

Source Category:	Fugitive Dust from Beef Cattle Feedlots
SCC Code:	2805001000
Pollutants of Concern:	PM2.5, PM10
How is the PM National Air Pollutant Emission Trends inventory developed for this category?	
Current Methodology:	
<ul style="list-style-type: none"> • Cattle feedlots are defined as establishments primarily engaged in feeding cattle for fattening. • The calculation of total PM₁₀ emissions from cattle feedlots is based on the product of a national PM₁₀ emission factor of 17 tons/1,000 head per year of throughput, and the number of beef cattle reported to the “Census of Agriculture.” • A particulate size fraction of 0.15, based on measurement data, is used to estimate PM_{2.5} from PM₁₀. • The number of cattle on feed in each state that reported data are used for those states and the remaining number from the national totals are equally distributed to those states that haven’t reported specific totals. 	
Uncertainties / Shortcomings of Current Methods:	
<ul style="list-style-type: none"> • The actual number of cattle on feed at any given time is approximately 10% of the total number of beef cattle. There is a possibility that the data used may not represent the actual number of cattle in feedlots. • Activity is allocated equally to all states that have not reported state specific data to the Census of Agriculture. • Activity is allocated equally to all counties in a state when county specific information is not reported. • Feeder cows are kept on feedlots for periods of less than one year before being sent to the meat packer. Information on the capacity of each feedlot may not represent the total number processed. 	
How can State, Local, and Tribal agencies improve upon this methodology?	
<ul style="list-style-type: none"> • Obtain local information on the number, location and timing of beef cattle numbers on feed. 	

Activity Variables Used to Calculate Fugitive Dust from Feedlots

Current Variables/Assumptions Used:

- A national average emission factor has been used in the National Emission Inventory.
- The number of beef cattle in the county. [Census of Agriculture]

Suggestions for Improved Variables:

- Use locally obtained emission factors, if more appropriate.
- Local information on number of beef cattle [state agriculture departments (many have data on web sites), County Agricultural Agent]
- Determine any seasonal variations in the number of head in the feedlot.

Where can I find Additional Information and Guidance?

EPA Contact: Mr. Dallas Safriet, Mail Drop D205-01
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Meat Animal Production, Disposition, and Income <http://www.usda.mannlib.cornell.edu/reports/nassr/livestock/zma-bb>

National Air Pollutant Emission Trends Procedures Document for 1900-1999 <http://www.epa.gov/ttn/chief/publications.html>
NOTE: This document is being revised.

NEI Methodology Description <http://www.epa.gov/ttn/chief/publications.html#reports>

National Air Pollutant Emission Trends 1900-1998 <http://www.epa.gov/ttn/chief/trends/trends98/br owse.html>