

NEBRASKA ADMINISTRATIVE CODE

Title 129 – Department of Environmental Quality

Chapter 20 – PARTICULATE EMISSIONS; LIMITATIONS AND STANDARDS

For exceptions due to breakdowns or scheduled maintenance— see Chapter 35 – COMPLIANCE; EXCEPTIONS DUE TO STARTUP, SHUTDOWN, OR MALFUNCTION

~~001 No person shall cause, suffer, allow or permit the emission of particulates from any processing machine, equipment, device or other articles, or combination thereof, except indirect heating equipment and incinerators, in excess of the amounts allowed in Table 20-2 during any one hour.~~

002001 No person shall cause or allow particulate matter caused by the combustion of fuel to be emitted from any stack or chimney into the outdoor atmosphere in excess of the hourly rate set forth in Table 20-1:-

Table 20-1

<u>Process Weight Rate</u>		<u>Rate of Emissions</u>	<u>Process Weight Rate</u>		<u>Rate of Emissions</u>
<u>Lb/Hr</u>	<u>Tons/Hr</u>	<u>Lb/Hr</u>	<u>Lb/Hr</u>	<u>Tons/Hr</u>	<u>Lb/Hr</u>
<u>100</u>	<u>0.05</u>	<u>0.551</u>	<u>16,000</u>	<u>8.000</u>	<u>16.5</u>
<u>200</u>	<u>0.10</u>	<u>0.877</u>	<u>18,000</u>	<u>9.00</u>	<u>17.9</u>
<u>400</u>	<u>0.20</u>	<u>1.40</u>	<u>20,000</u>	<u>10</u>	<u>19.2</u>
<u>600</u>	<u>0.30</u>	<u>1.83</u>	<u>30,000</u>	<u>15</u>	<u>25.2</u>
<u>800</u>	<u>0.40</u>	<u>2.22</u>	<u>40,000</u>	<u>20</u>	<u>30.5</u>
<u>1,000</u>	<u>0.50</u>	<u>2.58</u>	<u>50,000</u>	<u>25</u>	<u>35.4</u>
<u>1,500</u>	<u>0.75</u>	<u>3.38</u>	<u>60,000</u>	<u>30</u>	<u>40.0</u>
<u>2,000</u>	<u>1.00</u>	<u>4.10</u>	<u>70,000</u>	<u>35</u>	<u>41.3</u>
<u>2,500</u>	<u>1.25</u>	<u>4.76</u>	<u>80,000</u>	<u>40</u>	<u>42.5</u>
<u>3,000</u>	<u>1.50</u>	<u>5.38</u>	<u>90,000</u>	<u>45</u>	<u>43.6</u>
<u>3,500</u>	<u>1.75</u>	<u>5.96</u>	<u>100,000</u>	<u>50</u>	<u>44.6</u>
<u>4,000</u>	<u>2.00</u>	<u>6.52</u>	<u>120,000</u>	<u>60</u>	<u>46.3</u>
<u>5,000</u>	<u>2.50</u>	<u>7.58</u>	<u>140,000</u>	<u>70</u>	<u>47.8</u>
<u>6,000</u>	<u>3.00</u>	<u>8.56</u>	<u>160,000</u>	<u>80</u>	<u>49.0</u>
<u>7,000</u>	<u>3.50</u>	<u>9.49</u>	<u>200,000</u>	<u>100</u>	<u>51.2</u>
<u>8,000</u>	<u>4.00</u>	<u>10.4</u>	<u>1,000,000</u>	<u>500</u>	<u>69.0</u>
<u>9,000</u>	<u>4.50</u>	<u>11.2</u>	<u>2,000,000</u>	<u>1,000</u>	<u>77.6</u>
<u>10,000</u>	<u>5.00</u>	<u>12.0</u>	<u>6,000,000</u>	<u>3,000</u>	<u>92.7</u>

Effective Date:

20-1

Title 129

Chapter 20

<u>12,000</u>	<u>6.00</u>	<u>13.6</u>			
---------------	-------------	-------------	--	--	--

Table 20-1

Total Heat Input in Million British Thermal Units Per Hour (MMBtu/Hr)	Maximum Allowable Emissions of Particulate Matter in Pounds per Million British Thermal Units (lb/MMBtu)
10 or less	0.60
Between 10 and 10,000	$\frac{1.026}{I^{0.233}}$ I = The total heat input in MMBtu/Hr
10,000 or more	0.12

003002 No person shall cause, suffer, allow or permit the emission of particulates from any processing machine, equipment, device or other articles, or combination thereof, except indirect heating equipment and incinerators, in excess of the amounts allowed in Table 20-2 during any one hour.

Table 20-2

<u>Process Weight Rate</u>		<u>Rate of Emissions</u>	<u>Process Weight Rate</u>		<u>Rate of Emissions</u>
<u>Lb/Hr</u>	<u>Tons/Hr</u>	<u>Lb/Hr</u>	<u>Lb/Hr</u>	<u>Tons/Hr</u>	<u>Lb/Hr</u>
<u>100</u>	<u>0.05</u>	<u>0.551</u>	<u>16,000</u>	<u>8.000</u>	<u>16.5</u>
<u>200</u>	<u>0.10</u>	<u>0.877</u>	<u>18,000</u>	<u>9.00</u>	<u>17.9</u>
<u>400</u>	<u>0.20</u>	<u>1.40</u>	<u>20,000</u>	<u>10</u>	<u>19.2</u>
<u>600</u>	<u>0.30</u>	<u>1.83</u>	<u>30,000</u>	<u>15</u>	<u>25.2</u>
<u>800</u>	<u>0.40</u>	<u>2.22</u>	<u>40,000</u>	<u>20</u>	<u>30.5</u>
<u>1,000</u>	<u>0.50</u>	<u>2.58</u>	<u>50,000</u>	<u>25</u>	<u>35.4</u>
<u>1,500</u>	<u>0.75</u>	<u>3.38</u>	<u>60,000</u>	<u>30</u>	<u>40.0</u>
<u>2,000</u>	<u>1.00</u>	<u>4.10</u>	<u>70,000</u>	<u>35</u>	<u>41.3</u>
<u>2,500</u>	<u>1.25</u>	<u>4.76</u>	<u>80,000</u>	<u>40</u>	<u>42.5</u>
<u>3,000</u>	<u>1.50</u>	<u>5.38</u>	<u>90,000</u>	<u>45</u>	<u>43.6</u>
<u>3,500</u>	<u>1.75</u>	<u>5.96</u>	<u>100,000</u>	<u>50</u>	<u>44.6</u>
<u>4,000</u>	<u>2.00</u>	<u>6.52</u>	<u>120,000</u>	<u>60</u>	<u>46.3</u>
<u>5,000</u>	<u>2.50</u>	<u>7.58</u>	<u>140,000</u>	<u>70</u>	<u>47.8</u>
<u>6,000</u>	<u>3.00</u>	<u>8.56</u>	<u>160,000</u>	<u>80</u>	<u>49.0</u>
<u>7,000</u>	<u>3.50</u>	<u>9.49</u>	<u>200,000</u>	<u>100</u>	<u>51.2</u>
<u>8,000</u>	<u>4.00</u>	<u>10.4</u>	<u>1,000,000</u>	<u>500</u>	<u>69.0</u>
<u>9,000</u>	<u>4.50</u>	<u>11.2</u>	<u>2,000,000</u>	<u>1,000</u>	<u>77.6</u>
<u>10,000</u>	<u>5.00</u>	<u>12.0</u>	<u>6,000,000</u>	<u>3,000</u>	<u>92.7</u>
<u>12,000</u>	<u>6.00</u>	<u>13.6</u>			

Table 20-2

<u>Total Heat Input in Million British Thermal Units Per Hour (MMBtu/Hr)</u>	<u>Maximum Allowable Emissions of Particulate Matter in Pounds per Million British Thermal Units (lb/MMBtu)</u>
<u>10 or less</u>	<u>0.60</u>

<u>Between 10 and 10,000</u>	$\frac{1.026}{I^{0.233}}$ <u>I = The total heat input in MMBtu/Hr</u>
<u>10,000 or more</u>	<u>0.12</u>

004003 For the purpose of these regulations, the total heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or chimney, or the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel burning units at a plant or on a premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

005004 No person shall cause or allow emissions, from any source, which are of an opacity equal to or greater than twenty percent (20%), as evaluated by an EPA-approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B except as provided for in section 005 of this chapter.

006005 Exceptions:

006.01005.01 No person shall cause or allow emissions from any existing teepee waste wood burner which are of an opacity equal to or greater than forty percent (40%).-

006.02005.02 No person shall cause or allow emissions from any existing alfalfa dehydration plant dryer which are of an opacity equal to or greater than thirty percent (30%).-

006.03005.03 Emission sources subject to monitoring requirements of Chapter 34, 005 of this Title are allowed to have one six minute period per hour of not more than ~~27~~twenty-seven percent (27%) opacity.

005.04 A ~~F~~furnaces owned and operated by a law enforcement agency to dispose of ammunition, fireworks or similar flammable or explosive materials ~~are is~~ exempt from the provisions of this Chapter solely while being used for this purpose.-

006 All sources shall comply with section 004 of this Chapter unless an opacity standard applies as specified elsewhere in this Title.

Process Weight Rate		Rate of Emissions	Process Weight Rate		Rate of Emissions
Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
100	0.05	0.554	16,000	8.000	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10	19.2
600	0.30	1.83	30,000	15	25.2
800	0.40	2.22	40,000	20	30.5
1,000	0.50	2.58	50,000	25	35.4
1,500	0.75	3.38	60,000	30	40.0
2,000	1.00	4.10	70,000	35	41.3
2,500	1.25	4.76	80,000	40	42.5
3,000	1.50	5.38	90,000	45	43.6
3,500	1.75	5.96	100,000	50	44.6
4,000	2.00	6.52	120,000	60	46.3
5,000	2.50	7.58	140,000	70	47.8
6,000	3.00	8.56	160,000	80	49.0
7,000	3.50	9.49	200,000	100	51.2
8,000	4.00	10.4	1,000,000	500	69.0
9,000	4.50	11.2	2,000,000	1,000	77.6
10,000	5.00	12.0	6,000,000	3,000	92.7
12,000	6.00	13.6			

007 Interpolation of the data in Table 20-2 for process weight rates up to 60,000 Lb/Hr shall be accomplished by use of the equation $E = 4.10 p^{.67}$ and interpolation and extrapolation of the data for process weight rates in excess of 60,000 Lb/Hr shall be accomplished by use of the equation $E = 55.0 p^{.11} - 40$, where E = rate of emission in Lb/Hr and P = process weight rate in Tons/Hr. If two or more units discharge into a single stack, the allowable emission rate will be determined by the sum of all process weights discharging into the single stack.-

008 Section 001 and Section 002 of this Chapter shall apply unless a more stringent particulate matter standard is specified in the underlying requirements of an applicable federal rule or is specified within a construction permit issued pursuant to this Title.

Enabling Legislation: Neb. Rev. Stat. §§81-1504(1)(2); 81-1505(12)

Legal Citation: Title 129, Ch. 20, Nebraska Department of Environmental Quality