

SOUTH DAKOTA ODOR FOOTPRINT TOOL

Procedure to use SDOFT:

- 1 Select South Dakota County from drop down list where site is located.
- 2 Select Odor Source Type from drop down list for each odor source at the site.
- 3 Select housing or manure storage type from drop down list for each odor source at the site.
- 4 Enter size (width and length) of emitting surface for each odor source at the site.
- 5 Enter odor control technology if any from drop down list for each odor source at the site.
- 6 View annoyance-free distances at bottom of page (scroll down).
- 7 Select the annoyance-free curves to be graphed by checking the square on the left bottom of this page.

County of Site

Hand

Source Type

Source 1	Source 2	Source 3	Source 4	Source 5
Swine Barn	Swine Barn	Swine Barn	Swine Barn	Swine Barn

Housing Type or Manure Storage

Gestation - Deep Pit	Finishing - Deep Pit	Farrowing	Finishing - Deep Pit	Finishing - Deep Pit
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Emitting Factor

243 165 68 165 165

Emitting Surface

Width (ft)	171.83	79	178.5	0	0
Length (ft)	665	313.42	426	0	0

Emitting Area (sq ft)

114266.95 24760.18 76041 0 0

Odor Control Technology

A No Odor Control	A No Odor Control	A No Odor Control	A No Odor Control	A No Odor Control
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Odor Control Factor

1 1 1 1 1

Source Emitting Factor

2777 409 517 0 0

Total Odor Emitting Factor (TOEF)

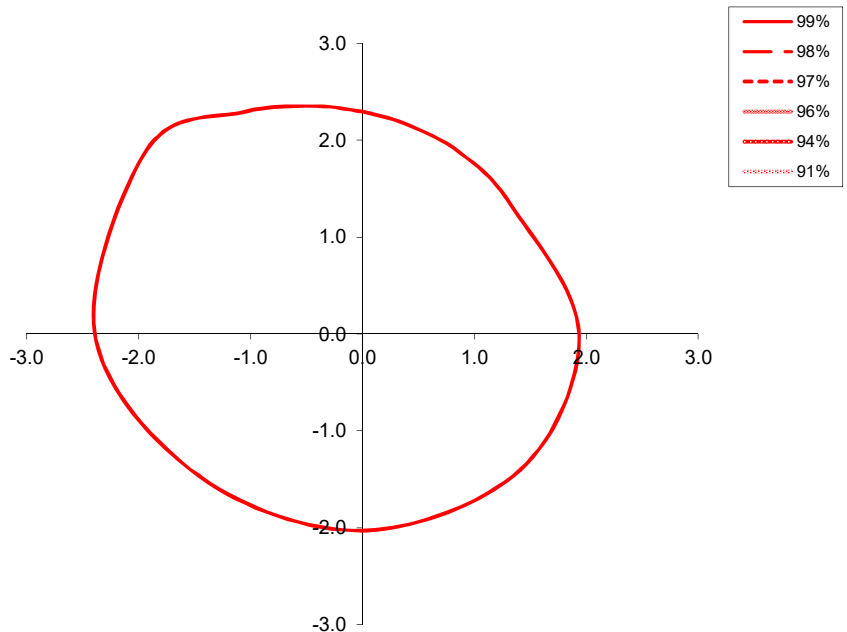
3702

SETBACK DISTANCES FROM ODOR SOURCE AT VARIOUS ODOR ANNOYANCE-FREE FREQUENCIES IN FEET

Direction from source	99% Annoyance-free	98% Annoyance-free	97% Annoyance-free	96% Annoyance-free	94% Annoyance-free	91% Annoyance-free
Northeast	9914	5001	3398	2296	1141	649
Southeast	10514	6335	5097	4328	3257	2050
Southwest	10939	6443	4812	3784	2517	1363
Northwest	14310	8890	7046	5990	4716	3573

Select which annoyance-free curves to show on graph

- 99% Annoyance-free
- 98% Annoyance-free
- 97% Annoyance-free
- 96% Annoyance-free
- 94% Annoyance-free
- 91% Annoyance-free





0 2,640 5,280



99% Annoyance-Free Zone from SDOFT

2 Mile Setback to Incorporated Municipalities and Any Occupied Residence

2 Mile Setback to Incorporated Municipalities and Any Occupied Residence

660' Setback to Domestic Ground and Surface Water Supplies

207th Street (Unimproved)

660' Setback to Domestic Ground and Surface Water Supplies

99% Annoyance-Free Zone from SDOFT

2 Mile Setback to Incorporated Municipalities and Any Occupied Residence

Ratio, LLC
Site Location
NW 1/4 SECTION 32, T11N, R67W, Hand County, SD
SET PROJECT #: 000

PLOT DATE 8/3/2019 9:01 AM

AERIAL