







Smooth 'N Shine Polishing Olive & Tea Tree Revive Oil Conditioning Gel	Edge Control		<p><i>High hazard:</i> Methylisothiazolinone</p> <p><i>Moderate hazard:</i> PEG-10 Olive Glycerides, Aminomethyl Propanol, PPG-5-Ceteth-20, Phenoxyethanol, Methylparaben</p> <p><i>Low hazard:</i> Water, PVP, Carbomer, Mentha Arvensis (Wild Mint) Oil, Disodium EDTA, Melaleuca Alternifolia (Tea Tree) Leaf Oil, D&amp;C Yellow 10, Green 3, Oleth-20</p>	<p><i>Skin Deep:</i> 4</p> <p><i>Good Guide:</i> 5.5</p>
Ampro Pro Styl Clear Ice Gel	Hair Gel		<p><i>High hazard:</i> Fragrance</p> <p><i>Moderate hazard:</i> Propylene Glycol, Polysorbate-20, Diazolidinyl Urea (Formaldehyde releaser)</p> <p><i>Low hazard:</i> Water, Sodium Carbomer-940, Hydrolyzed Protein, Disodium EDTA, FD&amp;C Violet 2</p>	<p><i>Skin Deep:</i> 4</p> <p><i>Good Guide:</i> no data</p>
Blue Magic Hair & Scalp Conditioner	Hair Grease		<p><i>High hazard:</i> Fragrance</p> <p><i>Moderate hazard:</i> Lecithin, D&amp;C Green 6, Petrolatum</p> <p><i>Low hazard:</i> Lanolin, Olea Europaea (Olive) Oil, Isopropyl Myristate, D&amp;C Yellow 11</p>	<p><i>Skin Deep:</i> 5</p> <p><i>Good Guide:</i> 4.1</p>
Hollywood Beauty Tea Tree Oil	Hair Oil		<p><i>High hazard:</i> Isopropylparaben, Isobutylparaben, Butylparaben, Fragrance</p> <p><i>Moderate hazard:</i> Tocopheryl Acetate, Phenoxyethanol, Methylparaben, BHT</p> <p><i>Low hazard:</i> Glycine Soja (Soybean) Oil, Melaleuca Alternifolia (Tea Tree) Leaf Oil, Carthamus Tinctorius (Safflower) Oil, D&amp;C Yellow 11, Arnica Montana (Arnica) Flower Extract, Pinus Palustris Leaf Extract, Rose Hips Fruit Oil, Arctium Majus (Burdock) Root Extract, Citrus Medica Limonium (Lemon) Peel Extract, Hedera Helix (Ivy) Leaf/Stem Extract, Tropaeolum Majus (Nasturtium) Extract, Lamium Album (White Nettle) Flower Extract, Calendula Officinalis (Pot Marigold) Flower Extract</p>	<p><i>Skin Deep:</i> 5</p> <p><i>Good Guide:</i> no data</p>

SoftSheen-Carson Optimum Care Oil Therapy Hair & Scalp Quencher	Hair Oil		<p><i>High hazard:</i> Propylparaben, Lilial, Amylcinnamaldehyde, Benzyl Salicylate, Fragrance</p> <p><i>Moderate hazard:</i> Cyclopentasiloxane, Alpha-Isomethyl Ionone, Citronellol, BHT, Limonene</p> <p><i>Low hazard:</i> Caprylic/Capric Triglyceride, Elaeis Guineensis (African Palm) Oil, C18-36 Acid Triglyceride, Paraffin, C12-15 Alkyl Benzoate, Olea Europaea (Olive) Oil, Simmondsia Chinensis (Jojoba) Seed Oil, Cocos Nucifera (Coconut) Oil, Persea Gratissima (Avocado) Oil, 2-Oleamidol, 1, 3-Octadecanediol, Lyral</p>	<p><i>Skin Deep:</i> 6</p> <p><i>Good Guide:</i> 4.3</p>
Creme of Nature Exotic Shine Hair Color	Hair Dye		<p><i>High hazard:</i> P-Phenylenediamine, Propylparaben, Butylparaben, Isobutylparaben, Fragrance, Resorcinol, Oxybenzone</p> <p><i>Moderate hazard:</i> Hydrogen Peroxide, Laureth-1, Propylene Glycol, Ammonium Hydroxide, Quaternium-10, Lecithin, Tocopheryl acetate, Glyceryl Linolenate, Glyceryl Linoleate, 2-Amino-4-Hydroxyethylaminosol E Sulfate, Polyquaternium-32, PEG-12 Dimethicone, Cyclopentasiloxane, Dimethicone, Cocamidopropyl Betaine, Ethylparaben, Phenoxyethanol, M-Aminophenol, BHA, Linalool, D&amp;C Red 17, Ethanolamine, P-Aminophenol</p> <p><i>Low hazard:</i> Water, Cetyl Alcohol, Stearyl Alcohol, Oleic Acid, Sodium Cetearyl Sulfate, Phosphoric Acid, Isostearic Acid, Glyceryl Monostearate, Ammonium Lauryl Sulfate, Polyquaternium-10, Polyquaternium-28, Erythorbic Acid, Sorbitol, Hamamelis Virginiana (Witch Hazel) Extract, Panthenol, Xanthan Gum, Cetearyl Alcohol, Mineral Oil, Honey, Olea Europaea (Olive) Oil, Lanolin Oil, D&amp;C Yellow 11, Sodium Sulfate, Glycerin</p>	<p><i>Skin Deep:</i> 10</p> <p><i>Good Guide:</i> 3.6</p>
TRESemme Climate Control Mousse	Hair Mousse		<p><i>High Hazard:</i> Isobutane, Lilial, Amylcinnamaldehyde, Geraniol, Fragrance</p> <p><i>Moderate Hazard:</i> Propylene Glycol, Polysorbate-20, Polyquaternium-7, Propane, Linalool, Hexyl Cinnamal, Limonene, Octinoxate</p> <p><i>Low Hazard:</i> Water, Polyquaternium-4,</p>	<p><i>Skin Deep:</i> 8</p> <p><i>Good Guide:</i> 5.2</p>

			Hydrofluorocarbon 153A, Polyquaternium-11, Vinyl Caprolactam/PVP/Dimethylaminoethyl Methacrylate Copolymer, Undeceth-11, Butyloctanol, Undeceth-5, Ethylhexyl Palmitate, Olea Europaea (Olive) Oil, Silicone Fluid, Citric Acid, Hydrolyzed Keratin	
Got2B Kinkier Curling Mousse	Hair Mousse		<p><i>High hazard:</i> Fragrance</p> <p><i>Moderate hazard:</i> Phenoxyethanol, Limonene,</p> <p><i>Low hazard:</i> Water, Methylparaben, Hydroxycitronellal, Isobutane, Propane, Polyquaternium-46, Panthenol, PEG-40 Hydrogenated (Castor) Oil</p>	<p><i>Skin Deep:</i> no data</p> <p><i>Good Guide:</i> 5.3</p>
Murray's Hair Care Beeswax	Locking Wax		<p><i>High hazard:</i> Fragrance</p> <p><i>Moderate hazard:</i> Petrolatum</p> <p><i>Low hazard:</i> Beeswax</p>	<p><i>Skin Deep:</i> 3</p> <p><i>Good Guide:</i> 4.3</p>
Africa's Best No-Lye Dual Conditioning Relaxer System (Regular)	Hair Relaxer		<p><i>High Hazard:</i> Fragrance, Cocamide Dea, DMDM Hydantoin (Formaldehyde releaser), Propylparaben</p> <p><i>Moderate Hazard:</i> Cetareth-20, Propylene Glycol, Steareth-2, FD&amp;C Yellow 5, Sodium Laureth Sulfate, Dimethicone, Calcium Hydroxide, Petrolatum, Cocamidopropyl Betaine, Methylparaben</p> <p><i>Low Hazard:</i> Water, Mineral Oil, Cetearyl Alcohol, Cetyl Alcohol, Behentrimonium Methosulfate, Guanidine Carbonate, Cocodimonium Hydroxypropyl Hydrolyzed Wheat Protein, Trideceth-7 Carboxylic Acid, Polyquaternium-47, Panthenol, Phenol Red, Trigonella Foenumgraecum, Seed Extract, Commiphora Myrrha (Myrrh) Extract, Arctium Lappa (Burdock) Extract, Hedera Helix (Ivy) Extract, Urtica Dioica (Nettle) Extract, Rosamarinus Officinalis (Rosemary) Leaf Extract, Salvia Officinalis (Sage) Leaf Extract, Polyquaternium-37, Propylene Glycol, Dicaprylate/Dicaprate, PPG-1, Trideceth-6, Hydrolyzed Collagen, EDTA, Citric Acid, Tetrasodium EDTA, Betula Alba (Birch) Leaf Extract, Arnica Montana (Arnica)</p>	<p><i>Skin Deep:</i> 10</p> <p><i>Good Guide:</i> 2.3</p>

			Flower Extract	
Optimum Care Salon Collection Optimum Care Anti-Breakage No-Lye Relaxer System, Regular	Relaxer		<p><i>High Hazard:</i> Fragrance, Linal, Benzy Salicylate, Lyral, Geraniol, Citral, Coumarin, Amylcinnamaldehyde</p> <p><i>Moderate Hazard:</i> Trideceth-2 Carboxamide Mea, Cetereath-25, Phenoxyethanol, Methylparaben, Ethylparabem, Hexyl Cinnamal, Alpha-Isomethyl Ionone, Petrolatum, Calcium Hydroxide, PEG-75 Lanolin</p> <p><i>Low Hazard:</i> Gluconolactone, Water, Cetearyl Alcohol, Glycerin, Hexadimethrine Chloride, Disodium EDTA, Polyquaternium-22, 2-Oleamido1,3-Octadecanediol, Mineral Oil, Polyquaternium-6</p>	<i>Skin Deep:</i> 10

Figure 1b: Products without Data

Brand	Product Type	Image
Olive Oil	Hair Relaxer	
Motions	Hair Relaxer	
Affirm	Hair Relaxer	
Olive Oil	Oil Sheen	

Salon Pro Vitamin E Formula with Shea Butter Hair Food	Hair Oil	
Salon Pro Olive Oil Formula with Aloe Vera Hair Food	Hair Oil	
Jamaican Mango & Lime Black Castor Oil	Hair Oil	
Hollywood Beauty Carrot Oil	Hair Oil	
Hollywood Beauty Olive Oil Shine Moisturizer	Hair Moisturizer	
African Essence	Hair Polish	
African Essence	Weave Spray	
Creative Image Adore	Hair Dye	

Bigen	Hair Dye	
Jazzing	Hair Dye	
Via Natural	Semi-Permanent Hair Dye	
High Beams Intense	Temporary Spray-On Hair Dye	
Organics Cornrow & Braid Revitalize	Braid Cream	

Figure 1c: Top 5 Hazardous Products Found in Salons

Brand	Product Type	Chemicals of Concern	Health Hazard(s)
1. Africa's Best (10)	Relaxer	Fragrance, Cocamide Dea, DMDM Hydantoin, Propylparaben	<p><i>Fragrance:</i> Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)</p> <p><i>Cocamide Dea:</i> Cancer, Allergies/immunotoxicity, Contamination concerns (Nitrosamines-in the presence of nitrosating agents), Organ system toxicity (non-reproductive)</p> <p><i>DMDM Hydantoin:</i> Cancer, Allergies/immunotoxicity, Contamination concerns (Formaldehyde), Irritation (skin, eyes, or lungs)</p>

			<p><i>Propylparaben</i>: Developmental/reproductive toxicity, Ecotoxicology, Endocrine disruption, Allergies/immunotoxicity, Use restrictions</p>
<p>2. Optimum Care Salon Collection Optimum Care Anti-Breakage No-Lye Relaxer System, Regular (10)</p>	<p>Relaxer</p>	<p>Fragrance, Lilial, Benzyl Salicylate, Lyrall, Geraniol, Amylcinnamaldehyde</p>	<p><i>Fragrance</i>: Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)</p> <p><i>Lilial</i>: Endocrine disruption, Allergies/immunotoxicity, Organ system toxicity (non-reproductive), Persistence and bioaccumulation</p> <p><i>Benzyl Salicylate</i>: Ecotoxicology, Endocrine disruption, Allergies/immunotoxicity</p> <p>Lyrall: Allergies/immunotoxicity</p> <p>Geraniol: Ecotoxicology, Allergies/immunotoxicity</p> <p>Amylcinnamaldehyde: Allergies/immunotoxicity</p> <p>Citral: Allergies/immunotoxicity, Irritation (skin, eyes, or lungs)</p>
<p>3. Creme of Nature Exotic Shine Hair Color (10)</p>	<p>Hair Dye</p>	<p>P-Phenylenediamine, Propylparaben, Butylparaben, Isobutylparaben, Fragrance, Resorcinol, Oxybenzone</p>	<p><i>P-Phenylenediamine</i>: Cancer, Data gaps, Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Organ system toxicity (non-reproductive)</p> <p><i>Propylparaben</i>: Developmental/reproductive toxicity, Ecotoxicology, Endocrine disruption, Allergies/immunotoxicity</p> <p><i>Butylparaben</i>: Biochemical or cellular level changes, Data gaps, Developmental/reproductive toxicity, Endocrine disruption, Allergies/immunotoxicity</p> <p><i>Isobutylparaben</i>: Biochemical or cellular level changes, Data gaps, Developmental/reproductive toxicity, Endocrine disruption, Allergies/immunotoxicity</p> <p><i>Fragrance</i>: Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)</p> <p><i>Resorcinol</i>: Cancer, Ecotoxicology, Endocrine disruption, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Organ system toxicity (non-reproductive), Occupational hazards</p>

			<p><i>Oxybenzone</i>: Enhanced skin absorption, Biochemical or cellular level changes, Developmental/reproductive toxicity, Endocrine disruption, Allergies/immunotoxicity, Organ system toxicity (non-reproductive), Persistence and bioaccumulation</p>
4. TRESemme climate Control Mousse (8)	Hair Mousse	Isobutane, Lilial, Amylcinnamaldehyde, Geraniol, Fragrance	<p><i>Isobutane</i>: Multiple, additive exposure sources, Allergies/immunotoxicity, Contamination concerns (Butadiene), Irritation (skin, eyes, or lungs), Organ system toxicity (non-reproductive)</p> <p><i>Lilial</i>: Endocrine disruption, Allergies/immunotoxicity, Organ system toxicity (non-reproductive), Persistence and bioaccumulation</p> <p><i>Amylcinnamaldehyde</i>: Allergies/immunotoxicity</p> <p><i>Geraniol</i>: Ecotoxicology, Allergies/immunotoxicity</p> <p><i>Fragrance</i>: Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)</p>
5. Olive Oil (8)	Edge Control	Eugenol, Geraniol, Lilial, Propylparaben, DMDM Hydantoin, Fragrance	<p><i>Eugenol</i>: Allergies/immunotoxicity, Organ system toxicity (non-reproductive)</p> <p><i>Geraniol</i>: Ecotoxicology, Allergies/immunotoxicity</p> <p><i>Lilial</i>: Endocrine disruption, Allergies/immunotoxicity, Organ system toxicity (non-reproductive), Persistence and bioaccumulation</p> <p><i>Propylparaben</i>: Developmental/reproductive toxicity, Ecotoxicology, Endocrine disruption, Allergies/immunotoxicity,</p> <p><i>DMDM Hydantoin</i>: Cancer, Allergies/immunotoxicity, Contamination concerns, Irritation (skin, eyes, or lungs)</p> <p><i>Fragrance</i>: Ecotoxicology, Allergies/immunotoxicity, Irritation (skin, eyes, or lungs), Miscellaneous, Organ system toxicity (non-reproductive)</p>



Figure 2. Services Provided

Salon	Services Offered
Aida's Dominican Beauty Style	<ul style="list-style-type: none"> <li>-Relaxers</li> <li>-Wash &amp; Sets</li> <li>-Wash &amp; Blowdrys</li> <li>-Trims</li> <li>-Hair Coloring</li> <li>-Hair Cutting</li> <li>-Deep Conditioner</li> <li>-Hot Oil Treatment</li> </ul>
Janet's Hair Braiding	<ul style="list-style-type: none"> <li>-Single Braids</li> <li>-Senegalese Twist</li> <li>-Marley Twist</li> <li>-Kinky Twist</li> <li>-Cornrows</li> <li>-Faux Locs</li> <li>-Dread Retwist</li> </ul>
Ketta's Hair Salon	<ul style="list-style-type: none"> <li>-Relaxers</li> <li>-Wash &amp; Sets</li> <li>-Wash &amp; Blowdrys</li> <li>-Press &amp; Curl</li> <li>-Trims</li> <li>-Hair Coloring</li> <li>-Hair Cutting</li> <li>-Deep Conditioner</li> <li>-Hot Oil Treatment</li> <li>-Weaves (Sew-in/Glue-in)</li> <li>-Flat Twist</li> <li>-Finger Waves</li> <li>-Dread Retwist</li> </ul>
K Zee African Braiding & Supplies	<ul style="list-style-type: none"> <li>-Single Braids</li> <li>-Senegalese Twist</li> <li>-Marley Twist</li> <li>-Kinky Twist</li> <li>-Cornrows</li> <li>-Faux Locs</li> <li>-Dread Retwist</li> </ul>
Princey's Place	<ul style="list-style-type: none"> <li>-Relaxers</li> <li>-Wash &amp; Sets</li> <li>-Wash &amp; Blowdrys</li> <li>-Press &amp; Curl</li> <li>-Trims</li> <li>-Hair Coloring</li> <li>-Hair Cutting</li> <li>-Deep Conditioner</li> <li>-Hot Oil Treatment</li> <li>-Weaves (Sew-in/Glue-in)</li> <li>-Flat Twist</li> <li>-Finger Waves</li> <li>-Dread Retwist</li> </ul>
Touch of Class Beauty Salon	<ul style="list-style-type: none"> <li>-Relaxers</li> <li>-Wash &amp; Sets</li> <li>-Wash &amp; Blowdrys</li> <li>-Press &amp; Curl</li> </ul>

	<ul style="list-style-type: none"> <li>-Trims</li> <li>-Hair Coloring</li> <li>-Hair Cutting</li> <li>-Deep Conditioner</li> <li>-Hot Oil Treatment</li> <li>-Weaves (Sew-in/Glue-in)</li> <li>-Flat Twist</li> <li>-Finger Waves</li> </ul>
--	--

Figure 3. Survey Results

Question Number	Survey #1	Survey #2	Survey #3	Survey #4
1				
2				
3	Female	Female	Female	Female
4	30-44 years	45 or older	30-44 years	30-44 years
5	15 years	50 years	24 years	13 years
6	Family or Friends	Cosmetology School	Cosmetology School	Cosmetology School
7	21-30 hours/week	21-30 hours/week	31-40 hours/week	21-30 hours/week
8a				
8b		8 or more	8 or more	
8c		8 or more	8 or more	
8d	1-3 times	8 or more	8 or more	1-3 times
8e		4-7 times	4-7 times	4-7 times
8f				
8g				
8h				
8i	Braid			
9a	1-3 times		1-3 times	4-7 times
9b				
9c				4-7 times
9d				
9e	1-3 times	4-7 times	4-7 times	1-3 times
9f			1-3 times	
9g		4-7 times	1-3 times	1-3 times
9h				
9i				
10a	Olive Oil Relaxer	Olive Oil Relaxer	Adore Color	Hollywood Beauty Tea Tree Oil

10b		Motions Relaxer	Motions Relaxer	Blue Magic Hair & Scalp Conditioner
				TRESemme
10c		Affirm Relaxer	Affirm Relaxer	Climate Control Mousse
10d		Keracare	Keracare	Murray's Hair Care Beezwax
10e			Creme of Nature	Creme of Nature
11	Very Safe		Very Safe	Very Safe
12a			5	
12b			2	
12c			6	
12d			1	
12e			3	
12f			4	
12g			7	
12h			8	
13	No	No	No	No
13a			I'm not interested in the chemistry part.	
13b				
13c				
13d			I usually try to read up on things, and also sample them.	
14a	Often	Always	Always	Often
14b	Never		Never	Never
14c	Never	Often	Often	Rarely
14d	Never	Rarely	Rarely	Never
14e	Never			
15a	Never	Always	Always	
15b	Never		Always	
15c	Never			
16	No	Yes	Yes	No
16a		In hair class	In hair classes	
16b		The safe chemicals and how it works	The type chemical and how it works	
17	Very Concerned	Very Concerned	Very Concerned	Not Concerned
18	Very Concerned	Very Concerned	Very Concerned	Not Concerned
19a			6	
19b			5	

19c			2	
19d			4	
19e			1	
19f			3	
19g			7	
20	Yes	Yes	Yes	Yes
20a			Make sure they get their chemical services on times and get frequent conditions.	
21	Yes		Yes	Yes
21a	Private Coverage		Other	Private Coverage
21b				
22	Good	Good	Good	Good
23a	No	Yes	Yes	No
23b	No	No	No	No
23c	No	Yes	Yes	No
23d	No	No	Yes	No
23e	No	Yes	Yes	Yes
23f	No	Yes	Yes	No
23g	No	Yes	No	No
23h	No	Yes	Yes	No
23i	No	Yes	No	No
23j	No	No	Yes	No
23k	No	Yes	No	No
23l	No	No	Yes, in my legs, arms and back pain	Yes, hands and wrists
23m	No	No	No	No
24a	No	No	No	No
24b	No	Yes	Yes	No
24c	No	No	No	Yes
24d	No	Yes	Yes	No
24e	No	Yes	Yes	Yes
24f	No	No	No	No
24g	No	No	No	No
24h	No	No	No	No
24i	No	No	Yes	No
24j	No	Yes	Yes	Yes
24k	No	Yes	No	No
25	Yes	No	Yes	Yes
26a	No	Yes	Yes	No
26b	No	No	Yes	No

26c	No	Yes	No	No
26d	No	Yes	No	No
26e	No	No	No	No
26f	No	Yes	No	No
26g	No	Yes	No	No
26h	No	Yes	No	No
26i	No	Yes	No	No
26j	No	Yes	No	No
26k	No	Yes	No	No
26l	No	Yes	No	No
27	No	No	No	No
27a				
28	No	No	No	No
28a				
29a	No	No	Yes	Yes
29b	No	No	No	No
29c	No	No	No	No
29d	No	No	No	Yes
29e	Yes	Yes	Yes	Yes
30	Yes	No	No	No
31	Yes	Yes	Yes	Yes
32	No	Yes	Yes	Yes
33a	No	Yes	Yes	No
33b	No	Yes	Yes	Yes
33c	No	Yes	Yes	Yes
33d	No	Yes	Yes	Yes
33e	No	Yes	Yes	Yes
33f	No	Yes	Yes	Yes
33g	No	Yes	Yes	Yes
33h	No	No	No	No

*III. Site Approval Consent Form*

OCCIDENTAL COLLEGE  
CONSENT FORM TO CONDUCT RESEARCH ON SITE

**Faculty Supervisor:** Professor Bhavna Shamasunder

**Student Investigator:** Antoniqua Roberson

**Title of Research Project:** What's going on "hair"?: The Perceptions and Awareness of Chemical Exposures from Hair Styling Product by Black Female Hairdressers in Dorchester, MA

I acknowledge that on <date> \_\_\_\_\_, I was informed by Antoniqua Roberson of Occidental College about this research project, the way it will be conducted and the conditions of I have received copies of the appropriate documents checked below which provide the essential descriptions of the proposed project:

\_\_\_ Informed Consent Form for Minor Child  X  Informed Consent Form for Adult Subjects

\_\_\_ Parental Information Letter \_\_\_ Data Archival Consent Form

\_\_\_ Informed Consent Form for Film Projects \_\_\_ Aforementioned documents in the appropriate and Documentaries/Subject Release Form language (if other than English)

This institution is fully aware of the nature and extent of the subject's participation in this project and agree with full knowledge of all details to allow the subjects to participate. Subjects may withdraw their participation on this project at any time without prejudice or penalty of any kind. In the case of minors, parents/guardians will be informed that they may withdraw their child's participation on this project at any time without prejudice or penalty of any kind.

On behalf of the institution, I give my consent for the research investigator(s) to utilize this site to recruit and interview it's members/students.

Permission to conduct research is granted beginning (date) \_\_\_\_\_ and ending

Name (print): \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Name of the institution: \_\_\_\_\_

Address: \_\_\_\_\_

Phone number: \_\_\_\_\_ Email: \_\_\_\_\_

**The institution's representative should sign two copies of this form. Keep one copy and return the other copy to the investigator.**

*IV. Survey Consent Form*

OCCIDENTAL COLLEGE  
INFORMED CONSENT FORM FOR ADULT SUBJECTS

**Faculty Supervisor:** Professor Bhavna Shamasunder

**Student Investigator:** Antoniqua Roberson

**Title of Research Project:** What's going on "hair?": The Perceptions and Awareness of Chemical Exposures from Hair Styling Product by Black Female Hairdressers in Dorchester, MA

I acknowledge that on \_\_\_\_\_, I was informed by Antoniqua Roberson of Occidental College of the following research project, the way it will be conducted and the conditions of my participation in it:

You are invited to participate in a research study conducted by Antoniqua Roberson, a student from the Urban & Environmental Policy Department at Occidental College in Los Angeles, CA. You must be at least 18 years of age to participate in this study. Please read this form and ask any question you may have before agreeing to be in the study.

**PURPOSE OF THE STUDY:** The purpose of this study is to examine black hair salons on Washington Street in Dorchester, MA, allowing the researcher, Antoniqua Roberson, to learn which endocrine disrupting chemicals (EDCs) are common in the hair care products at these salons; find out from Black, female hair care professionals about their experiences and health history working within the cosmetic industry; as well as uncover any trends between the six salons. The results of this study will be part of a final research report for Occidental College, and may be used in presentations and publications with the Black Women's for Wellness (BWW) organization, located in Los Angeles, CA.

**PROCEDURES:** If you volunteer in this study, you will be asked to complete a survey, created by BWW, followed by semi-structured interviews. With your permission, the interviews will be audio taped for the purpose of note taking; however, they will be deleted once I have

**VOLUNTARY NATURE OF THE STUDY:** Participation in this study is voluntary. You may skip any questions that you do not want to answer or stop participating at any time. You are free to withdraw from the study at any time. Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.

**CONFIDENTIALITY:** Subjects responses will remain confidential and no names will be used in the reported results of this study. Instead you will be referred to as "Participant A or Participant B". The data collected will be featured in the researcher's senior comprehensive project for the Urban & Environmental Policy department at Occidental College, and the final research report may be used in presentations or publications, as well as serve as a supplementary research project to a study conducted by the Black Women for Wellness organization. The researcher, faculty supervisor, and BWW will have access to information collected in this study.

That data will be kept password protected while working with it on the computer. Data derived

from participation in this study may be held for future use, and may be stored and re-analyzed, or otherwise combined with other data at a later date.

**RISKS & BENEFITS:** If you agree to participate in this study, you will be asked questions about your health history and sharing information about toxic exposures from beauty products. Some of the questions ask for personal information and may be stressful or trigger concern about your future health. However, you are free to not answer a question or stop your participation in this study at any time. By participating in this study, you may help to give the researcher and others a better understanding of the social and health experiences of Black women working in the hair, cosmetic industry.

After the interview, you will be given information on the movement for alternatives and safer hair care practices for salon workers. And, you will be provided contact information for your local Planned Parenthood and/or clinic for counseling and special services, and contact information for the Black Women for Wellness and West Harlem Environmental Action if you are interested in learning more information about these issues.

**COMPENSATION:** No compensation is offered for participation in this study.

**CONTACT INFORMATION:** If you have any questions, comments or concerns about the research, you can contact Antoniqua Roberson at [robersondancy@oxy.edu](mailto:robersondancy@oxy.edu) or Professor Bhavna Shamasunder at [bhavna@oxy.edu](mailto:bhavna@oxy.edu). If you have any questions or concerns regarding your rights as a participant in this study, you may contact the Institutional Review Board/Human Subjects Research Review Committee (IRB/HSRRC) Office at Occidental College in Los Angeles, CA, 90041 at (323) 259-2921 or [hsrcc@oxy.edu](mailto:hsrcc@oxy.edu).

**Please initial one of the options below.**

The interview may be audio-recorded for note-taking purposes:

YES \_\_\_\_\_ (initial)      NO \_\_\_\_\_ (initial)

I am at least eighteen years of age. I am fully aware of the nature and extent of my participation in this research project and the possible risks as outlined above. I understand that may withdraw my participation on this project at any time without prejudice or penalty of any kind. I hereby agree to participate in this research project.

Name (print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Subject should sign two copies of this form. Keep one copy and return the other to the investigator.**



*V. Proposed Semi-Structured Interview Questions*

1. What sparked your interest to become a haircare professional?
2. When working with products, do you wear protective gear (goggles, gloves, etc.)? If so, which products do you wear protective gear with? Which products do you not wear protective gear? Why?
3. Do you think it is important to wear protective gear when working with products?
4. Are you aware of your exposure to chemicals in the products when you do not wear protective gear?
5. Have you ever heard of endocrine disruption chemicals (EDCs)? If so, can you explain what they are and/or what you have heard about them?
6. Do you concerns any regarding EDC exposure at work? If so, what are they?
7. Is cosmetic safety important to you? Why or why not?
8. Has the natural hair movement influenced product usage at the shop? If so, in what ways?
9. Are you concerned about health impacts? If so, what are you most concerned about?
10. What have you heard thus far about reproduction impacts in regards to cosmetic products?
11. Have you ever shown signs similar to any of the conditions linked to EDC exposure that I have just mentioned? If so, which conditions?
12. Would you be interested in buying safer, alternative cosmetic products? Do you have any children? If so, how many?
13. Have your children ever experienced any of the health related impacts mentioned in the survey? If so, which conditions?
14. Have you ever had a miscarriage or had difficulties conceiving since being a hairdresser?

VI. Black Women for Wellness (BWW), Healthy Hair Initiative Survey



BLACK WOMEN FOR WELLNESS

Healthy Hair Initiative Survey

By completing this survey, you help Black Women for Wellness (BWW) identify how to best meet your needs and the needs of your community when it comes to black hair products. Completion of this survey will also help address your possible occupational safety needs as a hair stylist.

We thank you in advance for your time and cooperation!

- 1. Complete Salon Address:

\_\_\_\_\_

- 2. Hair Stylist Code Number. Please write in the boxes the following information.

Salon's Name	FIRST LETTER of your First Name	Today's Date

- 3. What is your gender? Please circle one.

Male                                  Female                                  Transgender  
Other: \_\_\_\_\_                                  I do not wish to answer

- 4. How old are you? Please check one.

- 18 or younger
- 19-24 years
- 25-29 years
- 30-44 years
- 45 or older

refuse to answer

5. How long have you been a stylist? \_\_\_\_\_

6. Where did you learn how to perform your job as a stylist? Please check one.

Cosmetology school

Family or friends

On the job

Other: \_\_\_\_\_

7. How many hours a week do you work? Please check one.

9 hours/week or less

10-20 hours/week

21-30 hours/week

31-40 hours/week

41-50 hours/week

51 hours/week or more

8. Which of these services you provide? Please check all that apply.

		How many times a week do you provide these services		
Check all that apply	Services	1-3 times	4-7 times	8 or more
	Permanent waves and texturizers			
	Permanent Straighteners or Relaxers (non-lye or lye relaxers)			
	Hair dyes			
	Hair extensions (i.e. weaves, clip ins, etc)			
	Press and curl (chemically treated hair)			

from participation in this study may be held for future use, and may be stored and re-analyzed, or otherwise combined with other data at a later date.

**RISKS & BENEFITS:** If you agree to participate in this study, you will be asked questions about your health history and sharing information about toxic exposures from beauty products. Some of the questions ask for personal information and may be stressful or trigger concern about your future health. However, you are free to not answer a question or stop your participation in this study at any time. By participating in this study, you may help to give the researcher and others a better understanding of the social and health experiences of Black women working in the hair, cosmetic industry.

After the interview, you will be given information on the movement for alternatives and safer hair care practices for salon workers. And, you will be provided contact information for your local Planned Parenthood and/or clinic for counseling and special services, and contact information for the Black Women for Wellness and West Harlem Environmental Action if you are interested in learning more information about these issues.

**COMPENSATION:** No compensation is offered for participation in this study.

**CONTACT INFORMATION:** If you have any questions, comments or concerns about the research, you can contact Antoniqua Roberson at [robersondancy@oxy.edu](mailto:robersondancy@oxy.edu) or Professor Bhavna Shamasunder at [bhavna@oxy.edu](mailto:bhavna@oxy.edu). If you have any questions or concerns regarding your rights as a participant in this study, you may contact the Institutional Review Board/Human Subjects Research Review Committee (IRB/HSRRC) Office at Occidental College in Los Angeles, CA, 90041 at (323) 259-2921 or [hsrcc@oxy.edu](mailto:hsrcc@oxy.edu).

**Please initial one of the options below.**

The interview may be audio-recorded for note-taking purposes:

YES \_\_\_\_\_ (initial)      NO \_\_\_\_\_ (initial)

I am at least eighteen years of age. I am fully aware of the nature and extent of my participation in this research project and the possible risks as outlined above. I understand that may withdraw my participation on this project at any time without prejudice or penalty of any kind. I hereby agree to participate in this research project.

Name (print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Subject should sign two copies of this form. Keep one copy and return the other to the investigator.**

*V. Proposed Semi-Structured Interview Questions*

1. What sparked your interest to become a haircare professional?
2. When working with products, do you wear protective gear (goggles, gloves, etc.)? If so, which products do you wear protective gear with? Which products do you not wear protective gear? Why?
3. Do you think it is important to wear protective gear when working with products?
4. Are you aware of your exposure to chemicals in the products when you do not wear protective gear?
5. Have you ever heard of endocrine disruption chemicals (EDCs)? If so, can you explain what they are and/or what you have heard about them?
6. Do you concerns any regarding EDC exposure at work? If so, what are they?
7. Is cosmetic safety important to you? Why or why not?
8. Has the natural hair movement influenced product usage at the shop? If so, in what ways?
9. Are you concerned about health impacts? If so, what are you most concerned about?
10. What have you heard thus far about reproduction impacts in regards to cosmetic products?
11. Have you ever shown signs similar to any of the conditions linked to EDC exposure that I have just mentioned? If so, which conditions?
12. Would you be interested in buying safer, alternative cosmetic products? Do you have any children? If so, how many?
13. Have your children ever experienced any of the health related impacts mentioned in the survey? If so, which conditions?
14. Have you ever had a miscarriage or had difficulties conceiving since being a hairdresser?

*VI. Black Women for Wellness (BWW), Healthy Hair Initiative Survey*



BLACK WOMEN FOR WELLNESS

**Healthy Hair Initiative Survey**

By completing this survey, you help Black Women for Wellness (BWW) identify how to best meet your needs and the needs of your community when it comes to black hair products. Completion of this survey will also help address your possible occupational safety needs as a hair stylist.

We thank you in advance for your time and cooperation!

1. Complete Salon Address:

\_\_\_\_\_

2. Hair Stylist Code Number. Please write in the boxes the following information.

Salon's Name	FIRST LETTER of your First Name	Today's Date

3. What is your gender? Please circle one.

Male

Female

Transgender

Other: \_\_\_\_\_

I do not wish to answer

4. How old are you? Please check one.

18 or younger

19-24 years

25-29 years

30-44 years

45 or older

- refuse to answer
- 5. How long have you been a stylist? \_\_\_\_\_
- 6. Where did you learn how to perform your job as a stylist? Please check one.
  - Cosmetology school
  - Family or friends
  - On the job
  - Other: \_\_\_\_\_
- 7. How many hours a week do you work? Please check one.
  - 9 hours/week or less
  - 10-20 hours/week
  - 21-30 hours/week
  - 31-40 hours/week
  - 41-50 hours/week
  - 51 hours/week or more
- 8. Which of these services you provide? Please check all that apply.

		How many times a week do you provide these services		
Check all that apply	Services	1-3 times	4-7 times	8 or more
	Permanent waves and texturizers			
	Permanent Straighteners or Relaxers (non-lye or lye relaxers)			
	Hair dyes			
	Hair extensions (i.e. weaves, clip ins, etc)			
	Press and curl (chemically treated hair)			

	Brazilian blowout			
	Nails			
	Spa			
	Other: _____			

9. Which of the following natural hair services do you provide? Please check all that apply.

Check all that apply	Services	How many times a week do you provide these services		
		1-3 times	4-7 times	8 or more
	Twists			
	Sister Locs			
	Locs			
	Afros			
	Braids			
	Short natural			
	Press and curl (not chemically treated hair)			
	Curly styles			
	Other: _____			

10. List 5 products that you frequently use. Include type of product, brand and/or manufacturer (i.e. Nexxus Pro. Mend Conditioner).

- 1.
- 2.
- 3.
- 4.
- 5.



11. On a scale of 1-4 how safe do you think the products are that you use. Please circle one.

1	2	3	4
Not safe	Somewhat safe	Safe	Very safe

12. How important are the following when making a decision about purchasing a product?  
Please rank them from 1 to 8, 1 being the most important.

	Rank
Price	
How well it works	
Recommendations from others	
Product ingredients	
Health effects on stylists	
Accessibility	
Fragrance	
Product packaging	

13. Do you make your own products? Please check one.

Yes

No

a) Why or why not?

b) If yes, what ingredients do you typically use?

c) How often do you use those ingredients?

d) Where do you get your product information, when it comes to making your own?

14. How often do you take any of the following precautions when handling chemical products at work? Please check one for each of the following.

	Never	Rarely	Often	Always
I wear a protective apron				
I wear goggles				
I wear gloves				
I wear a face mask				
Other: _____				

15. How often do you take any of the following precautions when applying chemical products on your clients? Please check one for each of the following

	Never	Rarely	Often	Always
I use protective creams				
I put an apron on them				
Other: _____				

16. Have you received any training on the potential health effects of chemical hair products? Please check one.

Yes

No

a) If so, where did you receive this training?

b) What kind of information was provided?

17. On a scale of 1-4, how concerned are you about the effects of chemical products on your health? Please circle one.

1	2	3	4
Not concerned	Slightly Concerned	Moderately Concerned	Very concerned

18. On a scale of 1-4, how concerned are you about the health effects of chemical products on the health of your clients? Please circle one.

1	2	3	4
Not concerned	Slightly Concerned	Moderately Concerned	Very concerned

19. What would prompt you to use less toxic hair care products? Please rank them from 1 to 7, 1 being the most important.

	Rank
Price	
Accessibility	
Effectiveness	
Reliability of the product	
Product ingredients	
Health improvements for the stylists	
Other: _____	

20. Do you recommend healthy hair products to your clients? Please check one.

- Yes
- No

a) If yes, what healthy hair recommendations do you make?

21. Do you have health insurance? Please check one.

Yes

No

a) If yes, are you covered through (please check one)

Covered California

Private Coverage

Dependent Coverage

Other: \_\_\_\_\_

b) If no,

I looked and it was expensive

I haven't looked but I think it might be expensive

I don't look where to find information about health insurance

Other: \_\_\_\_\_

22. How would you rate your health? Please circle one.

1	2	3	4
Poor	Fair	Good	Excellent

23. Have you experienced any of the following health symptoms while working in the salon?  
 Check all that apply.

	Check all that apply
Skin irritation	
Nose irritation	
Eye irritation	
Nausea	
Fatigue/tiredness	
Headaches	
Migraines	
Difficulty breathing	
Dizziness	
Stress	
Anxiety	
Chronic pain Please indicate what body parts:	
Other:	

24. Have you experienced any of the following physical injuries while at work?  
 Check all that apply.

	Check all that apply
Chemical burn	
Pain in wrists	
Pain in fingers	
Pain in hands	
Cuts	
Loss of function in wrists	
Loss of function in fingers	
Loss of function in hands	
Back pain	
Leg/ foot problems	
Other	

25. Have you ever worked at a hair salon while you were pregnant? Please check one.

- Yes
- No
- Not applicable

26. Do you have a medical history of any of the following health related problems?  
Check all that apply.

	Check all that apply
Asthma	
Carpal tunnel	
Chronic dermatitis	
Breast cancer	
Cancer Please indicate type(s):	
Uterine fibroids	
Difficulty conceiving	
Miscarriage	
Low birth weight	
Premature birth	
Birth defect in child	
Other:	

27. Have you experienced any other health symptoms that you suspect might be related to your work? Check one.

- Yes
- No

a) If yes, please explain.

28. Have you heard of any stylist who have experienced miscarriages, infant death or have given birth to low birth weight, premature babies?

Yes

No

a) If yes, can you tell us more about what you have heard?

29. Does the salon have any of the following forms of ventilation? Check all that apply.

Table fan

Salon ventilation system

Ceiling fan

Window

Second door that opens

30. Are you interested in learning more about a safer and healthier workplace?  
Please check one.

Yes

No

31. Are you interested in meeting other workers or owners to share and talk about a safer and healthier workplace?  
Please check one.

Yes

No