



# HEALTH & SAFETY COMPLIANCE ASSESSMENTS OF GEORGIAN APPAREL COMPANIES

FINAL

Monday, February 6, 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by Deloitte Consulting LLP.

# **HEALTH & SAFETY COMPLIANCE ASSESSMENTS OF GEORGIAN APPAREL COMPANIES**

FINAL

USAID ECONOMIC PROSPERITY INITIATIVE (EPI)

CONTRACT NUMBER: AID-114-C-10-00004

DELOITTE CONSULTING LLP

USAID/CAUCASUS

MONDAY, FEBRUARY 6, 2012

## DISCLAIMER:

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

# DATA

Author(s): Nino Davitashvili, Standards & Compliance Consultant

Reviewed By: Eka Nadareishvili, Apparel Consultant

Zviad Kvlividze, Manufacturing & Services Manager

Alan Saffery, Manufacturing & Services Component Leader

Name of Component: Manufacturing & Services

Practice Area: Apparel

Key Words: apparel, health, safety, standards, companies, compliance, WRAP, EPI, USAID, HSE, international, Georgian, occupational requirements, OHSAS, sector, sustainability, checklist, production, system, manufacturing, OSHA, accredited, recommendations, assessment,

# ABSTRACT

This report, conducted by EPI's Standards and Compliance Consultant, assesses the Georgian apparel sector's compliance with minimum health and safety requirements and provides suggestions for improvement. The report was prepared after visiting nine apparel companies in December 2011. The health and safety recommendations for all apparel companies focus on shifting priorities to safe production processes, a healthy working environment, and enhanced morale. These factors will help the apparel sector gain long-term sustainability and be competitive through adoption of international standards.

# ABBREVIATIONS

|       |  |
|-------|--|
| EPI   | Economic Prosperity Initiative                     |
| FDI   | Foreign Direct Investment                          |
| HSE   | Health, Safety and Environment                     |
| M&S   | Manufacturing and Services Component               |
| OH&S  | Operational Health and Safety                      |
| OHSAS | Occupational Health and Safety Management System   |
| OSHA  | Occupational Safety and Health Act                 |
| PPE   | Personal Protective Equipment                      |
| USAID | United States Agency for International Development |
| WRAP  | Worldwide Responsible Accredited Production        |

# CONTENTS

|     |                         |    |
|-----|-------------------------|----|
| I.  | EXECUTIVE SUMMARY ..... | 1  |
| II. | APPENDICES.....         | 2  |
| A.  | BACKGROUND .....        | 3  |
| B.  | METHODOLOGY .....       | 4  |
| C.  | FINDINGS.....           | 7  |
| D.  | RECOMMENDATIONS .....   | 29 |

# I. EXECUTIVE SUMMARY

EPI recognizes the importance of Health, Safety, Environmental (HSE) and social compliance and therefore intends to assist Georgian apparel companies in reaching international production standards such as the Occupational Health and Safety Assessment System (OHSAS) 18001 and Worldwide Responsible Accredited Production (WRAP). EPI believes that the adoption of international standards will significantly improve staff welfare, mitigate operational risks and improve factory infrastructure, thereby facilitating the apparel sector's long-term financial sustainability and attracting FDI.

EPI's Standards and Compliance Consultant visited nine apparel companies to assess their compliance with minimum health and safety requirements according to a pre-designed checklist. The checklist referenced the standards established by both the Federal OSHA for *Apparel And Other Finished Products Made From Fabrics And Similar Materials* Industry Group and the WRAP self-assessment checklist.

While health and safety issues were not initially prioritized among Georgian apparel manufacturing companies, four factories expressed a willingness to adopt the international WRAP standard requirements.

## **II. APPENDICES**

**A. BACKGROUND**

**B. METHODOLOGY**

**C. FINDINGS**

**D. RECOMMENDATIONS**



## A. BACKGROUND

In April 2011, EPI's apparel consultant, Margaret Bishop, conducted export capacity assessments for ten Georgian apparel and footwear manufacturers. Most recommendations focused on safety upgrades, advancement of factory infrastructure and HSE/social compliance. Each factory was assessed separately and the results were recorded in individual reports. At the end of 2011, EPI's Standards and Compliance Consultant revisited the factories to measure their progress in implementing her recommendations.

EPI acknowledges the importance of both HSE and social compliance and intends to support the Georgian apparel companies aligning their production standards with the following international certifications and requirements:

- Worldwide Responsible Accredited Production (WRAP) is an independent, non-profit organization dedicated to the certification of lawful, humane and ethical manufacturing throughout the world. WRAP was established in January 2000 and is the world's largest labor and environmental certification program for labor-intensive consumer products, manufacturing and processing. As a certification body, WRAP sets the standards for manufacturers in many developing countries, and thus is considered the "international passport for entry into western countries".
- The Occupational Health and Safety Assessment System (OHSAS 18001) is an international occupational health and safety management system specification. The OHSAS requirement and standard is applicable to any organization that wishes to establish an OH&S management system to eliminate or minimize risk to employees and other interested parties.
- The U.S. Occupational Safety and Health Administration (OSHA) ensures safe and healthy working conditions for the labor force by establishing and enforcing standards, and by providing training, outreach, education and assistance.

## B. METHODOLOGY

EPI's Standards and Compliance Consultant visited nine Georgian apparel companies to assess compliance with health and safety minimum requirements in accordance with a pre-designed checklist. This assessment fulfilled the following objectives:

- a) Evaluate the existing health and safety situation among Georgian apparel companies;
- b) Raise awareness of the importance of complying with international health and safety standards; and
- c) Help Georgian apparel companies adopt international standards.

The checklist referenced the standards established by both the Federal OSHA for *Apparel And Other Finished Products Made From Fabrics And Similar Materials* Industry Group and the WRAP self-assessment checklist. The minimum health and safety requirements were identified according to anticipated risks and hazards, while taking into consideration the working environment, working activities and type of equipment.

Georgian companies were evaluated according to a checklist of 26 health and safety issues. The selected issues were scored 0 – not available, 1 – partly available and 2 – available, and the results are presented in an aggregate form at the end of this document.

### HEALTH AND SAFETY CHECKLIST

| Health and Safety Risks and Hazards | Health and Safety Issues                        |
|-------------------------------------|---|
| Fire Hazard                         | Fire Extinguishers                              |
|                                     | Emergency Exits                                 |
|                                     | Evacuation Signs                                |
|                                     | Evacuation Plan                                 |
|                                     | Smoke Detectors                                 |
|                                     | Fire Alarm Drills                               |
|                                     | Heating   |
|                                     | Floor Safety                                    |
|                                     | Stairway Safety                                 |
|                                     | Electrical Wiring                               |
| Chemical Hazards                    | List of Chemicals Used for Spot Cleaning        |
|                                     | Personal Protective Equipment for Spot Cleaning |
| Injury Hazard                       | Broken Needle Policy                            |
|                                     | First Aid Kit                                   |
|                                     | Button Stitching Equipment Guard                |
|                                     | Metal Chain Gloves                              |
|                                     | Safety Glasses for Button Stitching Equipment   |
| Noise Pollution                     | Noise in Sewing Room                            |
| Sanitary and Hygiene Hazards        | WC  |
|                                     | Potable Water                                   |

|  |                          |
|--|--------------------------|
|  | Textile Waste Collection |
|  | Canteen                  |
|  | Waste Disposal           |
|  | Uniforms                 |
|  | Appropriate Lighting     |
|  | Ventilation System       |

## EXPLANATION OF HEALTH AND SAFETY HAZARDS AND ISSUES

**Fire Hazard** – The high level of electricity consumption from sewing machines, the use of ironing equipment and the presence of flammable fabrics, such as cotton, increase the risk of fire in apparel factories. Companies should therefore install or establish appropriate infrastructural safety mechanisms such as fire extinguishers, emergency exits, an evacuation plan, appropriately-installed evacuation doors, and non-slip floors and stairs to minimize the risk of injury during a potential evacuation. The method used for installing electrical wiring is also very important in apparel factories, and businesses should check whether electrical devices are grounded to protect people from shock and fire risk.

According to international standards, fire alarm drills should be carried out at least annually. The A-rating or Fire Rating of a fire extinguisher can be used to calculate the number of extinguishers required in a factory; the A-Rating is printed on the casing of the extinguisher. The number of extinguishers required can be calculated using the following formula:

$$\text{Extinguishers per floor} = \text{Floor area } M^2 \times 0.065 / \text{extinguisher A-rating}$$

The number of fire extinguishers also depends on the equipment used by the company. The use of ironing machinery, for example, requires additional fire extinguishers.

**Chemical Hazard** – Apparel factories use chemicals for fabric spot cleaning, some of which are toxic. It is necessary to maintain an up-to-date list of all chemicals used and follow instructions written on labels to minimize health problems caused from inhalation, as well as eye or skin contact. Additionally, each factory should ensure that the proper Personal Protective Equipment (PPE) is always used during the application of toxic chemicals.

**Injury Hazard** – The fast and repetitive work of fabric cutting equipment and button stitching machines increases the risk of accidental hand injuries. Eye injuries can occur if the needle of the sewing machine or button stitching machine breaks. Each company should create a safe working environment for their workers by ensuring that equipment is supplied with guards and workers are using the proper PPE. In addition, finished apparel products may contain pieces of broken needles left over from sewing machines, and companies must ascertain that finished garments are free of needle parts to avoid potential injury to customers. In this case, apparel companies usually establish a broken needle policy, which requires the detection, collection and recording broken needles. Metal detection equipment can be installed.

**Noise Pollution** – Sewing machines generate extreme levels of noise, which should be measured and recorded and, when necessary, workers should be supplied with special ear protector devices to avoid injury or illness, such as hypertension or stress. According to the OSHA standards, employees who are exposed to noise at or above an eight-hour time-weighted average of 85 decibels should be supplied with ear protection devices, and all

continuous, intermittent and impulsive sound levels from 80 decibels to 130 decibels should be integrated into the noise measurements.

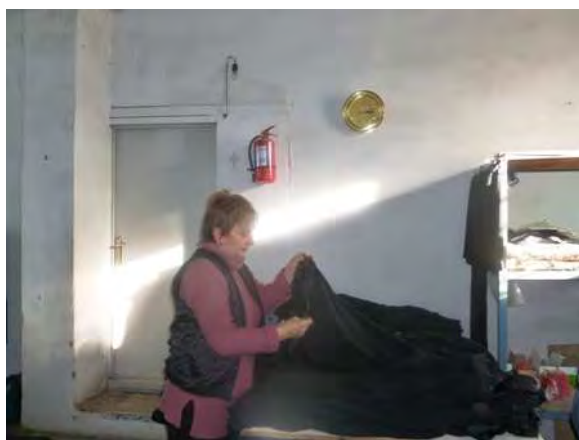
**Sanitary and Hygienic Hazard** – The following are essential for a healthy working environment: proper ventilation of stressful and crowded working conditions, good hygienic standards and proper sanitation. Adequate lighting in the workplace is very important as sewing is considered to be high precision work and, according to international standards, requires a light intensity of 1,000-3,000 lux.

# C. FINDINGS

## ELSELEMA

| Health and Safety Issue                                | Comments   |
|--|--|
| <b>Fire Extinguishers</b>                              | The factory has a few fire extinguishers, although they are insufficient for the size of the production rooms and the number of ironing stations present. Additionally, fire extinguishers are not easily accessible.  |
| <b>Emergency Exits</b>                                 | One sewing room can only be entered from another through doors that open only in one direction. Rooms do not have emergency exits. Only the last room has an exit to the stairway, which can serve as an emergency exit. In this case, entrances should be widened to avoid overcrowding during an emergency evacuation. |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.  |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.  |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.  |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.   |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk.  |
| <b>Floor Safety</b>                                    | The linoleum floor covering is uneven and damaged, increasing the risk of injury during an emergency evacuation.   |
| <b>Stairway Safety</b>                                 | The steps do not have safety signs indicating that workers should 'mind the step'. The stairways do not have handrails and steps do not have non-slip surfaces.  |
| <b>Electricity &amp; Wiring</b>                        | The electric heaters and ironing machines are connected to the power source using several power cables; thereby creating a risk of fire through overheating. Power plugs and sockets are not properly installed.   |
| <b>List of Chemicals Used For Spot Cleaning</b>        | The factory does not use chemicals for spot cleaning.  |
| <b>Personal Protective Equipment For Spot Cleaning</b> | PPE is not available at the factory since it does not use chemicals for spot cleaning.   |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.   |
| <b>First Aid Kit</b>                                   | The factory does not have a first aid kit.   |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is not used. There are cases of finger injury at the company.   |
| <b>Safety Glasses For Button Stitching Equipment</b>   | Safety glasses are not available.  |
| <b>Metal Chain Gloves</b>                              | The factory has metal chain gloves for the cutting machines, but they are not used.  |
| <b>Noise In Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.  |
| <b>WC</b>  | The factory's WC is in a poor sanitary condition.  |

|                                 |  |
|---------------------------------|--|
| <b>Potable Water</b>            | Potable water is accessible. Water dispensers are available at the factory.                                      |
| <b>Textile Waste Collection</b> | Textile waste is collected in bins, but textile pieces are scattered on the floor. The floors are cleaned daily. |
| <b>Waste Disposal</b>           | The factory disposes of waste on a daily basis.  |
| <b>Canteen</b>                  | The factory does not have a canteen and workers eat their lunches in the sewing rooms.                           |
| <b>Uniforms</b>                 | Workers do not have specific uniforms.   |
| <b>Proper Lightening</b>        | Lighting is not measured, but workers do not claim poor lighting.  |
| <b>Ventilation System</b>       | The factory does not have a proper ventilation system.   |



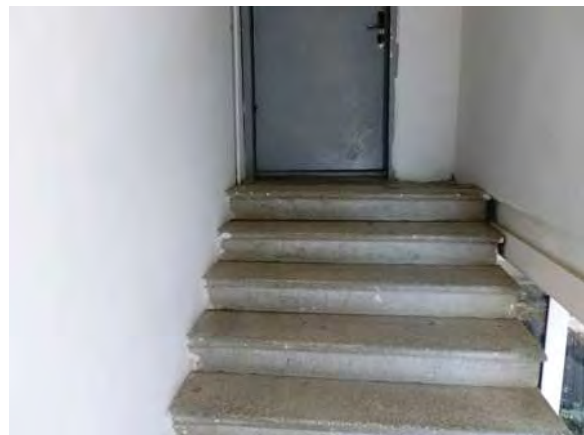
The fire extinguisher is located high on the wall, making it inaccessible.



The water dispensers and electrical wiring are poorly installed.



Factory floor is damaged.



Stairways do not have handrails.



Poor sanitary conditions in the factory's WCs.



Workers operate cutting equipment without safety gloves.

## IMERI

| Health and Safety Issue                                | Comments   |
|--|--|
| <b>Fire Extinguishers</b>                              | The factory has a few fire extinguishers, although they are insufficient for the size of the production rooms and the number of ironing stations present.                                      |
| <b>Emergency Exits</b>                                 | The sewing rooms have emergency exits, but doors are not installed properly.   |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.  |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.  |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.  |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.   |
| <b>Heating</b>   | The factory has a safe centralized heating system.   |
| <b>Floor Safety</b>                                    | The factory's sewing room is filled with wooden blocks, which are easily flammable and increase the risk of fire.  |
| <b>Stairway Safety</b>                                 | Stairways do not have non-slip surfaces.   |
| <b>Electricity &amp; Wiring</b>                        | The ironing machines are connected to mains electricity using several power cables; thereby creating a risk of fire through overheating. Additionally, the sockets are not properly installed. |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not use chemicals for spot cleaning.  |
| <b>Personal Protective Equipment for Spot Cleaning</b> | PPE is not available at the factory since it does not use chemicals for spot cleaning.   |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.   |
| <b>First Aid Kit</b>                                   | The factory has a medical center.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching machine is not equipped with a guard.   |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.  |
| <b>Metal Chain Gloves</b>                              | The factory has metal chain gloves for the cutting machine, but they are not used.   |
| <b>Noise in Sewing Room</b>                            | The noise in the sewing room is neither measured nor controlled.   |
| <b>WC</b>  | The factory's WCs are in a poor sanitary condition.  |
| <b>Potable Water</b>                                   | Potable water is accessible for the workers as the factory has an on-site tap.   |
| <b>Textile Waste Collection</b>                        | The textile waste is collected in bins, but textile pieces are still scattered on the floor.   |
| <b>Canteen</b>   | The factory has a canteen.   |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.  |
| <b>Uniforms</b>  | Workers do not have specific uniforms.   |
| <b>Proper Lighting</b>                                 | The factory is equipped with proper lighting, and in some cases the factory supplies additional lighting.  |



**Ventilation System**

The factory has a ventilation system, which does not work properly and needs renovation.



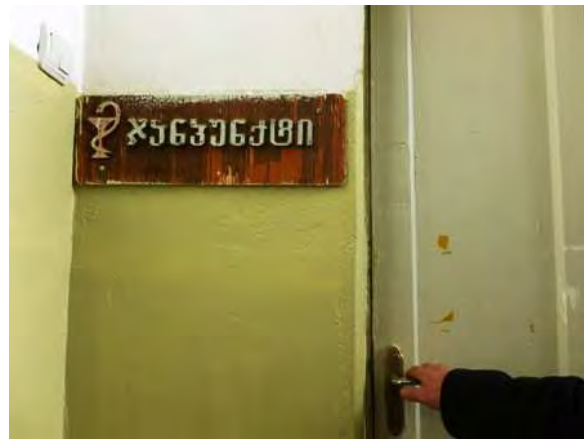
Fire extinguishers.



Ventilation system.



Cutting equipment with metal chain gloves.



Health center.



Garden in front of the factory.



Factory canteen.

## IVERIA UNIFORMS

| Health and Safety Issue                                | Comments   |
|--|--|
| <b>Fire Extinguishers</b>                              | The factory has only one fire extinguisher, which is insufficient for the size of the production rooms. The expiration date is not checked.                                  |
| <b>Emergency Exits</b>                                 | Not all rooms have emergency exits. One sewing room can be entered only from another sewing room and lacks an additional emergency exit.                                     |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.  |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.  |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.  |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.   |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk.  |
| <b>Floor Safety</b>                                    | The linoleum floor covering is uneven and damaged, increasing the risk of injury during an emergency evacuation.   |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.   |
| <b>Electricity &amp; Wiring</b>                        | The electric heaters and other high consumption equipment are connected to the power source using several power cables; thereby creating a risk of fire through overheating. |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not use chemicals for spot cleaning.  |
| <b>Personal Protective Equipment for Spot Cleaning</b> | PPE is not available at the factory since it does not use chemicals for spot cleaning.   |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.   |
| <b>First Aid Kit</b>                                   | The factory does not have a first aid kit.   |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guards are not used.  |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.  |
| <b>Metal Chain Gloves</b>                              | The factory does not have metal chain gloves for the cutting machine.  |
| <b>Noise in Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.  |
| <b>WC</b>  | The factory's WCs are in a poor sanitary condition.  |
| <b>Potable Water</b>                                   | Potable water is not accessible for workers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins, but textile pieces are scattered on the floor.   |
| <b>Canteen</b>   | The factory does not have a canteen and workers eat their lunches in the sewing rooms.   |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.  |
| <b>Uniforms</b>  | Workers do not have specific uniforms.   |

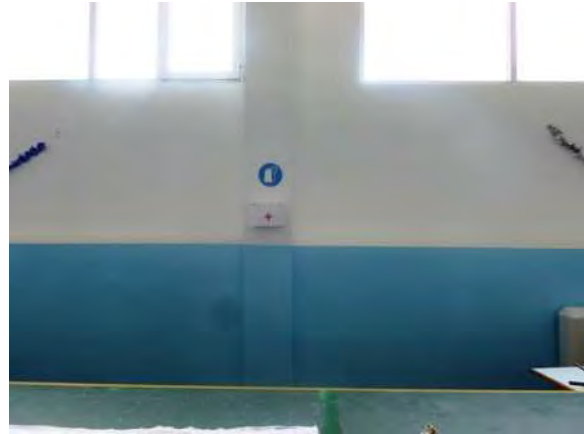
|                           |   |
|---------------------------|---|
| <b>Proper Lighting</b>    | The factory is equipped with proper lighting, and in some cases the factory supplies additional lighting. |
| <b>Ventilation System</b> | The factory does not have a ventilation system.   |

## LAURA GACHAVA

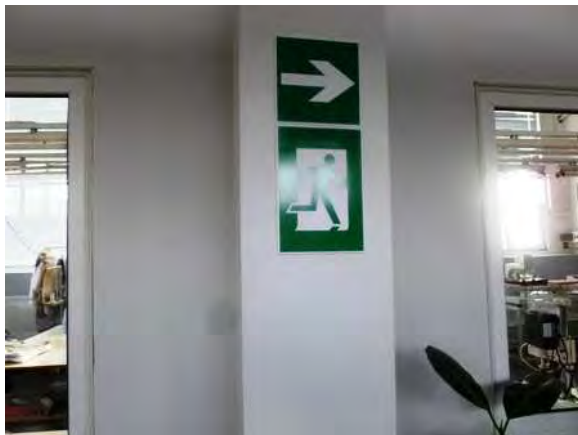
| Health and Safety Issue                                | Comments   |
|--|--|
| <b>Fire Extinguishers</b>                              | The sewing rooms are equipped with several fire extinguishers and their expiration dates are recorded. |
| <b>Emergency Exits</b>                                 | The factory has emergency exits, but the emergency doors are not properly installed.                   |
| <b>Evacuation Signs</b>                                | Evacuation signs are painted on the floor and are present on the walls.                                |
| <b>Evacuation Plan</b>                                 | The factory posts an evacuation plan.  |
| <b>Smoke Detectors</b>                                 | The factory is equipped with smoke detectors.  |
| <b>Fire Drills</b>                                     | The factory conducts an annual fire drill.   |
| <b>Heating</b>   | The factory has a centralized heating system.  |
| <b>Floor Safety</b>                                    | The floor is not damaged.  |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.   |
| <b>Electricity &amp; Wiring</b>                        | Electrical wiring is well installed.   |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The chemicals used for spot cleaning are listed on the wall.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | PPE is used for spot cleaning operations   |
| <b>Broken Needle Policy</b>                            | The factory has a broken needle policy which collects and records needles.                             |
| <b>First Aid Kit</b>                                   | Several first aid kits are available in the sewing rooms.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is used.  |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.  |
| <b>Metal Chain Gloves</b>                              | Metal chain gloves are used for the cutting machines.  |
| <b>Noise in Sewing Room</b>                            | The noise in the knitting room is neither measured nor controlled.                                     |
| <b>WC</b>  | The factory's WCs are in good sanitary condition.  |
| <b>Potable Water</b>                                   | Potable water is accessible and the factory provides water dispensers.                                 |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins and there are no scattered textile pieces on the floor.             |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.  |
| <b>Canteen</b>   | The factory has a canteen.   |
| <b>Uniforms</b>  | Factory workers are equipped with uniforms.  |
| <b>Proper Lighting</b>                                 | Workers do not claim a lack of lighting.   |
| <b>Ventilation System</b>                              | The factory has a properly installed ventilation system.   |



Fire extinguishers.



First aid kit.



Evacuation signs.



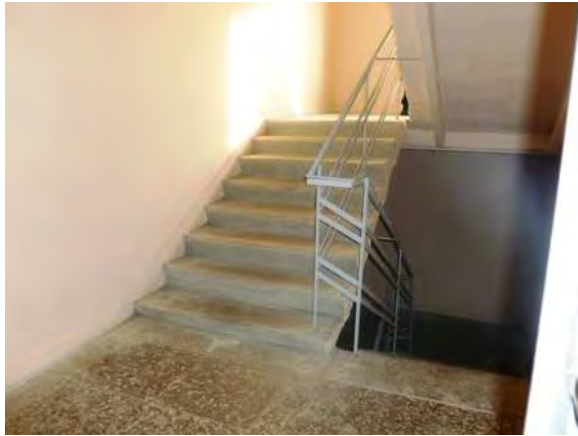
Evacuation plan.



Cutting equipment with metal chain gloves.



Evacuation door is not properly installed.



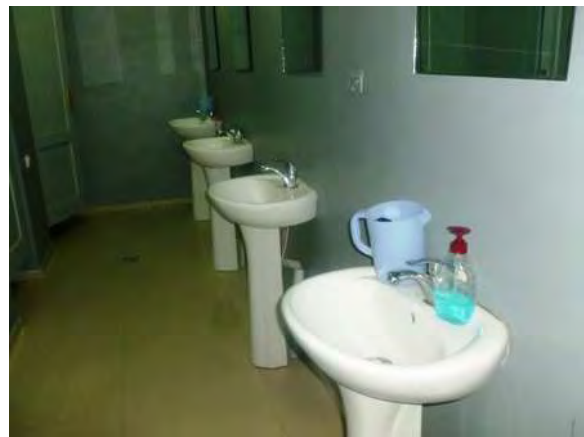
Stairway steps without non-slip surfaces.



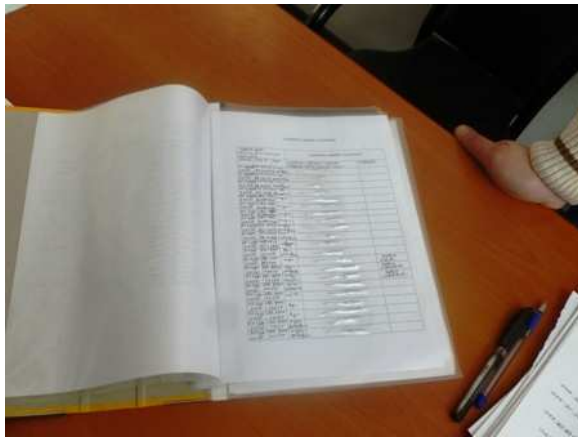
Factory canteen.



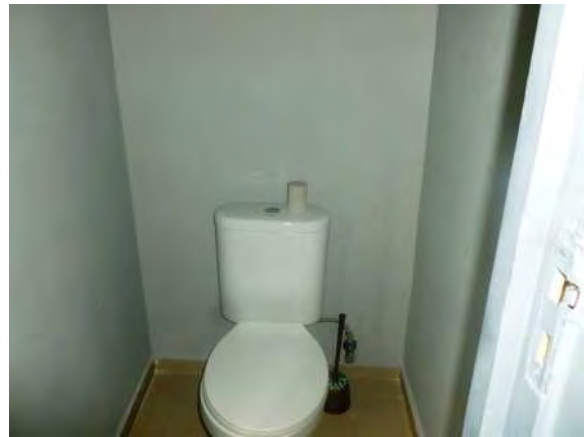
Water dispenser.



Clean bathrooms.



Broken needle record book.



Well-sanitized WCs.



Factory garden.



Smoke detectors and ventilation system.

## LAZETI

| Health and Safety Issue                                | Comments  |
|--|---|
| <b>Fire Extinguishers</b>                              | There are no fire extinguishers in the sewing rooms.  |
| <b>Emergency Exits</b>                                 | There are no emergency exits in the sewing rooms.   |
| <b>Evacuation Signs</b>                                | There are no evacuation signs in the sewing rooms.  |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.   |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.   |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.  |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk. |
| <b>Floor Safety</b>                                    | The concrete floors are damaged and uneven, increasing the risk of injury during an emergency evacuation.           |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.  |
| <b>Electricity &amp; Wiring</b>                        | The electric wiring is fastened to the wall and is inadequately isolated creating a risk of electric shock.         |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not use chemicals for spot cleaning.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | PPE is not available at the factory since it does not use chemicals for spot cleaning.                              |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.                          |
| <b>First Aid Kit</b>                                   | The factory does not have a first aid kit.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is not used.   |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.   |
| <b>Metal Chain Gloves</b>                              | The factory has metal chain gloves for the cutting machines, but they are not used.                                 |
| <b>Noise in Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.   |
| <b>WC</b>  | The factory's WC is in a poor sanitary condition.   |
| <b>Potable Water</b>                                   | Potable water is not accessible to the workers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins, but textile pieces are scattered on the floor.                                  |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.   |
| <b>Canteen</b>   | The factory does not have a canteen and workers eat their lunches in the sewing rooms.                              |
| <b>Uniforms</b>  | Workers do not have specific uniforms.  |
| <b>Proper Lightening</b>                               | The workers do not complain of poor lighting and the factory supplies additional lighting.                          |
| <b>Ventilation System</b>                              | The factory does not have a ventilation system.   |





Factory sewing rooms.



Factory electrical wiring.



Factory electrical wiring.



Food located in the sewing room.



Factory electrical wiring.



Factory electrical wiring.

## MATERIA

| Health and Safety Issue                                | Comments  |
|--|---|
| <b>Fire Extinguishers</b>                              | The factory does not have any fire extinguishers.   |
| <b>Emergency exits</b>                                 | The factory does not have any emergency exits.  |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.   |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.   |
| <b>Smoked detectors</b>                                | The factory is not equipped with smoke detectors.   |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.  |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk. |
| <b>Floor Safety</b>                                    | The floors are uneven, increasing the risk of injury during an emergency evacuation.                                |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.  |
| <b>Electricity Wring</b>                               | High power electric equipment uses several power cables; thereby creating a risk of fire through overheating        |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not use chemicals for spot cleaning.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | PPE is not available at the factory since it does not use chemicals for spot cleaning.                              |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.                          |
| <b>First Aid Kit</b>                                   | The factory does not have a first aid kit.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is not used.   |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.   |
| <b>Metal Chain Gloves</b>                              | The factory does not have metal chain gloves for the cutting machine.   |
| <b>Noise in Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.   |
| <b>WC</b>  | The factory's WC is in a poor sanitary condition.   |
| <b>Potable Water</b>                                   | Potable water is not accessible to the workers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins, but textile pieces are scattered on the floor.                                  |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.   |
| <b>Canteen</b>   | The factory does not have a canteen and workers eat their lunches in the sewing rooms.                              |
| <b>Uniforms</b>  | Workers do not have specific uniforms.  |
| <b>Proper Lighting</b>                                 | The workers do not complain of poor lighting and the factory supplies additional lighting.                          |
| <b>Ventilation System</b>                              | The factory does not have a ventilation system.   |

## KNITEX

| Health and Safety Issue                                | Comments  |
|--|---|
| <b>Fire Extinguishers</b>                              | The factory has only one poorly accessible fire extinguisher which is insufficient for the size of the production room. The fire extinguisher's expiration date is not checked. |
| <b>Emergency Exits</b>                                 | The factory has emergency exits, but one emergency door is not properly installed.  |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.   |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.   |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.   |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.  |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk.   |
| <b>Floor Safety</b>                                    | The linoleum floor covering is uneven and damaged, increasing the risk of injury during an emergency evacuation.  |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.  |
| <b>Electricity &amp; Wiring</b>                        | Many power cables are used in the factory; thereby creating a risk of fire through overheating.   |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not have a posted list of chemicals for spot cleaning.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | The factory does not have PPE for handling chemicals.   |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.  |
| <b>First Aid Kit</b>                                   | The factory has a first aid kit.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is not used causing finger injuries at the factory.  |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.   |
| <b>Metal Chain Gloves</b>                              | The factory does not have metal chain gloves for the cutting machine, resulting in hand injuries at the factory   |
| <b>Noise in Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.   |
| <b>WC</b>  | The factory's WC is in a poor sanitary condition.   |
| <b>Potable Water</b>                                   | Potable water is not accessible to workers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins, but textile pieces are scattered on the floor.  |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.   |
| <b>Canteen</b>   | The factory does not have a canteen and workers eat their lunches in the sewing rooms.  |
| <b>Uniforms</b>  | Workers do not have special uniforms.   |
| <b>Proper Lighting</b>                                 | The workers do not complain of poor lighting and the factory supplies additional lighting.  |

**Ventilation System**

The factory does not have a proper ventilation system



Food located in the sewing room.



Sewing room.



Cutting equipment without safety gloves.

**MILLER AND CO.**

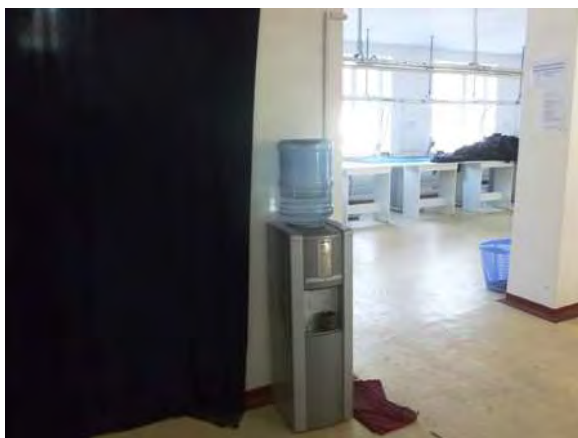
| <b>Health and Safety Issue</b>                         | <b>Comments</b>  |
|--|--|
| <b>Fire Extinguishers</b>                              | The sewing rooms are not equipped with a sufficient number of fire extinguishers.  |
| <b>Emergency Exits</b>                                 | Only one sewing room has emergency exits. The other two rooms lack emergency exits.  |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.  |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.  |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.  |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.   |
| <b>Heating</b>   | The factory has a centralized heating system   |
| <b>Floor Safety</b>                                    | The factory flooring is safe.  |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.   |
| <b>Electricity &amp; Wiring</b>                        | Electrical wiring is well installed.   |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The chemicals used for spot cleaning are listed on the wall.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | The factory uses PPE for spot cleaning operations.   |
| <b>Broken Needle Policy</b>                            | The factory has a broken needle policy. It collects and records needles and the factory owns a metal detection equipment to maintain needle control. |
| <b>First Aid Kit</b>                                   | Several first aid kits are available in the sewing rooms.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching equipment is equipped with a guard and the guard is used.   |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.  |
| <b>Metal Chain Gloves</b>                              | The metal chain gloves are used with the cutting machines.   |
| <b>Noise In Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.  |
| <b>WC</b>  | The factory's WC is in a good sanitary condition.  |
| <b>Potable Water</b>                                   | The factory has accessible potable water and water dispensers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins and there are no scattered textile pieces on the floor.   |
| <b>Waste Disposal</b>                                  | The factory disposes of waste on a daily basis.  |
| <b>Canteen</b>   | The factory has a canteen.   |
| <b>Uniforms</b>  | Factory workers are equipped with suitable uniforms.   |
| <b>Proper Lighting</b>                                 | The workers do not claim to have poor lighting.  |
| <b>Ventilation System</b>                              | The factory does not have a proper ventilation system.   |



Cutting equipment and metal chain gloves.



Sewing room.



Water dispenser.



Needle detector.



Sewing room.



Factory canteen.



The broken needle journal.

## UNISTYLE

| Health and Safety Issue                                | Comments  |
|--|---|
| <b>Fire Extinguishers</b>                              | The factory has fire extinguishers, although they are insufficient for the size of the production rooms.                      |
| <b>Emergency Exits</b>                                 | The factory has emergency exits but they are blocked, and one emergency door is poorly installed.                             |
| <b>Evacuation Signs</b>                                | The factory does not have any evacuation signs.   |
| <b>Evacuation Plan</b>                                 | The factory has neither a written or displayed evacuation plan.   |
| <b>Smoke Detectors</b>                                 | The factory is not equipped with smoke detectors.   |
| <b>Fire Drills</b>                                     | The factory does not conduct annual fire drills.  |
| <b>Heating</b>   | The factory does not have a centralized heating system, and instead, uses electric heaters that pose a safety risk.           |
| <b>Floor Safety</b>                                    | The floors are damaged and uneven, increasing the risk of injury during an emergency evacuation.                              |
| <b>Stairway Safety</b>                                 | The stairways do not have non-slip surfaces.  |
| <b>Electricity &amp; Wiring</b>                        | Many power cables are used in the factory; thereby creating a risk of fire through overheating. Sockets are poorly installed. |
| <b>List of Chemicals Used for Spot Cleaning</b>        | The factory does not have a posted list of chemicals for spot cleaning.   |
| <b>Personal Protective Equipment for Spot Cleaning</b> | The factory does not have PPE for use with chemicals.   |
| <b>Broken Needle Policy</b>                            | The factory does not have a broken needle policy. It neither records nor collects needles.                                    |
| <b>First Aid Kit</b>                                   | The factory has a first aid kit.  |
| <b>Button Stitching Equipment Guard</b>                | The button stitching guard is used.   |
| <b>Safety Glasses for Button Stitching Equipment</b>   | Safety glasses are not available.   |
| <b>Metal Chain Gloves</b>                              | The factory does not have metal chain gloves for the cutting machine.   |
| <b>Noise In Sewing Room</b>                            | The noise in the sewing room is not measured or controlled.   |
| <b>WC</b>  | The factory's WC is in a poor sanitary condition.   |
| <b>Potable Water</b>                                   | There is no accessible potable water for workers.   |
| <b>Textile Waste Collection</b>                        | Textile waste is collected in bins, but textile pieces are scattered on the floor.  |
| <b>Waste Disposal</b>                                  | The factory disposes of the waste on a daily basis  |
| <b>Canteen</b>   | The factory does not have a canteen and workers eat their lunches in the sewing rooms.  |
| <b>Uniforms</b>  | Workers do not have specific uniforms.  |
| <b>Proper Lighting</b>                                 | The workers do not complain of poor lighting and the factory supplies additional lighting.                                    |
| <b>Ventilation System</b>                              | The factory does not have a proper ventilation system.  |





Sewing room



Unsafe electric heaters in the sewing rooms.



Sewing room with food located on the table.



Unsafe power socket.



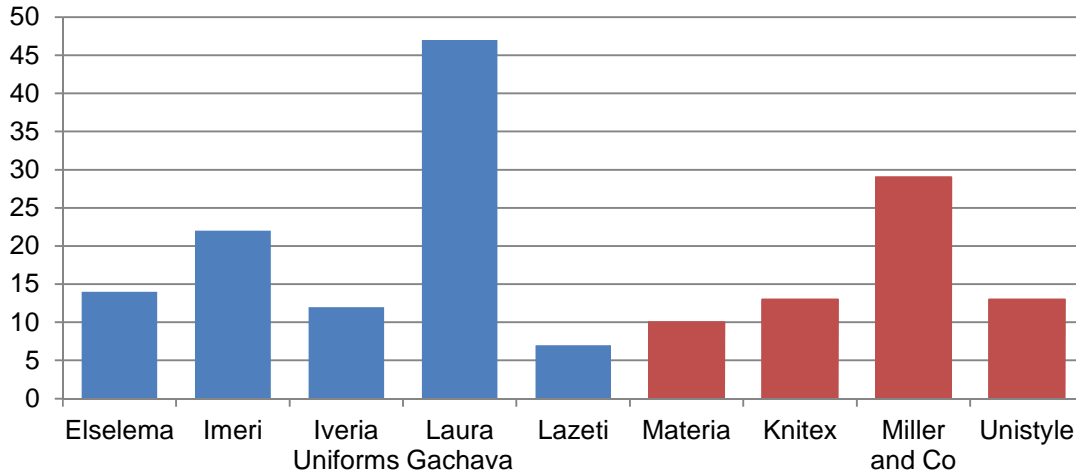
Blocked emergency exit.



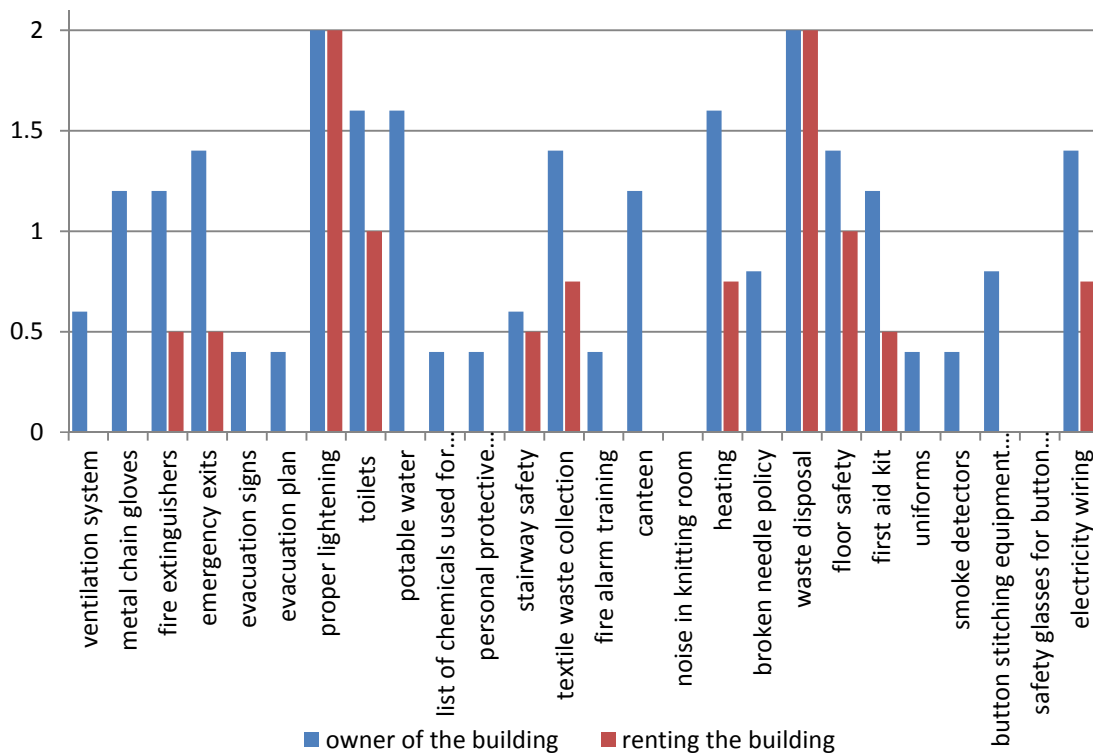
Textile waste collection bins with textile pieces scattered on the floor.

## CONCLUSIONS

**Overall Scores for Health and Safety Issues**



Four factories, Materia, Knitex, Miller & Co and Unistyle, have expressed an interest in adopting the international WRAP standard.



The diagram above demonstrates that apparel companies that own their buildings are more likely to consider health and safety compliance with international standards than those that rent their facilities.

## D. RECOMMENDATIONS

Georgian apparel manufacturers have, until recently, not considered health and safety issues to be priorities for their businesses. Few have acknowledged the value of complying with HSE standards and expressed a desire to make the necessary changes in order to align their practices with international standards.

The establishment of internationally accredited standards will help to ensure the long-term financial sustainability of the Georgian apparel industry. However, the high cost of implementing internationally accepted standards and the lack of access to finance leave most apparel companies unable to adopt the OHSAS 18001.

It is therefore suggested that EPI facilitate the implementation of the cost-effective quality-based international WRAP standards.

**USAID Economic Prosperity Initiative (EPI)  
6 Samgebro St.  
Tbilisi, Georgia**

**Phone: +995 32 43 89 24/25/26**

**Fax: +995 32 43 89 27**