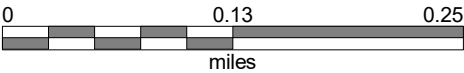
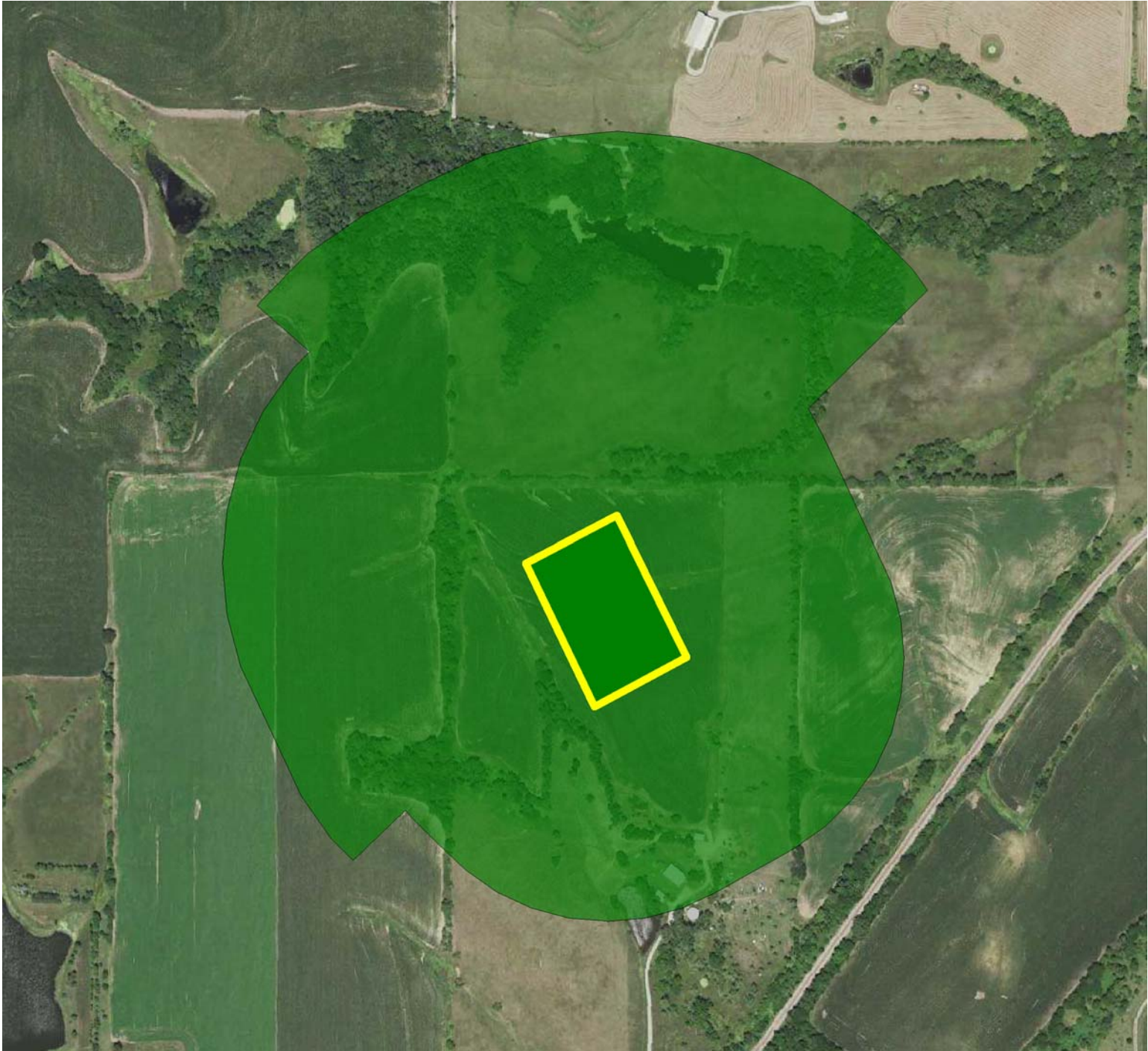


Randy Essink  
96% Odor Footprint Setback



- Residences
- Odor Footprint
- Proposed Facility Boundary
- Business





## NEBRASKA ODOR FOOTPRINT TOOL

### Separation Distance Results



Project title: Randy Essink  
 Site location: Lancaster County, NE  
 Location for weather data: Beatrice, Neb. (Southeast Neb.)

Prepared for: Lancaster County  
 Prepared by: Nutrient Advisors  
 Date prepared: June 14, 2018

	Source Facility 1	Source Facility 2	Source Facility 3	Source Facility 4
Type of facility:	Poultry, Broiler Floor-raised on litter			
Total plan area: (sq. ft.)	151,200			
Total number of animals:	190,000			
Base odor control:	No supplemental odor control implemented			
Percentage of total odor:	100%			
Alternate odor control:	No supplemental odor control implemented			
New Percentage of total odor:	100%			

		Separation Distance (miles)			
		North	East	South	West
<b>BASE PLAN</b>	90%	0.16	0.06	0.08	0.12
	94%	0.21	0.12	0.13	0.18
	96%	0.28	0.16	0.16	0.22
	98%	0.44	0.30	0.29	0.37
	99%	0.67	0.57	0.53	0.67
<b>ALTERNATE PLAN</b>	90%	0.16	0.06	0.08	0.12
	94%	0.21	0.12	0.13	0.18
	96%	0.28	0.16	0.16	0.22
	98%	0.44	0.30	0.29	0.37
	99%	0.67	0.57	0.53	0.67

	North	East	South	West
Terrain: (apply on receptor-by-receptor basis)	Rolling terrain	Rolling terrain	Rolling terrain	Rolling terrain

Funding provided by: The Nebraska Environmental Trust  
Pork Checkoff



# NEBRASKA ODOR FOOTPRINT TOOL

## Values Used in the Calculation of Separation Distances



Project title: Randy Essink  
 Site location: Lancaster County, NE  
 Location for weather data: Beatrice, Neb. (Southeast Neb.)

Prepared for: Lancaster County  
 Prepared by: Nutrient Advisors  
 Date prepared: June 14, 2018

BASE PLAN		Source Facility 1	Source Facility 2	Source Facility 3	Source Facility 4
Select odor sources:		Poultry, Broiler	0	0	0
Select type of facility:		Floor-raised on litter	0	0	0
Number of animals per facility:		47,500	0	0	0
Facility plan dimensions:					
a) Length & Width	(ft)	600	0	0	0
	(ft)	63	0	0	0
OR b) Diameter:	(ft)	0	0	0	0
Number of identical facilities:		4	0	1	1
Select odor control used in Base Plan:		No supplemental odor control implemented	0	0	0
Total plan area:	(sq. ft.)	151,200			
OFT odor emission number*:		10			
Odor control factor:		1			
Facility odor emission rate*:	(10 <sup>6</sup> OU/s)	1.51			

\* The emission values shown have been scaled up - based upon calibration study results - for use with the Odor Footprint Tool.

Total odor emission rate\*: 1.51 x 10<sup>6</sup> OU/s

ALTERNATE PLAN	Source Facility 1	Source Facility 2	Source Facility 3	Source Facility 4
Select odor control option being considered:	No supplemental odor control implemented	0	0	0
Odor control factor:	1			
New total odor emission rate*:	1.51 x 10 <sup>6</sup> OU/s			