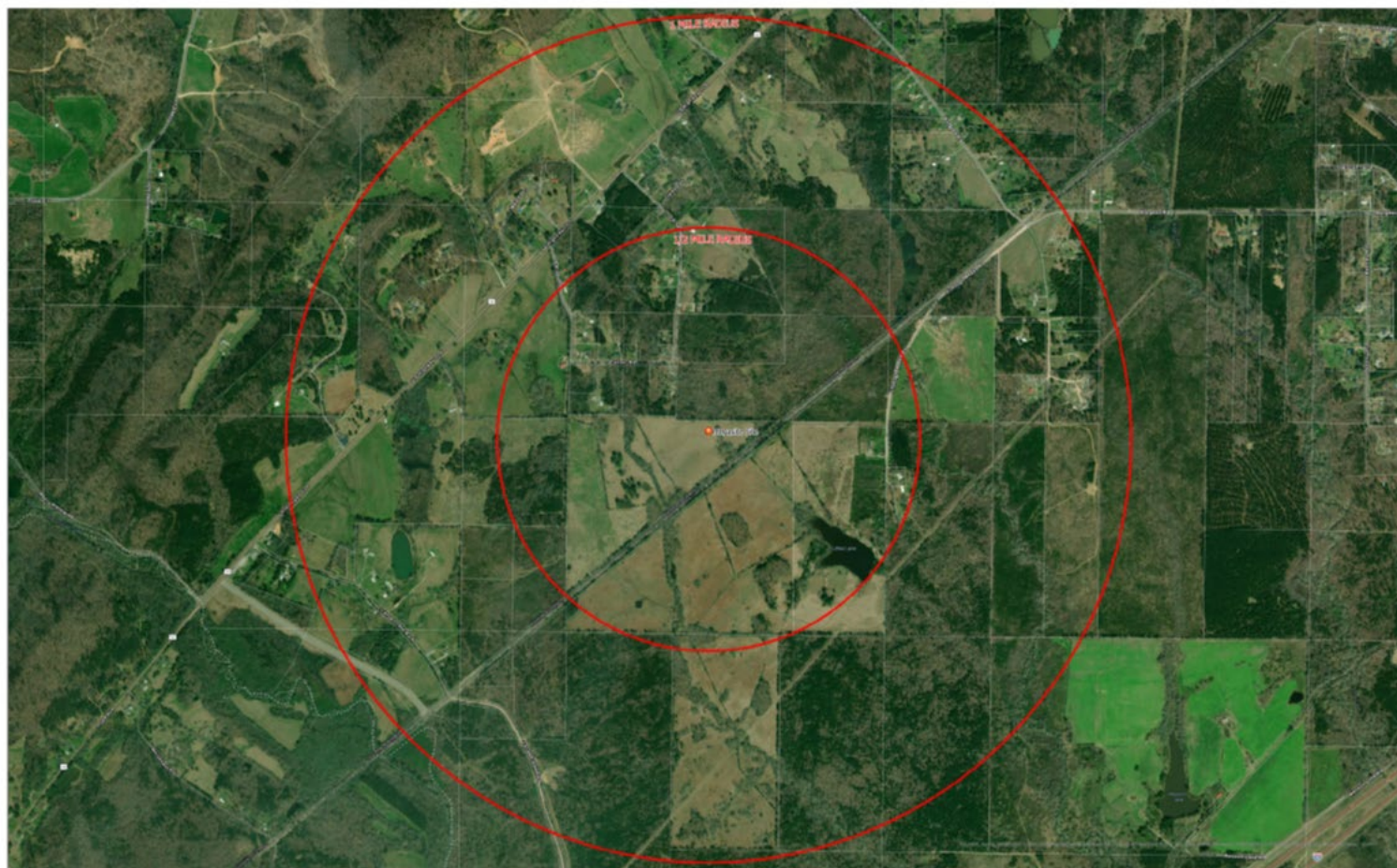
Wastewater
Pretreatment

Wetland's for Buffer

Gadsden Airport Site



Ettowah County Megasite Site



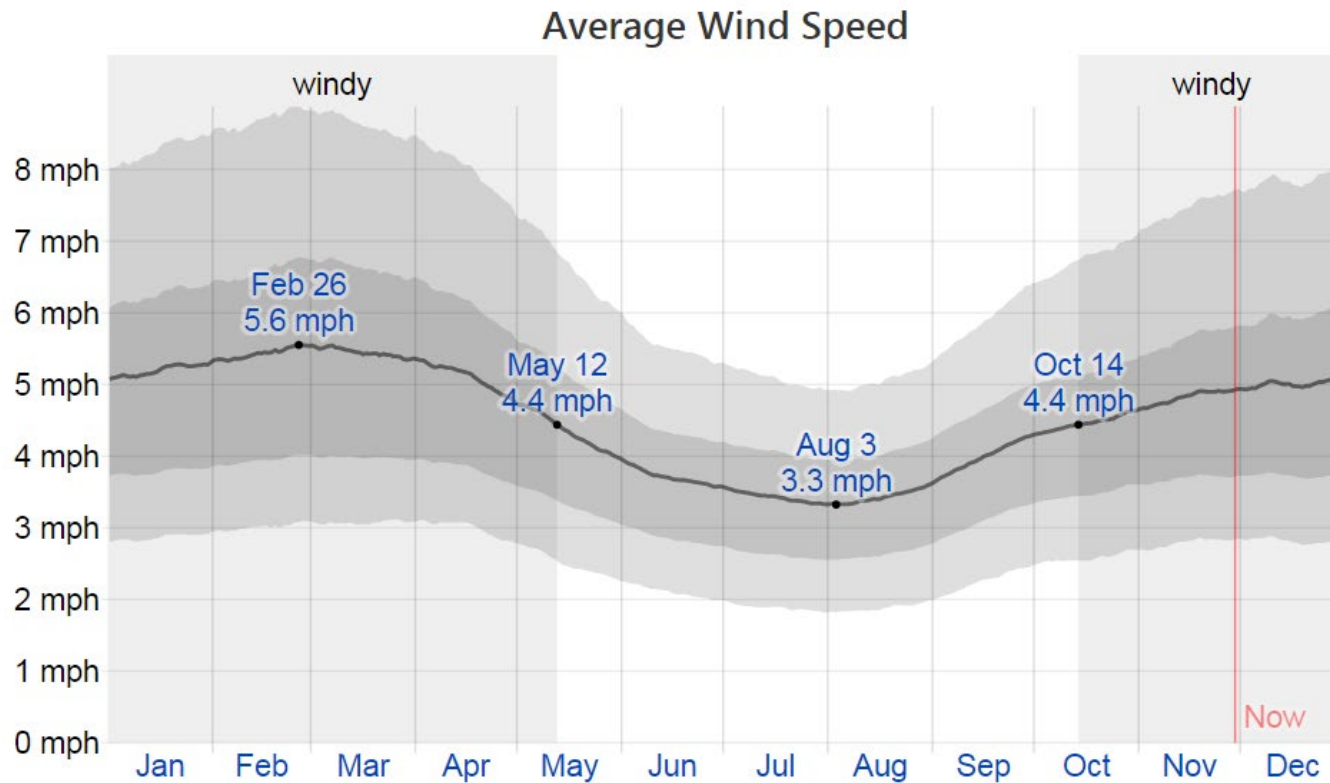
MEGASITE SITE

RESIDENTIAL COUNT

1/2 Mile Radius	16
1 Mile Radius	78



Gadsden Wind Speed



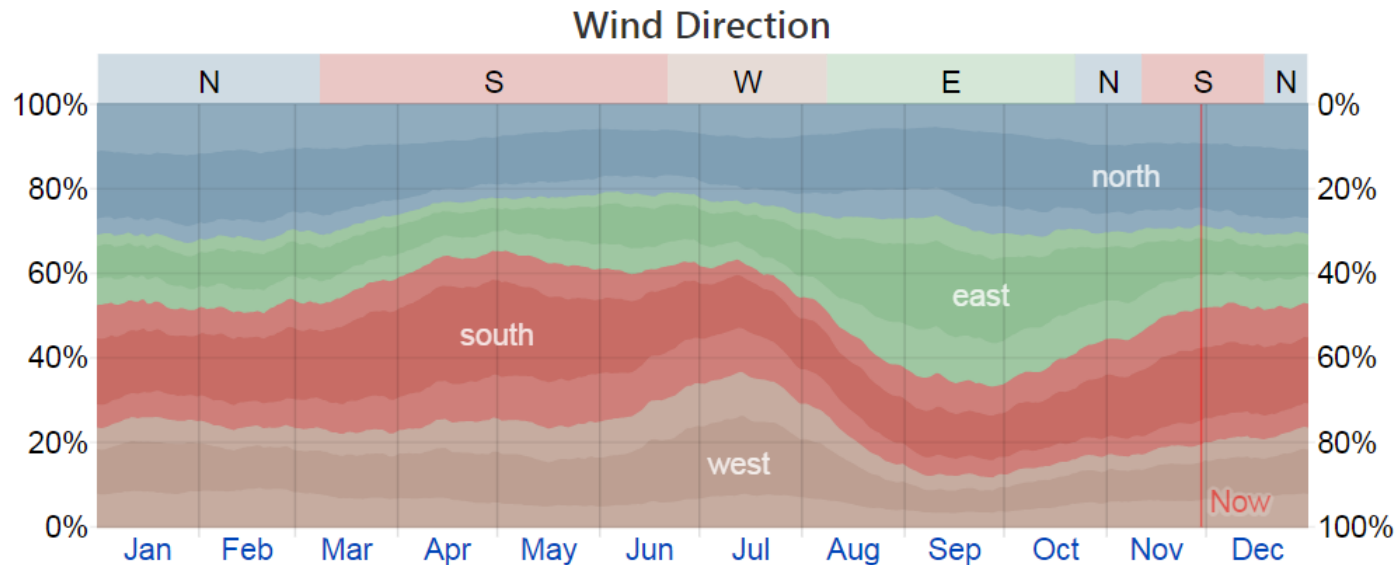
The average of mean hourly wind speeds (dark gray line), with 25th to 75th and 10th to 90th percentile bands.



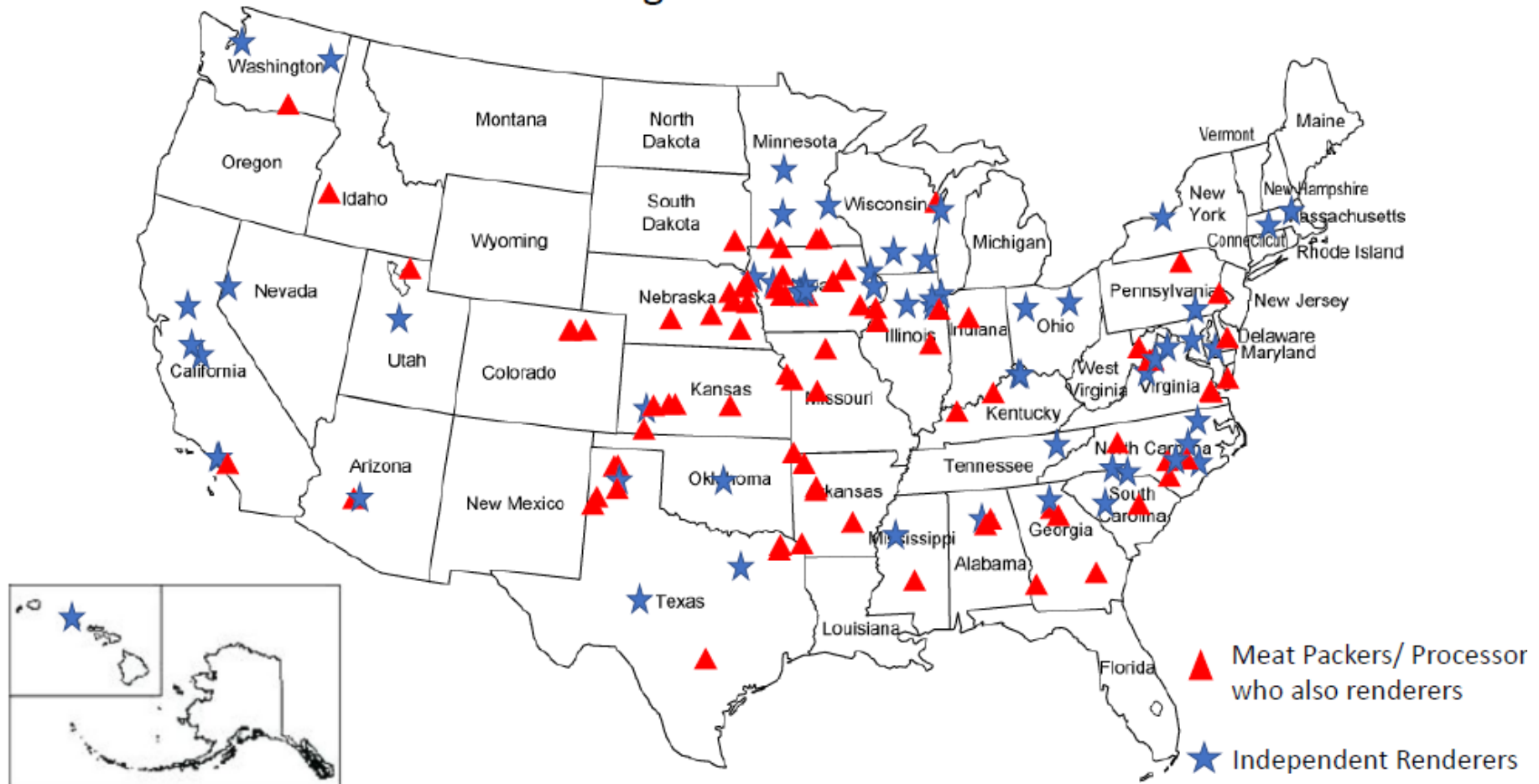
Gadsden Wind Direction

The predominant average hourly wind direction in Gadsden varies throughout the year.

The wind is most often from the south for 3.4 months, from March 8 to June 21 and for 1.2 months, from November 11 to December 18, with a peak percentage of 40% on May 3. The wind is most often from the east for 2.5 months, from August 8 to October 22, with a peak percentage of 38% on September 7. The wind is most often from the north for 2.9 weeks, from October 22 to November 11 and for 2.7 months, from December 18 to March 8, with a peak percentage of 30% on October 28.



Rendering Plant Locations 2019





Advantage to Gadsden

- 150 Construction Jobs
- 90 Full time Jobs
- \$70 million investment
- Additional Tax Revenue
 - Property Tax, City Payroll Tax, Sale Tax