



European Bank
for Reconstruction and Development

Sub-sectoral Environmental and Social Guideline: Tanneries and Leather Products

Introduction

This guideline is designed to be used by EBRD Financial Intermediaries (FIs) to understand the nature of environmental and social (E&S) risks associated with existing operations in this sector and suggested actions for businesses to manage these E&S risks. It also provides guidance for FIs on potential due diligence questions to raise with management to understand how their business is managing these E&S risks. This guideline focuses on material E&S risks; it is not an exhaustive list of E&S risks. In managing E&S risks, all businesses should be compliant with relevant E&S laws and regulations.¹ Where applicable, these include European Union legislation, which may also be taken as a benchmark for good practice.

This guideline covers tanneries and the processing of leather. Tanning is the method used to stabilise raw hide or skin into leather, a non-putrescible product. This guidance does not include the conversion of leather into its final products; this is covered in other guidelines, for example 'Footwear Manufacturing'.

Reference NACE codes:

- 15.11 Tanning and dressing of leather; dressing and dyeing of fur.

¹ This guideline outlines some relevant legislation but does not provide an exhaustive list of applicable laws and regulations.



Material risks

Below is an overview of the material risks present in leather production.

Environmental & Social Risk category	Environment 	Health and safety 	Labour 	Community 	Page no.
Key E&S Risks <i>(In order of materiality)</i>	Affect the natural environment	Affect the health or safety of employees	Affect workplace conditions and the treatment of employees	Affect the health and safety, livelihoods, and environment of the community and wider public	
Water management and wastewater	✓			✓	7
Hazardous Materials	✓	✓		✓	8
Labour rights			✓	✓	10
Air Emissions	✓	✓		✓	10
Solid Waste	✓			✓	11
Occupational Health and Safety		✓	✓		12
Energy Consumption	✓				14



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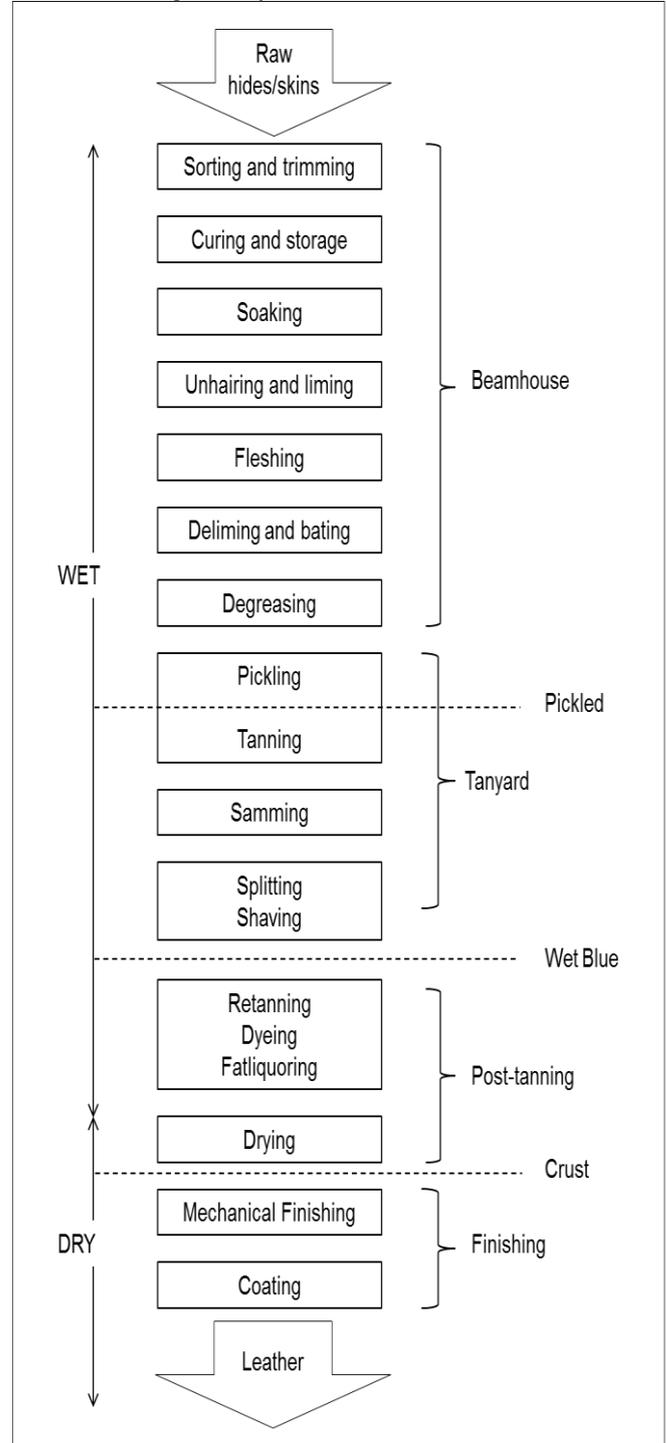
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1. Process description

The number and type of processes varies from one tannery to another depending on the type of animal hide or skin processed. In general, the production processes in a tannery can be split into four main stages Beamhouse, Tanyard, Post-tanning, and Finishing.

Process Diagram of Leather Production



Beamhouse

Raw hides and skins are typically procured from the hide and skin markets or directly from the abattoirs (slaughterhouses), and delivered



to the tanneries or fellmongeries (a fellmongery is a tannery that processes sheep skins). After liming, the hides or skins are no longer subject to animal by-product controls requiring permits (see ‘financial implications’ section).

- **Sorting:** Hides and skins are sorted in grades by size, weight, quality and sex. Trimming involves removing the edges (e.g. legs, tails, face, udders) of the raw hides.
- **Curing:** Long-term preservation methods (up to six months) include salting, brining, drying, or dry salting. Short-term preservation (typically two to five days) involves cooling, using crushed ice or refrigerated storage, and biocides. Hides and skins are generally stored on pallets in ventilated or air conditioned areas.
- **Soaking:** This allows hides and skins to reabsorb any lost water, cleans them, and removes interfibrillary material. Soaking can range from several hours to a few days. Additives to soaking water include surfactants, enzyme preparations, bactericides, and alkali products.
- **Unhairing and liming:** Mechanical and chemical treatments remove hair, epidermis, some interfibrillary components, and open up the fibre structure. Elimination of keratinous material (e.g. hair, hair roots, epidermis) and fats from the pelts involves the use of sulphides and lime treatments. To remove the wool from sheepskins, ‘paint’ (containing lime and sodium sulphide) is applied to the skin and left

to dissolve the cells around the hair root, allowing hair or wool to be removed by mechanical or manual pulling.

- **Fleshing:** This is a mechanical process to scrape off the excess organic material from the hide (e.g. connective tissue and fat).
- **Deliming:** This removes residual lime (or other alkali) from the pelts by gradually lowering pH through washing and addition of deliming chemicals (e.g. ammonium sulphate, among others), increasing temperature, and removing residual chemicals and degraded skin components.
- **Bating:** Enzymes are used to remove undesirable hair roots and pigments from the leather. This can improve the grain of the hide and the subsequent run and stretch of the leather.
- **Degreasing:** This is the elimination of excess grease from fatty skins. Three different methods commonly used for degreasing are degreasing in aqueous medium with non-ionic surfactant, degreasing in aqueous medium with organic solvents and non-ionic surfactants, and degreasing in an organic solvent medium.

Tanyard

Leather is called ‘pickled’ leather up until the end of the tanyard processes, where it becomes ‘wet blue’ leather.

- **Pickling:** This is conducted to lower the pH of the pelt before tanning. Depending on the type of tanning, the pickling floats will have a different



composition; this normally includes sulphuric acid and common salt.

- **Tanning:** This leads to the stabilization of the collagen fibre through cross-linking by tanning agents; after this, hides are no longer subject to putrefaction. Tanning agents can be categorized in three main groups namely mineral (chrome); vegetable; and alternatives (e.g. syntans, aldehydes, and oil tannage). Different tanning agents are used depending on the properties required in the finished leather.
- **Draining, horsing, samming, and setting:** After tanning, leathers are drained, rinsed, and either horsed up (hung on a 'horse') to 'age' or unloaded into boxes and subsequently sammed (squeezed between rollers) to reduce the moisture content. Setting-out operations stretch the leather.
- **Splitting and Shaving:** Splitting cuts leather to a set thickness. Shaving is carried out when splitting is not possible or when minor adjustments to the thickness are required.

Post-tanning

These processes are mostly undertaken in a single processing vessel. Specialized operations may also be performed to add certain properties to the leather product (e.g. water resistance or flame retardation).

A wide variety of processes and chemicals may be used in this phase. For example, the re-tannage of leather, vegetable tanning extracts, syntans, aldehydes, resins, and mineral tanning agents might be used. Weak alkalis (e.g. sodium or ammonium bicarbonate, formiate, or acetate) are used in the neutralization process.

Before leather is tradable and storable as an intermediate product (referred to as 'crust') it undergoes a drying process. Drying techniques include samming, setting, centrifuging, hang drying and vacuum drying, amongst others.

Finishing

Finishing operations enhance the appearance of the leather and provide the performance characteristics (e.g. colour, water resistance). These operations can be divided into mechanical finishing processes and surface coat applications. A wide range of processes exist for both types of finishing, including, but not limited to polishing, staking (softening and stretching of leather), plating (flattening) and spray coating (spraying the finishing material with pressurized air in spray cabinets).

2. Key E&S Risks

Tanneries may need permits, licences or authorisation to prevent their activities from causing pollution or harming human health. An environmental permit from a national or local authority may be required where an installation is a large consumer of organic solvents and significant VOC emissions may be released. Water use and discharge and trade effluent permits may also be required, particularly for those facilities where there is potential for effluent to be contaminated with heavy metals.

Specific legislation that may apply to tanneries may include, but is not limited to, the following:

- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Products using fur or skins from endangered species may be subject to restrictions or bans in countries that are signatories to the CITES agreement.



- The Animal By-Products Regulation 2011/142/EU.
- The Solvents Emissions Directive (1999/13/EC) sets out emission limit values for VOCs in waste gases and maximum levels for fugitive emissions from obligated facilities.
- Seveso III Directive (2012/18/EU) which aims to control the major accident hazard from dangerous substances². The Seveso Directive obliges Member States to ensure that operators that store and use substantial quantities of dangerous substances have controls in place to prevent major accidents. Operations outside the EU will be subject to local regulations.
- Registration, Evaluation and Authorisation of Chemicals (REACH) (1907/2006). If certain chemicals are being used within the EU they may need to be registered under the REACH regulation.

Below are the material E&S risks associated with this sector and key measures to manage them. Where gaps are found in the management of key E&S risks, the E&S risk management measures should form part of a corrective E&S action plan agreed with your customer.

Water management and wastewater



Generally, water consumption is greatest in the pre-tanning areas, but significant amounts of water are also consumed in the post-tanning processes.

Large volumes of effluent wastewater are also generated. Beamhouse effluent is alkaline and may contain hide substance, dirt, blood, or dung and therefore have significant loads of organic matter and suspended solids. Organic matter is oxidised by bacteria and this can deplete oxygen levels in the water killing fish and other biodiversity. Beamhouse effluent may also contain curing salt and grease, in addition to unused process chemicals (particularly dissolved sulphides). These can cause contamination and, particularly in the case of sulphur, unpleasant odours.

Wastewater from delimiting and bating and tanyard processes may contain sulphides, ammonium salts, and calcium salts and is weakly alkaline. After pickling and tanning, the main wastewater contaminants depend on the tanning techniques used but will mostly be acidic. Finishing wastewaters may contain lacquer polymers, solvents, colour pigments and coagulants.

Local communities and the environment may be affected by pollution due to discharge of untreated wastewater.

² Installations can be obligated under the Seveso Directive as a lower-tier establishment or an upper-tier establishment dependent on the quantity of dangerous substances. Note that the qualifying quantities / thresholds vary by substance.



How can a business manage this risk?

- Minimise the consumption of water used in production processes and equipment cleaning.
- Use 'batch' instead of 'running water' washes.
- Recycle wastewater where possible.
- Recover and recycle spent chrome, degreasing solvents and extraction salts from effluent.
- Design effluent systems to accommodate blending of acid and alkali discharges to reduce the need for pH adjustment.
- Ensure untreated wastewater does not discharge to watercourses through use of wastewater treatment facilities and monitoring of wastewater discharges.
- Segregate wastewater, effluent streams and rainwater to reduce the need for wastewater treatment.
- Install roofs where there is a risk that rainwater may fall on contaminated areas. Where necessary, rainwater should be captured and treated before discharge.

Hazardous materials



Strong acids, alkalis and solvents will be stored and used on site. These may have hazardous properties such as flammability, toxicity, corrosive potential and oxidising potential. Some chemicals may only possess a hazard potential if they have the opportunity to react with other compounds. Hazardous materials and chemicals may take the form of liquids or solids such as powders.

Inadequate control or accidental releases of hazardous substances on site or in transit could impact the workers, the local community and the environment as outlined below.

- **Biological hazards-** Workers may be exposed to disease-agents such as bacteria, fungi, mites and parasites which may be

present in the hides or may form during the manufacturing process.

- **Contamination of soil, groundwater and surface waters (on or off site)** - Significant environmental impacts can occur through acute incidents and accidents such as a major spillage or via gradual or repeated leakage of raw material contaminants in to soil and waters. Important pollutants include chlorides, tannins, trivalent chromium, sulphate and sulphides as well as other trace organic chemicals and chlorinated solvents. Biological contamination may include spores from the anthrax bacterium (carried by infected animal hides) that can last in soil for several decades and are lethal to humans.

Surface waters are particularly vulnerable to chemical contamination. Chronic, undetected leakages on site can occur as a result of fractured vessels, seals, valves and pipelines. These are of particular concern where heavy metals are released.

Remediation costs could be high, particularly if the site is in an area of high environmental sensitivity, for example, if located above a drinking water aquifer. Additional costs may include criminal or civil fines, ecosystem rehabilitation (e.g. fish restocking) and claims from third parties such as nearby landowners or residents.

- **Fire / Gas explosions** – Tanneries may use a range of flammable materials. There may be large quantities of solvent vapours within the production areas, which can explode if ignited. Explosions or fires can result in widespread contamination and destruction, impacting not only the immediate site but surrounding land, rivers and communities. Compensation costs for such incidents are



high and widespread remediation and rebuilding may be necessary.

- **Air pollution** (for more detail see Air Emissions section) - Releases of hazardous substances such as VOCs/organic solvents and hydrogen sulphide to the air could impact the workers, local environment and communities, potentially leading to large compensation claims.

Public anxiety, particularly from neighbouring residents, can be caused by a lack of knowledge regarding the nature of the chemicals being stored on the site, odours from the site, the potential for fires and explosions and the action that will be taken in the case of an accidental release.

How can a business manage this risk?

Chemical storage

- Label chemicals with appropriate, internationally recognised, diamond shaped hazard symbols.
- Chemicals with different hazard symbols should not be stored together - clear guidance on the compatibility of different chemicals can be obtained from the Materials Safety Data Sheet (MSDS) which should be readily available from the manufacturer and on site.
- Store chemicals in a dedicated, enclosed and secure facility with a roof and a paved/concrete floor. Chemical tanks should be completely contained within secondary containment such as bunding.
- Inspect tanks routinely to prevent overflowing or filling with incompatible materials.
- Consider feasibility of substitution of hazardous chemicals with less hazardous alternatives.
- Provide panic showers at locations where hazardous chemicals are stored or used.

Biological hazards

- Implement awareness campaigns and enforce the wearing of PPE.
- Ensure hides move between processes quickly in order to prevent the growth of bacteria. For

example, delimed skins are no longer protected from bacterial growth by an alkaline environment and should be moved to degreasing and pickling stages as rapidly as possible.

Groundwater contamination

- Install devices to prevent spills and overfills, e.g. alarms to warn of overflowing and automatic shut-off devices.
- Install a layer of impermeable hardstanding in all areas at high risk of contamination to prevent ground infiltration by pollutants.
- Install secondary spill containment (bunds etc.) for storage units containing hazardous materials.
- Maintain and inspect storage units regularly.
- Consider installation and use of groundwater monitoring points on site to check for contamination.

Fire and Explosion

- Control the effect of fires and explosions by segregating process, storage, utility and safe areas.
- Avoid potential sources of ignition including banning smoking in and around facilities.
- Introduce accident, fire and explosion precautions and emergency response plans and involve the emergency services and neighbouring community in the creation and practice of these plans to respond to major incidents at the installation.
- Provide the local fire department with a list/volume of products stored on the premises.
- Emergency storage lagoons may be needed to prevent contaminated firewater reaching watercourses.

Labour rights



Labour standards are rules that govern working conditions and industrial relations. They may be formal, such as national level regulation and international agreements, or informal, expressed through norms and values.



Child labour can be a concern in tanneries, particularly those in South-East Asian countries where child labour is common. Child labour is usually defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development.

Migrant workers, who, like children, can often be found working in tanneries, are at risk of being employed as forced labour. Forced labourers are employed against their will under the threat of punishment of themselves or their families, receiving extremely low compensation.

How can a business manage this risk?

- Adhere to national government legal requirements.
- Ensure that all work conducted by anybody below the age of 18 is subject to an appropriate risk assessment to eliminate the risk of child labour.
- Assess the labour and working condition issues of relevance to their activities and put in place appropriate policies and systems to manage these effectively. These could include policies which ensure workers are free to leave the worksite and are not held against their will in any way; working hours are formally agreed and in line with national policies; wages are not below sector standards; and workers are free to join trade unions.
- If fees are charged to workers either directly or by recruitment agencies, ensure that they are appropriate and do not prevent the worker from leaving employment because they cannot pay off the fees.
- Ensure the business meets good practice standards for managing labour issues and working conditions, in particular those set out in the International Labour Organisation conventions.
- Permit the formation of unions and the use of collective bargaining.

Air emissions



Hydrogen sulphide may be produced during the deliming process and is highly toxic and flammable. It can accumulate at the bottom of poorly ventilated spaces and at high concentrations can poison several different body systems (including the nervous system) leading to collapse and death. Long term, low level exposure can result in irritation, nausea, fatigue and fluid build-up in the lungs.

Volatile organic compounds (VOCs) may be released from all processes using organic solvents. Short term exposure to VOCs can cause nausea, irritation and vomiting; longer term exposure can cause cancer, immune system and organ damage. Particulate matter may also be generated from mechanical operations. This can be inhaled and cause respiratory disease including asthma in employees. Chlorinated VOCs are heavier than air and can accumulate in enclosed spaces, becoming an asphyxiation hazard.

Odours may result from raw hides and skins, putrefaction, and from substances including sulphides, ammonia and organic solvents.

Dust, vented fumes, and odours can be a nuisance to neighbouring residential and industrial areas.

How can a business manage this risk?

- Reduce hydrogen sulphide emissions by treating deliming solutions with hydrogen peroxide or sodium hydrogen sulphite to oxidise the sulphide and prevent acidification.
- Prevent odours by curing raw hides promptly, reducing the time that sludge remains in the thickener, ventilating tannery areas and controlling exhausted emissions from odourous



areas.

- Install or upgrade abatement technology to minimise the release of emissions, e.g. baghouses, cyclones, filters, and wet scrubbers (to control the release of VOCs or dust emissions), enclosure of equipment, appropriate ventilation with filters, and activated carbon/carbon adsorption for VOCs.
- Monitor indoor air quality and create dedicated areas with signage for elevated levels of emissions. Ensure that personal protective equipment is provided and that use is required.
- Use respiratory hazard control technology, (e.g. respirators) when exposure cannot be avoided.
- Implement a formal Leak Detection and Repair (LDAR) programme and where necessary, replace any equipment which generates significant fugitive emissions with higher quality items.

Solid waste



Solid waste generated from tanneries includes curing salt dust, hair, animal offcuts, sludges containing organic material and chromium and sulphur compounds, and empty chemical containers. Disposal of animal offcuts from trimming may be subject to control by regulation, such as the EU Animal By-Products regulation. Waste storage on site may require specific licenses. Failure to comply with these regulations may have financial implications.

Waste stored for long periods of time on site can lead to nuisance odours. Improperly disposed of waste can lead to pollution and ground contamination.

How can a business manage this risk?

- Consider recycling and selling tannery sludges as soil conditioners, if they are free from

chromium and sulphides.

- Cover tannery sludges with inert material immediately, to avoid odours and insect infestation. Prevent waste being stored on site for lengthy periods of time.
- Return packaging of hazardous materials (wherever possible), such as empty drums, to supplier for reuse.
- Develop and implement a waste management plan covering all aspects of waste treatment on site. Wherever possible, priority should be given to reduction of wastes generated, and recovery and re-use of raw materials.
- Treat waste on site for example by dewatering (thickening) of sludges, compacting, rendering (drying and grinding to make bone meal), anaerobic digestion, composting and thermal treatment.

Occupational Health and Safety



Biological agents

Workers may be exposed to pathogens, see 'Hazardous materials' section for more information.

Burns and heat stress

High temperatures and direct infra-red radiation (IR) can cause fatigue and dehydration for those working in the vicinity. Direct IR can also cause damage to sight. Burns and scalds may occur through contact with hot surfaces, metal or water especially during maintenance activities.

Noise and vibration

Noise and vibration are significant hazards where machinery is being used or material is being transported. Noise may reach levels that are hazardous to health, leading to symptoms associated with permanent deafness.



Noise, particularly during unsocial hours, may cause annoyance or disruption to local communities.

Hand-arm vibration syndrome from the prolonged use of vibrating tools and machinery causes effects on the body's blood circulation known as 'vibration white finger' (VWF). Other damage may be caused to the nerves and muscles of the fingers and hands causing numbness and tingling, reduced grip strength and sensitivity. Pain and stiffness in the hands, and joints of the wrists, elbows and shoulders are other possible symptoms.

Machinery

Moving parts of machinery can result in entanglement and entrapment. Poorly designed workstations can require awkward postures, twisting, bending or reaching motions that could cause musculoskeletal disorders.

Manual handling and repetitive work

Lifting and carrying heavy or awkwardly shaped objects, such as bags, can result in manual handling injuries.

Collision

This can take the form of people being hit by vehicles, or moving or falling loads. Collisions between vehicles can also occur. Heavy loads may be lifted and moved at elevated heights using hydraulic platforms and cranes present a serious safety hazard.

Slips, trips and falls

These are primarily caused by uneven surfaces, inappropriate footwear, poor lighting, weather conditions, trailing cables and pipe work, especially during unblocking, maintenance and cleaning activities.

Confined spaces

Using or maintaining metal coating equipment may require entry into dangerous confined spaces.

Working hours

Long hours or night shifts can lead to fatigue, decrease wellbeing and ability to concentrate.

Asbestos

Asbestos (a carcinogen when in the form of inhalable dust) has been used on a large scale for many years as a fire proofing and insulation material. The organisation should identify the presence of asbestos, confirm its condition and, where necessary, encapsulate or remove it. Particular attention should be given to buildings constructed between 1950 and 2000 when asbestos use was at its most extensive.

Security

Tanneries could be targets for criminal attack due to chemicals and materials stored onsite.

How can a business manage these risks?

Biological agents

- See 'Hazardous materials' section.

Burns and Heat Stress

- Shield hot surfaces where close contact is expected and implement safety buffer zones.
- Reduce exposure times for people working in extreme heat and provide suitable PPE.
- Install cooling ventilation to reduce heat stress.

Noise and Vibration

- Conduct a noise survey and mark out dedicated areas with signage where there are elevated noise levels and PPE is required.
- Enclose noisy machines to isolate people from the noise where practicable.
- Reduce vibration exposure times and provide PPE where people may be exposed to vibration.
- Limit scrap handling and transport during unsocial hours to reduce noise.

Machinery



- Train staff in correct selection, use and maintenance of PPE.
- Train workers in correct use of machinery and safety devices.

Manual handling and repetitive work

- Redesign manual processes and rotate work tasks to reduce heavy lifting/repetitive activities, and where possible install mechanical lifting aids.
- Train workers in correct lifting technique.

Collision

- Separate people from moving equipment:
 - Ensure that the process layout reduces opportunities for process activities to cross paths; and
 - Install safeguards on moving parts of conveyor belts to reduce risk of entrapment of employees.
- Install walkways to separate people from vehicle movements to reduce risk of collision.
- Introduce a one way system for site traffic and introduce speed limits to reduce the likelihood of traffic accidents.

Slips, Trips and Falls

- Ensure that walkways are constructed of non-slip materials and route cables and pipework under walkways.

Confined Spaces

- Control entry into confined spaces and avoid it wherever possible.

Working Hours

- Implement a programme of assessment of routine monitoring of worker health.
- Implement a grievance/dispute resolution mechanism for workers.

Asbestos

- Remove friable asbestos using licensed contractors. This should be carried out in controlled conditions to ensure that there is no release of substances or materials to the environment.

Security

- Undertake a security vulnerability assessment and consider need for upgrades to existing security measures.

Energy consumption



Tanneries consume energy during mechanical operations and during the day to day running of the buildings. Companies consuming large amounts of energy may be obligated under emissions trading schemes (ETS). For example the EU ETS requires members to monitor and report their CO2 emissions and ensure that enough allowances (either allocated or purchased) are in place to cover their emissions for a compliance year.

How can a business manage this risk?

- Improve thermal efficiency of heating equipment to minimise heat loss.
- Implement heat recovery processes.
- Monitor and target energy useage and implement behavioural change programmes.
- Consider fuel used onsite and whether there are opportunities to switch to cleaner fuels or renewable energy sources.

3. Financial implications

Outlined below are examples of financial implications for businesses due to ineffective management of E&S risks related to this sector. These implications may in turn create issues for FIs.

- Significant capital investment in site infrastructure may be required to comply with planning constraints, permit / consent conditions and new environmental, health and safety requirements, especially if local communities raise concerns regarding the site operations.



- Some major retailers and brands are designing animal rights and welfare policies for the textile industry in response to consumer and NGO pressure³. This may lead to rejection of fur and skins from animals that are not by-products of the meat industry, banning of endangered or exotic species from their product range, and requirements around the welfare of animals used in their products.
- Fines, penalties and third party claims may be incurred for non-compliance with legislation around the environment, disposal of waste and animal by-products, and health and safety.
- Reputational risk through poor environment, health and safety performance may impact sales or cause the local community to no longer tolerate the company's operations (loss of a 'social licence to operate').
- Injuries to employees may lead to increased payroll costs, lost production time and employee compensation claims.
- Fire/explosions can result in widespread contamination and destruction, impacting surrounding land, rivers and communities. Compensation costs can be high and widespread remediation and rebuilding may be necessary.
- Soil and groundwater contamination from accidental chemical releases can be costly to remediate, especially if contamination affects neighbouring property, water supplies or public health.
- Many countries are signatories to the Kyoto Protocol and have adopted targets for the reduction of CO₂ emissions. Where Governments have set up carbon emission reduction programmes industrial processes have been required to reduce their CO₂ emissions through the setting of targets. This can result in a need for substantial investment in new/clean technologies to achieve the emission targets. These targets may be reflected in environmental permits.

4. Suggested due diligence questions

When assessing E&S risks, it is important to discuss with the customer how these risks are being managed. Below are suggested questions that can be used when engaging with management or on a site visit. You may wish to engage a specialist consultant to support you with this.

General

- Does the site have all the required permits in place?
- Is there an animal welfare policy? At minimum, a policy should specify that the species used and source must be recorded.
- What processes are undertaken and are any hazardous chemicals used? How hazardous are the materials and have associated risks been documented and addressed in appropriate risk assessments?
- If on a site visit, note signs of poor housekeeping, inadequate/untidy storage areas and poor drum labelling. Look for evidence of any recent spills or releases of raw materials/product.

3

http://www.wwf.org.uk/deeperluxury/_downloads/DeeperluxuryReport.pdf



Management plans

Confirm that the business has put in place at minimum, the following items in its E&S risk management systems:

- Operational policies and procedures for managing environmental, health, safety, labour and community matters. These systems should cover both employees and contractors.
- Accountability and responsibility for environmental, health and safety, and labour matters. Is there evidence of management review/demonstrated involvement in environment, health, safety and hygiene management? This should include senior management oversight.
- Improvement objectives, targets, project plans and monitoring programmes.
- Training for personnel, including ensuring that personnel are trained in the risk associated with their job and the correct use of PPE;
- Regular inspections, checks and audits with records to demonstrate achievement of the required level of performance against legal requirements.
- Energy conservation schemes and development of programmes to reduce greenhouse gas emissions.
- Emergency plans for environment, health and safety accidents or hygiene non-compliance incidents.
- Waste management plan (waste minimisation, re-use, recycling, monitoring).
- Stakeholder engagement plans / programmes.
- Financial investment plans directly or indirectly related to management of

environment, health and safety and labour issues.

Air emissions management (including noise)

- What levels of air emissions are permitted? Have permitted levels of emissions been exceeded in the past?
- Has pollution abatement technology been installed to reduce atmospheric emissions?
- Has employee exposure to potentially harmful gases been assessed and controlled?
- Are there any VOC abatement technologies or measures in place? Is there a Leak Detection and Repair (LDAR) programme?
- Are metal products/materials moved around the site by conveyor or by vehicle?
- Is there local exhaust ventilation? Is it maintained?
- Are there any dust control measures? Are they used and effective?
- If on a site visit, note the noise and dust levels and any odours at the site. Is there any build-up of dust on machinery or other surfaces? Is there any evidence of deployment of noise/dust/odour abatement measures or a requirement for such measures (e.g. hearing protection)?

Water abstraction & management

- What volumes and quality of water are required? Where is water obtained from?
- Are measures in place to recycle water? Will there be any planned changes which may affect the demand for water? Will existing resources be able to meet demand?
- Check regulatory compliance - are all necessary licences/permits/discharge consents in place?



Wastewater management

- What liquid effluents are produced? What discharge control measures are employed?
- Is effluent and wastewater treated before discharge? If so, does the wastewater treatment plant discharge to a local watercourse or the municipal wastewater treatment works? Higher environmental risks will be associated with facilities discharging to water courses without adequate treatment.
- Is the wastewater quality tested and if so, for what? Where are the samples taken from, and how often? Do the discharges have to meet set standards?
- If on a site visit, check the condition of the treatment plant and location of discharge points for effluent and wastewater from the facility. What does the quality of these discharges look like? Note the colour and appearance of adjacent watercourses.

Solid waste management

- What is the nature of solid waste disposal?
- Are measures in place to minimise, re-use or recycle waste products?
- How is hazardous waste removed? How are appropriate contractors selected and monitored to ensure that the waste is being taken to an appropriate waste disposal facility?
- If on a site visit, check that solid waste storage equipment is in a good condition, that waste storage areas are clear of debris and that skips are covered to prevent waste escaping, for example, check that waste containers have lids or are stored in an area with a roof. Check for flora/vegetation zones near storage sites that are not growing very well as this will indicate the possibility of pollution.

Transport of materials to or from the site

- How are chemicals transported (e.g. road, water or rail), and what are their potential impacts?
- Where are the areas for loading/unloading of materials located? Are they located near any water bodies or other possibly sensitive features? Is there any containment to prevent run-off of contaminated water?
- Does road haulage cause excessive traffic through any neighbouring residential areas?
- If on a site visit, check the age and condition of equipment and vehicles. Look for signs of wear and tear, degradation, leaks and breaks.

Storage

- What fuels and materials are stored in bulk on site?
- What is the potential for spillages and leakages to enter surface water drainage systems? Are surface tanks and material storage areas hard surfaced and bunded? Are alarms installed to detect leaks from storage areas?
- If on a site visit look to see whether these storage facilities are in good condition. Is the volume of the bunded area adequate to contain the stored materials? Are they regularly cleaned and inspected and tested for leakages?

Health & safety

- Do staff wear PPE? Is there signage to inform staff where PPE should be worn?
- Is first aid equipment available? Is there a trained and competent first aid resource on site?
- Is there a worker health monitoring programme? What does it check for?



- Have workers been historically exposed to materials that could potentially lead to occupation health diseases?
- If on a site visit, check signage around the site:
 - Does it convey the health and safety risks?
 - Are fire exits and/or evacuation routes clearly marked?
 - Are there demarcated routes for pedestrians and vehicles?
- If on a site visit, check the age and condition of equipment, look for signs of wear and tear, degradation, leaks and breaks. Check for automatic safeguards on machinery to prevent accidental injury.

Incident management

- Have there been any recent incidents on site such as fatalities, fires/explosions, spills?
- Assess emergency responses to fires, major spills and explosions (in some countries it may be a legal requirement to have an emergency response plan). Does the organisation have an emergency response plan which includes an engagement plan to disseminate information to local communities at risk?
- Does the organisation have insurance to cover any significant damage to the environment/ community/operations (this may be covered by public liability insurance or the organisation may be party to an industry insurance scheme). Review the terms of the cover and identify any exclusions relevant to environmental and health and safety matters. Identify the number and type of claims against insurance in the past.
- If on a site visit, note if safety equipment is clearly signed and readily available, e.g. fire

extinguisher(s), eye wash, safety shower, first aid equipment, emergency escape routes, emergency stop, decontamination equipment, and absorbent materials?

Inspections & regulation

- Check the conditions and duration of validity for all permits. Will any planned changes at the facility require revisions to the permits or require new consents?
- What systems are in place to check and maintain assets and infrastructure?
- Have the premises been inspected recently by the regulatory authorities for health and safety, labour conditions, hygiene and environment? What were their findings?
- Has the organisation been subject to environment, health and safety or quality audits by customers/insurers? What was the outcome of these audits?
- Does the organisation have insurance in place to cover the recall of contaminated/faulty products? Have there been any recent product recall incidents? If yes, what did these relate to?
- Review historical and projected trends for environmental fees and fines. It is also suggested that contact is made with local regulatory agencies to determine compliance and whether complaints have been made by the public.

Investment

- Where are the organisations main markets? Are they manufacturing in, or exporting to, the EU? Are product standard regulations such as REACH relevant?
- Review budgets for capital expenditure and operational expenditure to cover EHS matters. Does the business plan have line items for Environment, Health and Safety



improvements as well as asset management and maintenance?

- If investment or refinancing will lead to restructuring of the organisation what will be the potential impacts on health and safety at the operation and wider community? Have these been considered and assessed by the company?
- If the company plans to invest in new technology, what will be the impacts and benefits for human resources?

Social, labour and community

- Check that labour standards, contracting and remuneration are in line with national law and are consistent with the average for the sector.
- Check that hours worked, including overtime, are recorded. Staff should receive

written details of hours worked and payment received.

- Check that wages and working hours are consistent with the average for the sector and national standards.
- Has the company received inspections from the local labour inspectorate in the previous three years? Have these resulted in any penalties, fines, major recommendations or corrective action plans?
- Does the organisation have a grievance mechanism, which allows employees to raise workplace concerns?
- Are employees free to form, or join, a worker's organisation of their choosing?

Take note of/ask questions relating to any activities that manage risks as listed in the earlier sections of this document.



5. References and additional sources

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Sub-sectoral Environmental and Social Guideline: Tanneries and Leather Products

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