

Chapter NR 245

GRAIN MILLS

NR 245.01	Purpose.
NR 245.02	Applicability.
NR 245.03	Definitions.
NR 245.04	Compliance with effluent limitations and standards.
NR 245.06	Application of effluent limitations and standards.

NR 245.10	Effluent limitations, best practicable treatment.
NR 245.11	Effluent limitations, best available treatment.
NR 245.12	Standards of performance.
NR 245.13	Pretreatment standards.

NR 245.01 Purpose. The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the grain mills category of point sources and subcategories thereof.

Note: The authority for promulgation of this chapter is set forth in ch. NR 205.
History: Cr. Register, June, 1976, No. 246, eff. 7-1-76.

NR 245.02 Applicability. The effluent limitations, standards of performance, pretreatment standards, and other provisions in this chapter are applicable to pollutants or pollutant properties in discharges of process waste resulting from manufacture in any of the following subcategories as defined in s. NR 245.03:

- c1d** Process subcategories
 - cad Corn dry milling,
 - cbd Corn wet milling,
 - ccd Normal wheat flour milling,
 - cdd Bulgur wheat flour milling,
 - ced Normal rice milling, and
 - cfb Parboiled rice milling.
- c2d** Product subcategories.
 - cad Animal feed.
 - cbd Hot cereal.
 - ccd Ready-to-eat cereal.
 - cdd Wheat starch and gluten.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76.

NR 245.03 Definitions. The following special definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set forth in ch. NR 205.

c1d XAnimal feedY means such feeds cformula feed concentrated manufactured using primarily grain and grain by-products which may be supplemented by proteins, pharmaceuticals, vitamins, or mineral additives.

c2d XBulgur wheat flour millingY means the process in which wheat is parboiled, dried, and partially debranned in the production of bulgur.

c3d XCornY means shelled corn delivered to a plant before processing.

c4d XCorn dry millingY means the process in which shelled corn is washed and subsequently milled by dry processes into such products as corn meal, grits, flour, oil, and animal feed.

c5d XCorn wet millingY means the process in which shelled corn is steeped in a dilute solution of sulfurous acid and then processed by wet means into such products as animal feed, regular and modified starches, corn oil, corn syrup, and dextrose.

c6d XHot cerealY means breakfast cereals produced from

grains, principally wheat and oats, requiring cooking prior to human consumption.

c7d XMsBuY means 1000 standard bushels.

c8d XNormal rice millingY means the process in which rice is cleaned and milled by dry processes.

c9d XNormal wheat flour millingY means the processes in which wheat is milled by dry processes into flour and mill feed.

c10d XParboiled rice millingY means the process in which rice is cleaned, cooked, and dried before milling.

c11d XReady-to-eat cerealY means breakfast cereals produced from various grains and other materials cwhole grain wheat, rice, corn, grits, oat flour, sugar, and minor ingredientsd and normally available for human consumption without cooking.

c12d XStandard bushelY means a bushel of shelled corn weighing 56 pounds or a bushel of wheat weighing 60 pounds.

c13d XWheatY means wheat delivered to a plant before processing.

c14d XWheat starch and glutenY means such products produced from wheat flour through conventional processes of physical separation and subsequent refinement.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76.

NR 245.04 Compliance with effluent limitations and standards. Discharge of pollutants from facilities subject to the provisions of this chapter may not exceed, as appropriate:

c1d By July 1, 1977 effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available;

c2d By July 1, 1983 effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable;

c3d Pretreatment standards for discharges to publicly owned treatment works;

c4d Standards of performance for new sources.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76; r. and recr. Register, August, 1983, No. 332, eff. 9-1-83.

NR 245.06 Application of effluent limitations and standards. **c1d** The effluent limitations and standards set forth in this chapter shall be used in accordance with this section to establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this chapter, except as;

cad They may be modified in accordance with subch. IV of ch. NR 220,

cbd They may be superseded by more stringent limitations and standards necessary to achieve water quality standards or meet other legal requirements, or

ccd They may be supplemented or superseded by standards or

prohibitions for toxic pollutants or by additional limitations for other pollutants required to achieve water quality.

c2d The production basis for application of the limitations and standards set forth in this chapter shall be the daily average of the maximum month production in the past year for the facility in each subcategory subject to the provisions of this chapter.

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76; correction in c1d cad made under s. 13.92 c4d cbd 7, Stats., Register April 2018 No. 748.

NR 245.10 Effluent limitations, best practicable treatment. The following effluent limitations for all or specific subcategories establish, except as provided in subch. IV of ch. NR 220, the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best practicable control technology currently available.

c1d There shall be no discharge of process waste waters from the normal wheat flour milling, normal rice milling, animal feed, and hot cereal subcategories.

c2d The pH of all discharges shall be within the range of 6.0 to 9.0.

c3d The 30 day average and daily maximum limitations for BOD₅ and suspended solids are set forth in table 1.

c4d The effluent limitations for process subcategories in table 1 are in lbs{MsBu of corn or wheat processed and in lbs{1000lbs or kg{1000kg of rice processed. The limitations for corn and wheat may be converted to kg{1000kg by dividing the english unit limitation by 56 in the case of corn and 60 in the case of wheat.

c5d The effluent limitations for product subcategories in table 1 are in lbs{1000lbs or kg{1000kg of cereal product for the ready-to-eat subcategory and of wheat flour raw material for the wheat starch and gluten subcategory1.

Table 1

Process subcategory	BPT Effluent Limitation			
	BOD ₅		Suspended Solids	
	Ave.	Max.	Ave.	Max.
corn dry milling	4	12	3.5	10.5
corn wet milling	50	150	50	150
bulgur wheat flour milling	.5	1.5	.5	1.5
parboiled rice milling	.14	.42	.08	.24
Product subcategory				
ready-to-eat cereal	0.40	1.2	0.4	1.2
wheat starch and gluten	2.0	6.0	2.0	6.0

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76; correction in cintro.d made under s. 13.92 c4d cbd 7, Stats., Register April 2018 No. 748.

NR 245.11 Effluent limitations, best available treatment. The following effluent limitations for all or specific subcategories establish the quantity or quality of pollutants or pollutant properties which may be discharged by a facility subject to the provisions of this chapter after application to process wastes of the best available technology economically achievable.

c1d There shall be no discharge of process waste waters from the normal wheat flour milling, normal rice milling, animal feed, and hot cereal subcategories.

c2d The pH of all discharges shall be within the range of 6.0 to 9.0.

c3d The 30 day average and daily maximum limitations for BOD₅ and suspended solids are set forth in table 2.

c4d The effluent limitations for process subcategories in ta-

ble 2 are in lbs{MsBu of corn or wheat processed and in lbs{1000lbs or kg{1000kg of rice processed. The limitations for corn and wheat may be converted to kg{1000kg by dividing the english unit limitation by 56 in the case of corn and 60 in the case of wheat.

c5d The effluent limitations for product subcategories in table 2 are in lbs{1000lbs or kg{1000kg of cereal product for the ready-to-eat subcategory and of wheat flour raw material for the wheat starch and gluten subcategory.

Table 2

Process subcategory	BPT Effluent Limitation			
	BOD ₅		Suspended Solids	
	Ave.	Max.	Ave.	Max.
corn dry milling	2	6	1	3
corn wet milling	20	60	10	30
bulgur wheat flour milling	.3	.9	.2	.6
parboiled rice milling	.07	.21	.03	.09
Product subcategory				
ready-to-eat cereal	0.20	0.60	0.15	0.45
wheat starch and gluten	0.50	1.50	0.40	1.20

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76.

NR 245.12 Standards of performance. The following effluent limitations for all or specific subcategories establish the quantity or quality of pollutants or pollutant properties which may be discharged by a facility which is a new source subject to the provisions of this chapter.

c1d There shall be no discharge of process waste waters from the normal wheat flour milling, normal rice milling, animal feed, and hot cereal subcategories.

c2d The pH of all discharges shall be within the range of 6.0 to 9.0.

c3d The 30 day average and daily maximum limitations for BOD₅ and suspended solids are set forth in table 3.

c4d The effluent limitations for process subcategories in table 3 are in lbs{MsBu of corn or wheat processed and in lbs{1000lbs or kg{1000kg of rice processed. The limitations for corn and wheat may be converted to kg{1000kg by dividing the english unit limitation by 56 in the case of corn and 60 in the case of wheat.

c5d The effluent limitations for product subcategories in table 3 are in lbs{1000lbs or kg{1000kg of cereal product for the ready-to-eat subcategory and of wheat flour raw material for the wheat starch and gluten subcategory.

Table 3

Process subcategory	Standard of Performance Effluent Limitation			
	BOD ₅		Suspended Solids	
	Ave.	Max.	Ave.	Max.
corn dry milling	2	6	1	3
corn wet milling	20	60	10	30
bulgur wheat flour milling	.3	.9	.2	.6
parboiled rice milling	.07	.21	.03	.09
Product subcategory				
ready-to-eat cereal	0.20	0.60	0.15	0.45
wheat starch and gluten	1.0	3.0	1.0	3.0

History: Cr. Register, June, 1976, No. 246, eff. 7-1-76.

NR 245.13 Pretreatment standards. The pretreatment standards for discharges to publicly owned treatment works from

sources subject to the provisions of this chapter shall be as set forth in ch. [NR 211](#).

History: Cr. [Register, June, 1976, No. 246](#), eff. 7-1-76; r. and recr. [Register, August, 1983, No. 332](#), eff. 9-1-83.