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SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF ALAMEDA

CENTER FOR ENVIRONMENTAL HEALTH,
a non-profit corporation,

Plaintiff,

v.

MANGO NY, INC., *et al.*,

Defendants.

Case No. 25CV112558

ASSIGNED FOR ALL PURPOSES TO:
The Hon. Jenna Whitman, Dept. 25

**[PROPOSED] CONSENT
JUDGMENT AS TO FRAME LA
BRANDS, LLC**

1 **INTRODUCTION**

2 1.1 The Parties to this Consent Judgment are the Center for Environmental Health, a
3 California non-profit corporation (“CEH”) and Frame LA Brands, LLC (“Settling Defendant”).
4 CEH and Settling Defendant are referred to herein together as the Parties or individually as a
5 Party. The Parties enter into this Consent Judgment to settle certain claims asserted by CEH
6 against Settling Defendant as set forth in the operative complaint in the above-captioned matter
7 (the “Complaint”). This Consent Judgment addresses alleged chromium exposures from footwear
8 made with leather materials. CEH asserts that leather used to make footwear that are tanned with
9 chromium compounds will expose consumers to hexavalent chromium (“CrVI”), which is a
10 chemical listed under Proposition 65 as known to the State of California to cause cancer and
11 reproductive toxicity.

12 1.2 On December 11, 2024, CEH issued a 60-day Notice of Violation under California
13 Health & Safety Code Section 25249.5, *et seq.* (“Proposition 65”) to Settling Defendant, the
14 California Attorney General, the District Attorneys of every county in California, and the City
15 Attorneys of every California city with a population greater than 750,000, alleging that Settling
16 Defendant violated Proposition 65 by exposing persons to CrVI from leather footwear without
17 first providing a clear and reasonable Proposition 65 warning. Settling Defendant expressly
18 denies such allegation.

19 1.3 On February 20, 2025, CEH filed the Complaint in the above captioned matter
20 (hereinafter, the “Action”), naming Settling Defendant as an original defendant. On March 6,
21 2025, CEH filed the operative First Amended Complaint in the Action (hereinafter, the
22 “Complaint”).

23 1.4 Settling Defendant is a business entity that is also a person in the course of doing
24 business as such term is defined under Proposition 65.

25 1.5 For purposes of this Consent Judgment only, the Parties stipulate that this Court
26 has jurisdiction over the allegations of violations contained in the Complaint and personal
27 jurisdiction over Settling Defendant as to the acts alleged in the Complaint, that venue is proper in
28 the County of Alameda, and that this Court has jurisdiction to enter and enforce this Consent

1 Judgment as a full and final resolution of all claims which were or could have been raised in the
2 Complaint based on the facts alleged therein with respect to leather footwear sold by Settling
3 Defendant.

4 1.6 Nothing in this Consent Judgment is or shall be construed as an admission by the
5 Parties of any fact, conclusion of law, issue of law, or violation of law, nor shall compliance with
6 the Consent Judgment constitute or be construed as an admission by the Parties of any fact,
7 conclusion of law, issue of law, or violation of law. Nothing in this Consent Judgment shall
8 prejudice, waive, or impair any right, remedy, argument, or defense the Parties may have in any
9 other pending or future legal proceedings. This Consent Judgment is the product of negotiation
10 and compromise and is accepted by the Parties solely for purposes of settling, compromising, and
11 resolving issues disputed in this Action. Settling Defendant does not admit any violation of
12 Proposition 65 or any other law or legal duty. Settling Defendant expressly denies any liability
13 for any of the claims asserted in the Complaint, Action, or CEH's 60-day Notice of Violation
14 pursuant to Proposition 65.

15 **2. DEFINITIONS**

16 2.1 "Chrome-Tanned Leather" means that the hide or skin used to make the leather
17 was converted to leather either by treatment solely with chromium salts or with chromium salts
18 together with a small amount of some other tanning agent, used merely to assist the chromium
19 tanning process, and not in sufficient amount to alter the essential chromium tanned character of
20 the leather that is tanned with chromium compounds.

21 2.2 "Covered Products" means footwear for which normal and foreseeable use will
22 result in one or more leather components coming into direct contact with the skin of the average
23 user's foot or leg while the footwear is worn (e.g., a leather insole, tongue, liner, unlined upper, or
24 strap).

25 2.3 "Effective Date" means the date on which notice of entry of this Consent
26 Judgment by the Court is served upon Settling Defendant.

27 2.4 A "Protocol Tannery" is a leather tannery that (a) produces Chrome-Tanned
28 Leather pursuant to the Reformulation Protocol, or (b) provides a certification demonstrating that

1 the tannery has achieved certification with overall Gold rating under the Leather Working Group
2 (LWG) Audit Protocol P7.2.2 (or any subsequent higher version that is in force at the time of
3 certification), or has attained a Gold medal rating in the section “Restricted Substances,
4 Compliance & Chromium VI Management” (or any subsequent section or sections regarding
5 CrVI management).

6 2.5 “Reformulation Protocol” means the leather tanning protocol set forth on Exhibit
7 A.

8 **3. INJUNCTIVE RELIEF**

9 3.1 **Chrome-Free Reformulation.** After the Effective Date, Settling Defendant shall
10 not sell any Covered Product that is made with Chrome-Tanned Leather that will be sold or
11 offered for sale by Settling Defendant or any entity downstream of a Settling Defendant in
12 California, except as provided in Section 3.2. This Section 3.1 shall not apply to any Covered
13 Products that are already in the stream of commerce (*e.g.*, Covered Products in third-party
14 inventory or on store shelves) prior to the Effective Date.

15 3.1.1 **Notice to Tanneries and Suppliers.** Settling Defendant represents and
16 warrants that it stopped selling or offering for sale Covered Products made with Chrome-Tanned
17 Leather in California prior to the Effective Date, and has no intention of reintroducing Covered
18 Products made with Chrome-Tanned Leather into the California market. Accordingly, Settling
19 Defendant need not provide any notice to its tanneries or suppliers of Covered Products
20 instructing them that all Covered Products shall be made without using Chrome-Tanned Leather.

21 3.2 **Protocol Reformulation.** As an alternative to chrome-free reformulation as set
22 forth in Section 3.1, after the Effective Date Settling Defendant may sell Covered Products that
23 are made with Chrome-Tanned Leather that will be sold or offered for sale by Settling Defendant
24 or any entity downstream of Settling Defendant in California so long as the leather was produced
25 pursuant to the Reformulation Protocol by a Protocol Tannery.

26 3.3 **Protocol Reformulation Notice.** At least thirty (30) days before Settling
27 Defendant sells any Covered Product that are made with Chrome-Tanned Leather that will be
28 reformulated under Section 3.2, Settling Defendant shall serve on CEH a written report notifying

1 CEH of its intent to sell such reformulated Covered Products and identifying the specific Covered
2 Products that have been or will be reformulated by name, product code number, SKU, and any
3 other identifier.

4 **4. ENFORCEMENT**

5 4.1 **Enforcement Procedures.** Any Party or any of the public entities identified in
6 Health & Safety Code section 25249.7(c) (collectively, “Enforcers”) may, by motion or
7 application for an order to show cause before this Court, seek to enforce the terms of this Consent
8 Judgment. Prior to filing any such motion or application, the Enforcer(s) shall provide the
9 allegedly violating Party with a written notice setting forth the detailed factual and legal basis for
10 the alleged violation including any evidentiary support of the alleged violation (the “Notice of
11 Violation”). The Enforcer(s) and the allegedly violating Party shall then meet and confer during
12 the thirty (30) day period following the date the Notice of Violation was sent in an effort to try to
13 reach agreement on an appropriate cure, penalty, or related attorneys’ fees related to the alleged
14 violation. After such thirty (30) day period, the Enforcer(s) may, by new action, motion, or
15 application for an order to show cause before the Superior Court of Alameda, seek to enforce the
16 terms and conditions contained in this Consent Judgment. In any enforcement proceeding, the
17 Court shall not be limited by this Consent Judgment in fashioning remedies for failure to comply
18 with Proposition 65, and may order compliance with Proposition 65 by reformulation, warnings,
19 or any other method it finds compliant with the law.

20 **5. PAYMENTS**

21 5.1 **Payments by Settling Defendant.** On or before ten (10) days after notice of the
22 entry of an order approving this Consent Judgment is served on Settling Defendant, Settling
23 Defendant shall pay the total sum of \$45,000 as a settlement payment as further set forth in this
24 Section.

25 5.2 **Allocation of Payments.** The total settlement amount shall be paid in five (5)
26 separate checks in the amounts specified below and delivered as set forth below. Any failure by
27 Settling Defendant to comply with the payment terms herein shall be subject to a stipulated late
28 fee to be paid by Settling Defendant in the amount of \$100 for each day the full payment is not

1 received after the applicable payment due date set forth in Section 5.1. The late fees required
2 under this Section shall be recoverable, together with reasonable attorneys' fees, in an
3 enforcement proceeding brought pursuant to Section 4 of this Consent Judgment. The funds paid
4 by Settling Defendant shall be allocated as set forth below between the following categories and
5 made payable as follows:

6 5.2.1 Settling Defendant shall pay \$5,624 as a civil penalty pursuant to Health &
7 Safety Code §25249.7(b). The civil penalty payment shall be apportioned in accordance with
8 Health & Safety Code §25249.12 (*i.e.*, 25% to CEH and 75% to the State of California's Office of
9 Environmental Health Hazard Assessment ("OEHHA")). Accordingly, Settling Defendant shall
10 pay the OEHHA portion of the civil penalty payment for \$4,218 by check made payable to
11 OEHHA and associated with taxpayer identification number 68-0284486. This payment shall be
12 delivered as follows:

13 For United States Postal Service Delivery:

14 Attn: Mike Gyurics
15 Fiscal Operations Branch Chief
16 Office of Environmental Health Hazard Assessment
17 P.O. Box 4010, MS #19B
18 Sacramento, CA 95812-4010

19 For Non-United States Postal Service Delivery:

20 Attn: Mike Gyurics
21 Fiscal Operations Branch Chief
22 Office of Environmental Health Hazard Assessment
23 1001 I Street, MS #19B
24 Sacramento, CA 95814

25 Settling Defendant shall pay the CEH portion of the civil penalty payment for \$1,406 by check
26 made payable to the Center for Environmental Health and associated with taxpayer identification
27 number 94-3251981. This payment shall be delivered to Lexington Law Group, LLP, 503
28 Divisadero Street, San Francisco, CA 94117.

 5.2.2 Settling Defendant shall pay \$4,216 as an Additional Settlement Payment
("ASP") to CEH pursuant to Health & Safety Code §25249.7(b), and California Code of
Regulations, Title 11, §3204. CEH will use these funds to support CEH programs and activities
that seek to educate the public about toxic chemicals, including hormone disruptors such as CrVI,

work with industries interested in moving toward safer alternatives, advocate with government, businesses, and communities for business practices that are safe for human health and the environment, and thereby reduce the public health impacts and risks of exposure to CrVI and other toxic chemicals in consumer products sold in California. CEH shall obtain and maintain adequate records to document that ASPs are spent on these activities and CEH agrees to provide such documentation to the Attorney General within thirty (30) days of any request from the Attorney General. The payments pursuant to this Section shall be made payable to the Center for Environmental Health and associated with taxpayer identification number 94-3251981. These payments shall be delivered to Lexington Law Group, LLP, 503 Divisadero Street, San Francisco, CA 94117.

5.2.3 Settling Defendant shall pay \$35,160 as a reimbursement of a portion of CEH's reasonable attorneys' fees and costs (including but not limited to expert and investigative costs). The attorneys' fees and cost reimbursement shall be made in two separate checks as follows: (a) \$28,240 payable to the Lexington Law Group, LLP and associated with taxpayer identification number 88-4399775; and (b) \$6,920 payable to the Center for Environmental Health and associated with taxpayer identification number 94-3251981. Both of these payments shall be delivered to Lexington Law Group, LLP, 503 Divisadero Street, San Francisco, CA 94117.

5.2.4 To summarize, Settling Defendant shall deliver checks made out to the payees and in the amounts set forth below:

Payee	Type	Amount	Deliver To
OEHHA	Penalty	\$ 4,218	OEHHA per §5.2.1
Center for Environmental Health	Penalty	\$ 1,406	LLG
Center for Environmental Health	ASP	\$ 4,216	LLG
Center for Environmental Health	Fees and Costs	\$ 6,920	LLG
Lexington Law Group, LLP	Fees and Costs	\$ 28,240	LLG

1 **6. MODIFICATION OF CONSENT JUDGMENT AND TERMINATION OF**
2 **INJUNCTIVE RELIEF**

3 6.1 **Modification.** This Consent Judgment may be modified from time to time by
4 express written agreement of the Parties, with the approval of the Court, or by an order of this
5 Court upon motion and in accordance with law.

6 6.2 **Notice; Meet and Confer.** Any Party seeking to modify this Consent Judgment
7 shall attempt in good faith to meet and confer with any affected Party during a minimum of a
8 thirty (30) day period prior to filing a motion or stipulation to modify the Consent Judgment.

9 6.3 **Most Favored Nations Provision.** If, after the Effective Date, a court enters
10 judgment in the Action or another Proposition 65 enforcement action brought by CEH over
11 exposure to CrVI in Covered Products that imposes different injunctive relief from that set forth
12 in Section 3.2 of this Consent Judgment as to protocol reformulation, a Settling Defendant may
13 seek to modify Section 3.2 of this Consent Judgment to conform with the injunctive relief
14 provided in such later judgment.

15 **7. CLAIMS COVERED AND RELEASE**

16 7.1 Provided that Settling Defendant has complied with Section 5 hereof, this Consent
17 Judgment is a full, final, and binding resolution between CEH on behalf of itself and the public
18 interest and Settling Defendant and its parents, subsidiaries, affiliated entities that are under
19 common ownership, directors, officers, employees, agents, shareholders, successors, assigns, and
20 attorneys (“Defendant Releasees”), and all entities to which Settling Defendant directly or
21 indirectly distributes or sells Covered Products, including but not limited to its distributors,
22 wholesalers, customers, retailers, franchisees, licensors, and licensees (“Downstream Defendant
23 Releasees”), of any violation of Proposition 65 based on failure to warn about alleged exposure to
24 CrVI contained in Covered Products that were distributed or sold by Settling Defendant prior to
25 the Effective Date.

26 7.2 Provided that Settling Defendant has complied with Section 5 hereof, CEH, for
27 itself, its agents, successors, and assigns, releases, waives, and forever discharges any and all
28 claims against Settling Defendant, its Defendant Releasees, and its Downstream Defendant

1 Releasees arising from any violation of Proposition 65 or any other statutory or common law
2 claims that have been or could have been asserted by CEH regarding the failure to warn about
3 exposure to CrVI arising in connection with Covered Products that were that were distributed or
4 sold by Settling Defendant prior to the Effective Date.

5 7.3 Provided that Settling Defendant has complied with Section 5 hereof, compliance
6 with the terms of this Consent Judgment by Settling Defendant shall constitute compliance with
7 Proposition 65 by Settling Defendant, its Defendant Releasees, and its Downstream Defendant
8 Releasees with respect to any alleged failure to warn about CrVI in Covered Products distributed
9 or sold by Settling Defendant after the Effective Date.

10 **8. PROVISION OF NOTICE**

11 8.1 When CEH is entitled to receive any notice under this Consent Judgment, the
12 notice shall be sent by first class and electronic mail to:

13 Joseph Mann
14 Lexington Law Group, LLP
15 503 Divisadero Street
16 San Francisco, CA 94117
jmann@lexlawgroup.com

17 8.2 When Settling Defendant is entitled to receive any notice under this Consent
18 Judgment, the notice shall be sent by first class and electronic mail to:

19 Sedina L. Banks
20 Sherry E. Jackman
21 Greenberg Glusker LLP
22 2049 Century Park East, Suite 2600
23 Los Angeles, CA 90067
sbanks@greenbergglusker.com
sjackman@greenbergglusker.com

24 8.3 Any Party may modify the person and address to whom the notice is to be sent by
25 sending the other Party notice by first class and electronic mail.

1 **9. COURT APPROVAL**

2 9.1 This Consent Judgment shall become effective when approved by the Court. CEH
3 shall prepare and file a stipulation or motion for approval and entry of this Consent Judgment and
4 Settling Defendant shall support such approval and entry.

5 9.2 If this Consent Judgment is not entered by the Court, it shall be of no further force
6 or effect and shall not be introduced into evidence or otherwise used in any proceeding for any
7 purpose.

8 **10. GOVERNING LAW AND CONSTRUCTION**

9 10.1 The terms of this Consent Judgment shall be governed by the laws of the State of
10 California.

11 **11. ATTORNEYS' FEES**

12 11.1 Should CEH prevail on any motion, application for an order to show cause, or
13 other proceeding to enforce a violation of this Consent Judgment, CEH shall be entitled to its
14 reasonable attorneys' fees and costs incurred as a result of such motion or application. Should
15 Settling Defendant prevail on any motion, application for an order to show cause, or other
16 proceeding, Settling Defendant may be awarded its reasonable attorneys' fees and costs as a result
17 of such motion or application upon a finding by the Court that CEH's prosecution of the motion
18 or application lacked substantial justification. For purposes of this Consent Judgment, the term
19 "substantial justification" shall carry the same meaning as used in the Civil Discovery Act of
20 1986, Code of Civil Procedure §§ 2016, *et seq.*

21 11.2 Nothing in this Section 11 shall preclude a Party from seeking an award of
22 sanctions pursuant to law.

23 **12. ENTIRE AGREEMENT**

24 12.1 This Consent Judgment contains the sole and entire agreement and understanding
25 of the Parties with respect to the entire subject matter hereof, and any and all prior discussions,
26 negotiations, commitments, or understandings related thereto, if any, are hereby merged herein
27 and therein. There are no warranties, representations, or other agreements between the Parties
28 except as expressly set forth herein. No representations, oral or otherwise, express or implied,

1 other than those specifically referred to in this Consent Judgment have been made by any Party
2 hereto. No other agreements not specifically contained or referenced herein, oral or otherwise,
3 shall be deemed to exist or to bind any of the Parties hereto. Any agreements specifically
4 contained or referenced herein, oral or otherwise, shall be deemed to exist or to bind any of the
5 Parties hereto only to the extent that they are expressly incorporated herein. No waiver of any of
6 the provisions of this Consent Judgment shall be deemed or shall constitute a waiver of any of the
7 other provisions hereof, whether or not similar, nor shall such waiver constitute a continuing
8 waiver.

9 **13. RETENTION OF JURISDICTION**

10 13.1 This Court shall retain jurisdiction over this matter to implement or modify the
11 Consent Judgment.

12 **14. SUCCESSORS AND ASSIGNS**

13 14.1 This Consent Judgment shall apply to and be binding upon CEH and Settling
14 Defendant, and their respective divisions, subdivisions, and subsidiaries, and the successors or
15 assigns of any of them.

16 **15. AUTHORITY TO STIPULATE TO CONSENT JUDGMENT**

17 15.1 Each signatory to this Consent Judgment certifies that they are fully authorized by
18 the Party they represent to stipulate to this Consent Judgment and to enter into and execute the
19 Consent Judgment on behalf of the Party represented and to legally bind that Party.

20 **16. NO EFFECT ON OTHER SETTLEMENTS**

21 16.1 Nothing in this Consent Judgment shall preclude CEH from resolving any claim
22 against an entity that is not Settling Defendant on terms that are different from those contained in
23 this Consent Judgment.

24 **17. EXECUTION IN COUNTERPARTS**

25 17.1 The stipulations to this Consent Judgment may be executed in counterparts and by
26 means of portable document format (pdf), which taken together shall be deemed to constitute one
27 document.
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IT IS SO ORDERED:

Dated: _____ Judge of the Superior Court of California

IT IS SO STIPULATED:

Dated: December 3, 2025

**CENTER FOR ENVIRONMENTAL
HEALTH**



Signature

Kizzy Charles-Guzman

Printed Name

CEO

Title

Dated: _____, 2025

FRAME LA BRANDS, LLC

Signature

Printed Name

Title

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IT IS SO ORDERED:

Dated: _____ Judge of the Superior Court of California

IT IS SO STIPULATED:

Dated: _____, 2025 **CENTER FOR ENVIRONMENTAL HEALTH**

Signature

Printed Name

Title

Dated: November 6, 2025 **FRAME LA BRANDS, LLC**

Adrian Taylor
Adrian Taylor (Nov 6, 2025 17:37:22 PST)

Signature

Adrian Taylor

Printed Name

Chief Financial Officer

Title

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EXHIBIT A

Reformulation Protocols for Covered Products Made with Chrome-Tanned Leather

LEATHER TANNING/FINISHING PROTOCOL FOR COMPLIANCE WITH PROPOSITION 65 REQUIREMENTS TO MINIMIZE POTENTIAL FORMATION OF HEXAVALENT CHROMIUM

Background: For purposes of compliance with Proposition 65, the following Protocol is intended to establish good manufacturing practices and measures for chrome-tanned or chrome-retanned leather in order to eliminate or minimize the presence and potential formation of hexavalent chromium (CrVI) in such leather intended for footwear and glove products sold in California. Settling Defendants shall be required to comply with the terms of the Protocol prior to manufacturing or processing leather footwear/gloves for sale in California or to require compliance with the Protocol by third party manufacturers and suppliers of leather intended for such products.

Certification with overall Gold rating under the Leather Working Group (LWG) Audit Protocol shall be considered in assessing compliance with this Protocol. For companies attaining a lower overall LWG medal rating, compliance assessment also shall consider attainment of Gold rating in the sections of the LWG Protocol relating to Restricted Substances Lists and Chemical Management (currently Section 9 “Restricted Substances, Compliance, Chromium VI Management” and Section 16 “Chemical Management” of Issue 7.2.2 of the LWG Protocol).

Leather Tanning/Finishing Protocol

The following protocol for chrome-tanners/retanners identifies good manufacturing practices recognized by the leather tanning industry to eliminate or minimize the formation of hexavalent chromium in chrome-tanned or chrome re-tanned leather. Tannery shall provide transport and storage instructions specifying recommended temperature, humidity, and light conditions sufficient to maintain physical and chemical properties of the leather relevant to CrVI formation.

Upon written agreement of the Parties, this Protocol may be re-evaluated and revised appropriately to reflect advances in technology and production processes. Unless otherwise noted, references to test methods, detection limits, and other standards are to the version in place as of adoption of this Protocol.

1. Process Stage: Beamhouse

- 1.1. **Degreasing:** Thorough degreasing processes must be employed to reduce the presence of natural fats that can diminish leather quality and potentially contribute to CrVI formation.
 - 1.1.1. Perform thorough and consistent degreasing during beamhouse operations involving sheepskin, pigskin, and other high-fat content hides (*i.e.*, fat content over 3% dry weight basis). These materials can be very greasy and may require a specific, separate degreasing operation to reduce the fat content.
 - 1.1.2. Processing of bovine hides should include the use of surfactants to ensure fat content less than 3% dry weight basis.
 - 1.1.3. Use of halogenated organic degreasing agents is prohibited.
 - 1.1.4. Use only aqueous degreasing agents.

- 1.1.5. Do not use products with oxidative potential.
- 1.1.6. If bleaching is required (under exceptional circumstances to reduce natural skin pigmentation when producing very pale leather), products with oxidative potential may be necessary. If used, the process should incorporate iodine-starch paper for each batch of leather being processed to check oxidative potential and, if necessary, use reducing agent prior to addition of chromium in tanning stage.
- 1.1.7. Wash limed hides/pelts properly after liming and decalcifying.

2. Process Stage: Tanning/Wet Blue

- 2.1. Tanning Agents: Chromium-containing tanning agents must not contain intentionally added or detectable levels¹ of CrVI.
 - 2.1.1. Obtain from chemical supplier test reports for each supplier production batch conducted pursuant to ISO 19071 for CrVI in chromium tanning agents demonstrating detectable levels of CrVI no higher than the levels specified in the most current version of the ZDHC Manufacturing Restricted Substances List (“MRSL”)² (as analyzed by the test method specified therein).
 - 2.1.2. Maintain inventory control to ensure quality of tanning agents at time of use. Use of tanning/retanning agents past their “use by” date is prohibited.
 - 2.1.3. Tanning process vessels and associated make-up and delivery systems to be thoroughly cleaned and maintained using best practices.
 - 2.1.4. Water used during the tanning process and to clean apparatus, tubs, tools, and other equipment must have undetectable levels of CrVI.
 - 2.1.4.1. Recycled water must be tested regularly (at least annually) and verified as having undetectable levels of CrVI; water received directly from municipal or permitted wells does not require repeat verification of CrVI levels but should be analyzed to confirm absence of CrVI.
 - 2.1.5. Storage conditions must be maintained in accordance with chemical supplier instructions. Storage of chemicals outside of manufacturer recommendations is prohibited, unless representative samples of the chemicals are tested to confirm undetectable levels of CrVI no later than one month prior to use. ISO 19071 or other CrVI test methods appropriate to the chemical shall be employed.
 - 2.1.6. Final wash must be employed to remove unfixed chrome to the extent feasible.
 - 2.1.7. Use of chromium tanning agents recycled by the tannery is prohibited unless tested regularly (at least annually) to confirm undetectable CrVI via ISO 19071.
- 2.2. Use of Oxidizing Agents: The use of oxidizing agents such as sodium chlorite (or hypochlorite) in the pickle, or of potassium permanganate in pre-tanning wet-end operations, increases the risk of the formation of CrVI.

¹ The terms “detectable/undetectable levels” of CrVI shall be defined by the relevant test method appropriate for the chemical.

² The ZDHC MRSL is the minimum standard for the CrVI standard in this Protocol. Reference to other CrVI limits from other MRSLs may be used if they meet or exceed the stringency of the ZDHC standard. The current version of the ZDHC MRSL is v.3.1 and can be found at: <https://mrsl-30.roadmaptozero.com/mrslpdf?for=Consultancy>. All references to the ZDHC MRSL in this Protocol refer to the then most current version of the ZDHC MRSL. This note applies to all references to ZDHC in this Protocol.

- 2.2.1. Oxidizing agents may only be used if they can be shown to be absolutely necessary (e.g., for white or pastel shades) and if the residuals are reduced prior to the addition of chrome tanning agents. Starch-iodide test papers (must show no color development) or Oxidation-Reduction Potential (“ORP”) measurement (must show a negative reading indicating a reducing agent) shall be used to confirm lack of oxidative potential.
- 2.3. Measure and monitor levels of residual natural fats in wet blue leather. Bovine leather shall contain no more than 3% residual fat as measured below. Pigskin leather shall contain no more than 7% residual fat, as measured below. Other leather (e.g., sheep, goat, etc.) shall contain no more than 4% fat, as measured below.
 - 2.3.1. Monitoring must indicate an average grease content of less than 3% (bovine) or 4% (other) by weekly analysis or per 30 batches of production, whichever is the more frequent. For pigskin, monitoring must indicate an average grease content of less than 7% by monthly analysis or per 30 batches of production, whichever is the more frequent. (A “batch” is a production drum load or a group of hides/skins that are processed together as a unit.)
 - 2.3.2. Alternatively, the wet blue leather must have a maximum of 0.5% of Free Fatty Acids (using test method ISO 4048:2018)
- 2.4. If wet blue is used as a starting material: Wet blue bought from other suppliers must be shown to be free of CrVI (using the ISO 17075-2 test method after ageing procedure) and to have fat content less than 3% (bovine), 7% (pigskin), or 4% (other). For pigskin with fat content over 4%, additional degreasing shall be performed before or during the retan stage to reduce fat content below 4%.

3. Process Stage: Retanning/Wet End/Finishing

- 3.1. Retanning Agents: Optimization of chrome fixation is critical to reduce extractable chrome levels and the potential for CrVI formation.
 - 3.1.1. Use of oxidizing agents (such as ammonia-based chemicals/bleach) after chrome tanning is prohibited.
 - 3.1.2. Confirm selection of appropriate retanning agents for binding behavior and/or use of complexing agents. Maintain documentation.
 - 3.1.3. Chromium-containing retanning agents must not contain intentionally added or detectable levels of CrVI higher than the levels specified in the ZDHC MRSL.
 - 3.1.4. Obtain from chemical supplier test reports conducted pursuant to ISO 19071 demonstrating undetectable levels of CrVI.
 - 3.1.5. Maintain inventory control to ensure quality of retanning agents at time of use. Use of retanning agents past their “use by” date is prohibited.
- 3.2. Retanning process vessels and associated make-up and delivery systems to be thoroughly cleaned and maintained using best practices.
- 3.3. Water used during retanning process and to clean apparatus, tubs, tools, and other equipment must have undetectable levels of CrVI. Recycled water must be tested

regularly (at least annually) and verified as having undetectable levels of CrVI; water received directly from municipal or permitted wells does not require repeat verification of CrVI levels but should be analyzed to confirm absence of CrVI.

- 3.4. Storage conditions must be maintained in accordance with chemical supplier instructions. Storage of chemicals outside of manufacturer recommendations is prohibited, unless representative samples of the chemicals are tested to confirm undetectable levels of CrVI no later than one month prior to use. ISO 19071 or other CrVI test methods appropriate to the chemical shall be employed.
- 3.5. Final wash must be employed to remove unfixed chrome to the extent feasible.
- 3.6. Use of chromium retanning agents recycled by the tannery is prohibited unless tested regularly (at least annually) to confirm undetectable CrVI via ISO 19071.
- 3.7. Use scavenging agents, such as 1%-3% vegetable tanning extracts, for antioxidant protection, or use commercially-available synthetic antioxidants specifically formulated for the purpose and according to manufacturer specifications. (Antioxidants may be introduced directly or as part of the retanning agent formulation.)
 - 3.7.1. Add antioxidants during retanning process to enable longer-lasting antioxidant efficacy. Use of only spray-on antioxidants is prohibited.
- 3.8. Dyes and Pigments:
 - 3.8.1. Dye and pigments must not contain intentionally added or detectable levels of CrVI.
 - 3.8.2. Obtain from chemical supplier test reports conducted pursuant to ISO or EPA test method for CrVI demonstrating undetectable levels of CrVI.
 - 3.8.3. Obtain from chemical supplier certification that dyes or pigments lack oxidative potential (through ORP measurement showing a negative reading indicating a reducing agent or other appropriate method).
 - 3.8.4. If chromium-containing dyes or pigments are used, final product must be tested annually (or sooner if there is a change in formula) to confirm levels of CrVI below detection limit. Test using ISO 17075-2.
 - 3.8.5. Use of dyes and pigments must be compliant with the ZDHC MRSL.
- 3.9. Bleaches:
 - 3.9.1. Use of aggressive bleaches, peroxides, and potassium permanganate (KMnO₄) as bleaching agents after tanning is prohibited.
- 3.10. Fatliquors: Fatliquors must be suitably formulated with an appropriate antioxidant to protect against CrVI formation. Fish and vegetable oils in particular must be formulated with an appropriate antioxidant to protect against CrVI formation. Do not use fatliquors without having first obtained from the supplier a statement confirming that fatliquors are formulated with an appropriate antioxidant.

- 3.11. Inventory control must be maintained to ensure quality of fatliquors at time of use and that all fatliquors are used prior to “use by” dates.
- 3.12. Chemical storage conditions must be maintained in accordance with chemical supplier instructions to avoid fatliquor breakdown. Storage in conditions outside of manufacturer recommendations is prohibited, unless representative samples of the chemicals are tested to confirm the absence of oxidative potential no later than one month prior to use. Starch-iodide test papers (must show no color development) or ORP measurement (must show a negative reading indicating a reducing agent) shall be used to confirm lack of oxidative potential.
4. **Finishing Oils/Waxes:** Oils and wax finishes containing a high level of unsaturated fats are more likely associated with CrVI formation.
 - 4.1. Obtain from supplier a statement confirming that finishing oils and waxes are suitable for use and do not contribute to CrVI formation (such as by indicating compliance with ZDHC MRSL specifications).
5. **pH Levels:** Careful monitoring of pH through the entire set of tanning, retanning, fatliquoring, and dyeing process stages is critical to the avoidance of CrVI in the finished leather product. The potential for formation of CrVI increases at higher pH. While the neutralization process during wet end retanning will raise pH, this will be reversed during subsequent acidification and fixation.
 - 5.1. The pH must be maintained below 4.0 in the final bath (fixation) of the re-tanning process to ensure entire cross-section of leather is at acidic pH. Maintain documentation of final pH.
 - 5.2. Acidification at the end of wet end processing should be done in a steady manner with 2-3 additions of acid.
 - 5.3. Allow sufficient time to ensure complete acid penetration, depending on thickness and other processing conditions.
 - 5.4. The pH through the entire leather cross-section must be consistently below 4.5 in finished leather. Document final pH of leather determined during research and development. Conduct random audit sampling to ensure pH of final leather product is below 4.5 and maintain documentation.
6. **Final Wash:** Final wash must be employed to remove unfixed chrome. The pH of wash waters may need to be adjusted (lowered) to avoid localized, surface raising of pH.
 - 6.1. Drying: Solar irradiation is prohibited during drying of the leather.

7. Mold:

- 7.1. Use of ammonia to prevent mold formation is prohibited. If a fungicide is to be used to prevent mold formation a declaration should be obtained from the manufacturer to confirm that its use will not contribute to the potential formation of CrVI.

8. Process Stage: Storage and Transportation

- 8.1. Storage and transportation conditions must be monitored to maintain temperature, humidity, and light exposure to reduce the possibility of CrVI formation. Tannery shall provide storage instructions specifying recommended temperature, humidity, and light conditions sufficient to maintain physical and chemical properties of the leather.

9. Good Manufacturing and Quality Control Standards

- 9.1. The following quality assurance procedures must be implemented in order to ensure the prevention of CrVI formation throughout the entire production process:
- 9.1.1. Ensure cleanliness and good organization within the entire production facility.
 - 9.1.2. Storage conditions must be regularly checked to ensure that chemical degradation does not occur.
 - 9.1.3. Inventory control (received date, use by date, supplier, batch number, stores location, *etc.*) must be undertaken to ensure that chemicals are not used past their use-by date.
 - 9.1.4. Train employees in the safe use of chemicals and the correct make-up and application procedures for their use in each stage of the process. Educate workers about the potential for formation of CrVI, its potential for harm in the final product, and their role in ensuring process recipes are followed in order to ensure manufacture of a safe product. Ensure that all safety data sheets are current and available for each chemical, and that employees have been trained to properly handle and store the chemicals. Maintain written chemical management policy.
 - 9.1.5. All process steps must be documented, including the chemicals used in order to ensure transparency in the manufacturing or processing procedure.
 - 9.1.6. Ensure that the products which you use to degrease, tan, dye, or retan the leather do not contain intentionally added or detectable levels of CrVI higher than the levels specified in the ZDHC MRSL and have low oxidation potential. Obtain from chemical supplier a statement confirming that chemicals are suitable for use and do not contribute to CrVI formation or have oxidative potential. If stored outside of supplier recommendations or past “use by” dates, use iodine-starch paper or ORP measurement to check oxidative potential and if necessary use reducing agent prior to use.
 - 9.1.7. Use of chemicals which contain intentionally added CrVI or which the manufacturer cannot guarantee as having detectable levels of CrVI no higher than the levels specified in the ZDHC MRSL is prohibited.
 - 9.1.8. Maintain detailed internal quality control records.
 - 9.1.9. Testing: Annually test representative samples of finished leather for CrVI. Refer to AFIRM Restricted Substances List (available at <https://afirm-group.com/wp->

content/uploads/2023/04/2023_AFIRM_RSL_2023_0419a.pdf) for recommended testing method.