

Chapter NR 252

LEATHER TANNING AND FINISHING

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**NR 252.01 Purpose.** The purpose of this chapter is to establish effluent limitations, standards of performance, and pretreatment standards for discharges of process wastes from the leather tanning and finishing 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 252.02 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 process subcategories.

(1) Hair pulp unhairing with chrome tanning and finishing. This subcategory includes tanneries which;

(a) Chrome tan and finish cattle hides after either removing the hair by the hair pulp technique or in independent processes by both the hair pulp and the hair save techniques,

(b) Chrome and vegetable tan and finish cattle hides after removing the hair by both the hair pulp and the hair save techniques, and

(c) Chrome tan sheep skins after removing the wool.

(2) Hair save unhairing with chrome tanning and finishing. This subcategory includes tanneries which;

(a) Chrome tan and finish cattle hides after removing the hair by the hair save technique, and

(b) Chrome tan deer skins after removing the hair by the hair save technique.

(3) Unhairing with vegetable or alum tanning and finishing. This subcategory includes tanneries which alum or vegetable tan cattle hides after removing the hair by either the hair save or hair pulp technique.

(4) Finishing of tanned hides. This subcategory includes tanneries which finish previously tanned cattle hides, sheep skins, deer skins, or cattle splits.

(5) Vegetable or chrome tanning of unhaired hides. This subcategory includes tanneries which;

(a) Chrome tan and finish pig skins, cattle splits, previously dehaired cattle hides, or sheep skins either with the wool retained or previously removed,

(b) Vegetable tan and finish cattle splits, previously dehaired cattle hides, or sheep skins either with the wool retained or previously removed, and

(c) Chrome and vegetable tan sheep skins from which the wool has been previously removed.

(6) Unhairing with chrome tanning and no finishing. This subcategory includes tanneries:

(a) Which chrome tan but do not finish cattle hides after removing hair by either the hair save or hair pulp technique, and

(b) Which remove hair from cattle hides by either the hair save or the hair pulp technique.

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

**NR 252.03 Definitions.** The following definitions are applicable to terms used in this chapter. Definitions of other terms and meanings of abbreviations are set for in ch. NR 205.

(1) "Alum tan" means the process of converting animal skin into leather using a form of aluminum.

(2) "Chrome tan" means the process of converting hides into leather using a form of chromium.

(3) "Chromium" means total chromium

(4) "Finish" means the final processing steps performed on a tanned hide including, but not limited to, the following wet processes; retan, bleach, color and fatliquor.

(5) "Hair pulp" means the removal of hair by chemical dissolution.

(6) "Hair save" means the physical or mechanical removal of hair which has not been chemically dissolved.

(7) "Hide" means any animal pelt or skin as received by a tannery as raw material to be processed.

(8) "Skin" means hide.

(9) "Split" means the nongrain part of a hide which results from a cut parallel to its surface.

(10) "TKN" means total kjeldahl nitrogen.

(11) "Vegetable tan" means the process of converting hide into leather using chemicals either derived from vegetable matter or synthesized to produce effects similar to those of chemicals so derived.

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

**NR 252.04 Compliance with effluent limitations and standards.** Discharge of pollutants from facilities subject to the provisions of this chapter may not exceed, as appropriate:

Register, August, 1983, No. 332  
Environmental Protection

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

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

(3) Pretreatment standards for discharges to publicly owned treatment works;

(4) 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 252.05 Modification of effluent limitations. (1) Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available may be modified in accordance with this section.

(2) An individual discharger or other interested person may submit evidence to the department that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the effluent limitations. On the basis of such evidence or other available information the department will make a written determination that such factors are or are not fundamentally different for that facility compared to those specified in the Leather Tanning and Finishing Development Document, EPA 440/1-74-016-a. If such fundamentally different factors are found to exist, the department shall establish for the discharge effluent limitations in the WPDES permit either more or less stringent than the limitations in this chapter, to the extent dictated by such fundamentally different factors. Such limitations must be approved by EPA which may approve, disapprove, or specify other limitations.

(3) Copies of this Development Document, "Leather Tanning and Finishing", EPA 440/1-74-016a, published March, 1974, are available for inspection at the office of the department of natural resources, the secretary of state's office, and the office of the revisor of statutes, and may be obtained for personal use from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20460.

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

NR 252.06 Application of effluent limitations and standards. (1) 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;

(a) They may be modified in accordance with s. NR 252.05,

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

(c) 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.

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

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

**NR 252.10 Effluent limitations, best practicable treatment.** The following effluent limitations for all or specific subcategories establish, except as provided in s. NR 252.05, 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.

(1) The pH of all discharges shall be within the range of 6.0 to 9.0.

(2) The 30-day average limitations for BOD<sub>5</sub>, suspended solids, chromium and oil and grease are set forth in table 1 in lbs/1000 lbs or kg/1000kg of raw material. Daily maximum limitations are twice the 30-day average limitations.

(3) The limitations for BOD<sub>5</sub> and suspended solids set forth in table 1 shall be increased by multiplying by 1.5 for a facility subject to the provisions of this chapter having a total daily production of less than 17,000 hides.

TABLE 1  
BPT Effluent Limitations

Subcategory as defined in section NR 252.02	BOD	TSS	Chromium	Oil and Grease
(1)	4.0	5.0	0.10	0.75
(2)	4.6	5.8	0.12	0.90
(3)	3.8	4.8	0.05	0.75
(4)	1.6	2.0	0.10	0.25
(5)	4.8	6.0	0.06	0.90
(6)	2.8	3.4	0.10	0.35

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

**NR 252.11 Effluent limitations, best available treatment.** The following effluent limitations for all 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.

(1) The pH of all discharges shall be within the range of 6.0 to 9.0.

(2) The fecal coliform present in all discharges shall not exceed an MPN of 400/100 ml.

(3) The 30-day average limitations for BOD<sub>5</sub>, suspended solids, and other parameters are set forth in table 2 in lbs/1000 lbs or kg/1000kg of raw material. Daily maximum limitations are twice the 30-day average limitations.

TABLE 2  
BAT Effluent Limitations

Subcategory as defined in s. NR 252.02	BOD	TSS	Chromium	Oil & Grease	Sulfide	TKN
(1)	1.40	1.50	0.05	0.53	0.005	0.27
(2)	1.60	1.80	0.06	0.63	0.006	0.32
(3)	1.30	1.40	0.05	0.50	0.005	0.25
(4)	0.50	0.60	0.02	0.24	0.002	0.10
(5)	1.60	1.80	0.06	0.63	0.006	0.31
(6)	0.70	0.80	0.03	0.34	0.003	0.14

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

**NR 252.12 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.

(1) The pH of all discharges shall be within the range of 6.0 to 9.0.

(2) The 30-day average limitations for BOD<sub>5</sub>, suspended solids, chromium and oil and grease are set forth in table 3 in lbs/1000 lbs or kg/1000kg of raw material. Daily maximum limitations are twice the 30-day average limitations.

(3) The limitations for BOD<sub>5</sub> and suspended solids set forth in table 3 shall be increased by multiplying by 1.5 for a facility subject to the provisions of this chapter having a total daily production of less than 17,000 hides.

TABLE 3  
Standards of Performance Effluent Limitations

Subcategory as defined in s. NR 252.02	BOD	TSS	Chromium	Oil and Grease
(1)	4.0	5.0	0.10	0.75
(2)	4.6	5.8	0.12	0.90
(3)	3.8	4.8	0.06	0.75
(4)	1.6	2.0	0.10	0.25
(5)	4.8	6.0	0.06	0.90
(6)	2.8	3.4	0.10	0.35

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

**NR 252.13 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.