# **Tanning Industry**

### **Introduction**

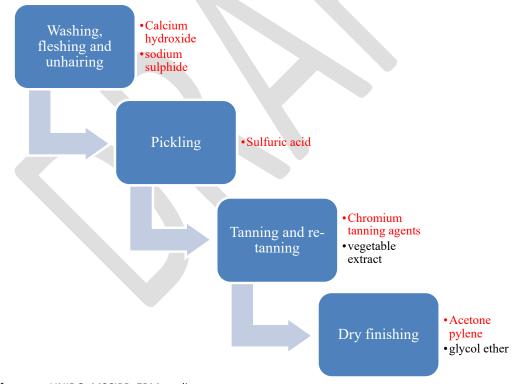
Tanneries are classified as industrial establishments as per decree 5243/2001. This factsheet intends on identifying the main resulting hazardous wastes and develops ways for its management.

#### **Process description**

The steps below show the main steps of the tanneries process:

- 1. Washing, fleshing and un-hairing: Hides are soaked and rinsed with fresh water.
- 2. Pickling: hides are neutralised in preparation for the tanning process.
- 3. Tanning and re-tanning: The leather is tanned with chrome dioxide in water.
- 4. Finishing: the tanned hides can be treated mechanically to enhance their quality.

The common activities at tanning industry are outlined in the following chart.



References: UNIDO, MSCIPP, ERM studies.

## **Tanning Industry Hazardous Waste Description and Management**

Description of the waste	Waste Code (EWC)	Waste Classification (Dangerous Goods Classification	Basel Class.	Storage	Transport (UN- Code)	Treatment	HS- Code
Degreasing wastes containing solvents without a liquid phase	040103* (040104)	3	A3150	3	1169	D10	3814
Acids	110105*	8	A1060	8B	3264	D9	3204
inorganic chemicals consisting of or containing dangerous substances	160507*	various	A4140	various	various	D10	2846

European Waste Code (EWC) 040103\*: Degreasing wastes containing solvents without a liquid phase

European Waste Code (EWC) 040104: Chromium containing tanning agents. Not classified as hazardous waste for most of the generated waste qualities as the Cr concentration is low. European Waste Code (EWC) 110105\*: Acids

European Waste Code (EWC) 160507\*: Inorganic chemicals consisting of or containing dangerous substances

Waste Classification (Dangerous Goods Classification) 3: Flammable Liquids



#### Waste Classification (Dangerous Goods Classification) 8: Corrosives



Basel Classification A1060: Waste liquors from the pickling of metals Basel Classification A3150: Waste halogenated organic solvents Basel Classification A4140: Waste consisting of hazardous chemicals

Transport Code (UN) 1169: Extracts, aromatic, liquid

Transport Code (UN) 3264: Corrosive liquid, acidic, inorganic, n.o.s.

D9: Physico chemical treatment facility (for example: evaporation, drying, calcination, neutralization, precipitation).

D10: Disposal on land (for example: incineration in a licensed rotary kiln with >1,050C)

## **Disposal Facilities**

## MEAB Schöneiche – Märkische Entsorgungsanlagen Betriebsgesellschaft mbH

Address: Am Galluner Kanal, 15806 Schöneiche

Site: Tschudistraße 3, 14476 Potsdam

Point of Contact: Christine Landgraf; Tel. 033208–60 281; c.landgraf@meab.de

### NORD (Dänemark) – Nordgroup A/S – Ekokem A/S

Lindholmvej 3, DK – 5800 Nyborg

Point of Contact: Jens Peter Rasmussen; Tel: +4563317100; jpr@nordgroup.eu

## GSB Baar-Ebenhausen - gsb- Entsorgungsbetrieb Ebenhausen

Äußerer Ring 50, 85107 Baar-Ebenhausen

Point of Contact: Peter Pentenrieder, Tel.: +49 (0) 84 53 / 91-6 15, Mobil: +49 (0) 170 / 28 68

791, peter.pentenrieder@gsb-mbh.de

# Fernwärme Wien - Wien Energie GmbH

Kundenservice Abfallwirtschaft, Simmeringer Haide, 11. Haidequerstrasse 6, 1110 Wien Point of Contact: Tel: +43 (0)1 4004–89695, abfall@wienenergie.at

### **EGEO Portugal**

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