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PARTNERS IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH & SAFETY

**REPORT OF OCCUPATIONAL HEALTH AND SAFETY AUDITS
AT NIEN HSING GROUP TEXTILE CO. LTD. GARMENT FACTORIES
IN THE THETSANE INDUSTRIAL AREA
MASERU, LESOTHO**

PREPARED FOR:

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NOVEMBER 10, 2018

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ATTACHMENT A: Audit Findings and Corrective Action Plan

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1.0 INTRODUCTION

Alliance Consulting International (Alliance) is pleased to present The Worker Rights Consortium (WRC) the results of the Occupational Health and Safety (OHS) Audits of three Nien Hsing Group Textile Company Limited (Nien Hsing Group) garment factories located in the Thetsane Industrial Area in Maseru, Lesotho. The site audits at the Global Garments (GG), C&Y Garments (C&Y), and Nien Hsing International (NHI) factories, were conducted on October 16, 17, and 18, 2018, respectively, at the request of WRC. The OHS audit was performed by Enrique Medina, MS, CIH, CSP, FAIHA, President of Alliance with coordination from Mr. Bent Gehrt, WRC's Field Director for Southeast Asia.

The introduction to this report describes the scope of work and the Site's background. Section 2.0 presents a summary of the findings of the site inspection and document review. Section 3.0 presents the study limitations. The Attachment section contains the Corrective Action Plan with a complete list of findings, recommendations, and regulatory citations.

1.1 Scope of Work

The purpose of the OHS audits was to make an evaluation of conditions at the three Nien Hsing Group factories and the status of regulatory compliance with current Lesotho health and safety laws and regulations, and globally recognized standards for health and safety Best Management Practices. This audit was also designed to further investigate, via onsite inspection and measurement, the issue of excessive dust, extreme temperatures, and other health and safety issues identified by the WRC through offsite worker interviews. The OHS aspects audited included elements of electrical safety, ergonomics, emergency exits, fire protection, hazardous materials, industrial hygiene, job risk assessment, machine guarding, personal protective equipment, respiratory protection, training, ventilation and air quality, OHS program, among others. Due to the limited time available, the audit approach to the three-day site visit included the following tasks:

- Holding an opening conference involving facility management, and the WRC's investigative team to describe the scope of work, and timetable.
- Conducting a walk-through inspection of one factory per day. At each factory, the WRC team, consisting of the auditor and a Sesotho-English translator, was accompanied by the OHS Supervisor, the factory General Manager, and Mr. Cesar Kang, Nien Hsing Group's Regional Manager in Lesotho. Area supervisors were also present in their respective areas.
- Reviewing available documentation provided by management regarding reporting of occupational illnesses and injuries, safety inspections, accident investigations, and OHS personnel and committee activities.

- Interviewing workers from various departments individually and in private, following the site inspection. Typically, four or five workers were selected by the WRC team from among members of the OHS Committee, fire evacuation monitors, or those with collateral duty in first aid. They were asked about health and safety conditions, and OHS Committee activities in their factory.
- Holding a brief closing conference with Nien Hsing Group representatives at the end of the third day.
- Preparing an audit report with findings and recommendations for corrective measures. Observations on BMPs to enhance worker protection where host country regulations and industry guidelines are absent or considered to be outdated were included as appropriate.

1.2 Background Information

The Nien Hsing Group garment factories consists of three cut-and-sew factories making denim garments and employing approximately 10,000 workers. C&Y is the oldest of the three and started in 1991. At the time of the site visit, it employed approximately 3,000 workers producing approximately 21,000 pieces of men's jeans daily in seven lines for Levi Strauss and Co. (LS&CO). NHI was built in 2001, and currently employs 3,200 workers with a daily production of 21,000 to 23,000 jeans in eight lines for VF Corporation (VF), and The Children's Place (TCP). GG started operating in 2003. It employs approximately 3,200 workers with a daily production of 20,000 to 22,000 garments for VF and TCP.

2.0 FINDINGS

2.1 Summary of Health and Safety Findings

Due to the similarities in the three operations, the shared client base, and corporate management's stated policy that OHS standards apply to all the factories, the audit findings of the three factories are combined into one report. Some findings were observed in more than one factory, and are reported individually by facility name.

There are 91 findings listed in the attached Corrective Action Plan (CAP). 28 of these are ranked as Priority 1 findings that require immediate attention due to their potential for injury or illness to workers. 63 findings are considered Priority 2, which relate to potential non-compliance or hazards and could result in injury. There are no findings classified as Priority 3, which are related to recordkeeping requirements, as that was beyond the scope of the audit and the available resources. One Best Safety Practice observed at C&Y is also recognized. Detailed descriptions of individual findings in each of the categories, and recommended corrective actions, along with the regulatory citations, are presented in the Corrective Action Plan in the Attachment section.

The main occupational health and safety issues identified during the audits can be grouped into the following risk areas:

- Inadequate personal protection equipment (PPE), and ineffective respiratory protection using single use dust masks with unacceptably long change-out schedules ranging from two to four masks per month per worker;
- Uncontrolled dust-emitting operations (i.e., hand sanding, grinding, air gun cleaning, sewing and cutting), and lacking or deficient general, and local exhaust ventilation, which allows fiber dust and other contaminants to build-up in the indoor environment resulting in poor indoor air quality; and,
- Narrow, and chronically obstructed aisles blocking exit paths with lockable or unsuitable emergency exit doors, which have caused injuries from falls and can hinder orderly evacuations in the event of a fire.

The manufacture of denim garments is a highly chemically-intensive process utilizing large volumes of corrosive acids, caustics, oxidizers, peroxides, and a wide array of dyes containing toxic metals and organic compounds. Even larger quantities of chemicals are used to treat the estimated 7500 cubic meters of wastewater generated daily in the process and over 100 metric tons of sludge per week. Deficiencies in the handling, use, and storage of hazardous and incompatible chemicals, unlabeled chemical containers, crowded conditions in the chemical store rooms and chemical warehouses, missing or inaccessible emergency showers; poor housekeeping in the secondary containment, and gaps in hazard communication worker training were evident in all three factories.

Machine guarding deficiencies in sewing machines, riveters and bench grinders are likely the main contributor to the high incidence of needle punctures, cuts, and lacerations to fingers and hands that in each factory exceed one hundred injuries per month, and result in dozens of hospital referrals. Monthly injury records provided by NHI indicate that almost 5% of the factory work force is injured every month, which means that six out of ten factory workers risk sustaining a lost-time injury in a given year.

Ergonomic risk factors are evident in sewing, packing, sample room and others from the wood benches with inadequate back support, no adjustments, or cushioned seats or backs, and in standing jobs, such as cutting, ironing, packing, quality control, potassium permanganate (PP) spray booths, air gun cleaning, and others from lacking or deteriorated anti-fatigue floor mats over concrete floors.

The main conditions of the work environment with a direct relationship to OHS that were observed in the factory inspection, reported by most of the workers interviewed, and documented OHS Committee records reviewed are:

- Extreme temperatures inside the factories, particularly in the winter due to lack of space heaters, or insufficient heating capacity of existing heaters, fail to keep the temperature within industry-recognized standards of 20°C to 23°C in winter; and indoor temperature above acceptable levels of 23°C to 26°C in the summer months, which can contribute to the reported fainting episodes of workers in the Global Garments packing department.

- Insufficient numbers of working toilets for women workers, lack of accessible handwashing sinks with clean water, soap, clean towels, or hand dryers, and no toilet paper dispensers in the toilet stalls. Workers are issued 15 turns of a roll of toilet paper each day. Lesotho's Labour Code Order 1992, Part 7: Health, Safety and Welfare at Work, Sixth Schedule, Health Safety and Welfare mandate one toilet per 25 female employees, and handwashing facilities conveniently accessible to employees at all times, and supplied with clean water, soap, clean towels, or other suitable means of cleaning and drying.

Other safety issues of concern observed during the site audits include noise exposure, electrical hazards, fall protection, and trips and falls.

2.2 OHS Management Performance Evaluation

The OHS function at each factory is overseen by an OHS Officer as defined in the Nien Hsing Group's Corporate EHS Compliance Manual. The OHS Officer performs a number of duties, including conducting daily factory inspections following an established checklist; performing risk assessments for job functions to identify hazards and establish safety and PPE requirements; conducting or coordinating worker and supervisor OHS training under the direction of the Human Resources Manager; conducting accident investigations; coordinating the joint-labor management OHS Committee; and performing record-keeping and reporting duties to management. The OHS Officer is the only employee with full-time health and safety duties, and is supported by workers with collateral duties in first aid, fire monitors, and members of the OHS Committee. The OHS Officer does not have an assigned budget and must request approval from the factory General Manager for safety-related expenses.

Each factory has a contracted health clinic that reports to the government's Ministry of Health. The clinic is staffed by a nurse, a health counselor, and a part-time physician. The clinic operates independently from the factory, and is authorized to provide public health services for all chronic diseases, including HIV, hepatitis, and mental health. They can attend to minor injuries and illnesses beyond first aid, and provide referrals to hospitals when needed. The clinic does not have an ambulance but can access one, if needed. The clinic compiles reports injury and illness statistics.

The OHS committees at each factory are composed of 10 to 16 members, half of which represent the workers, and the other half are management representatives. The worker OHS Committee members interviewed had been in the committee from a few months to 14 years. The OHS Committee also conducts monthly site inspections, and meets with the General Manager to present the report and recommend solutions. The factory General Manager is the senior manager responsible for the operation of the OHS Committee, as per Lesotho Labour Code Order 1992, Part 7, Article 98.

A review of incident reports, daily inspection checklists OHS Committee minutes for all three factories from 2017 and 2018 document recurring and chronic safety deficiencies, including blocked aisles, emergency exits, and doors; blocked fire extinguishers; unlabeled chemical containers; delays in getting needed PPE and dust masks; extreme hot

or cold temperatures due to missing or poorly maintained equipment; roof leaks; and violations of safety rules and sanitary practices by ex-patriate supervisors. Many of these issues remain unresolved month after month for at least one year.

Nien Hsing Group contracted with NOSA Occupational Hygiene Services to conduct personal air and noise monitoring, and indoor air quality and ventilation measurements at the three factories in 2015 and 2016. The reports describe some of the same issues regarding unclassified dust masks, ventilation, and noise exposure presented in this report in some areas of the factories. In addition, Supplier Corrective Action Plans for Levi Strauss & Co. (LS&CO CAP) for C&Y and NHI in 2018 also document some of the same findings of these audits.

The factory General Managers are responsible for maintaining a safe work environment. Multiple OHS Committee reports, the NOSA reports, and the LS&CO CAP reports documenting the same types of hazards to the General Managers clearly demonstrate that factory management is aware of situation, has failed to address it after two or more years, and in the face of continued excessive injuries has demonstrated a lax attitude towards worker safety and health. Overall, there is insufficient management commitment, administrative support and financial, human and technical resources devoted to the OHS program at Nien Hsing Group, at both the corporate and factory levels to produce a successful, worker-focused safety management program.

Management must take steps to reduce the excessive injury and illness incidence and severity rates and demonstrate concern for worker safety and health by making the necessary investments in time, attention and resources, implementing measures to provide a working environment that does not endanger the health and safety of workers, and incorporating safety values into its production goals, and management and supervisory training.

2.3 Evaluation of NOSA Air Monitoring Results

NOSA's air monitoring results at all three factories found that levels of particulates were below permissible occupational limits in all operations tested. It is important to note that while the methods used are valid for solid particulates, such as metal dusts or nuisance particles, they are not designed to capture airborne fabric fibers, which have a different aerodynamic behavior. Particulate sampling methods tend to undercount the actual concentrations of inhalable and respirable fabric fibers. Evidence from the interior of worker dusts masks in the hand sanding and grinding areas; from visible airborne fabric fiber dust in the air gun blowing room; accumulated settled fabric fiber dust on rafters, piping, window sills, and roof exhaust fan shrouds; reports of fabric fiber dust build-up in the space heater fans from maintenance mechanics; the absence of local exhaust ventilation to capture emissions at the source; and most importantly, overwhelming and consistent complaints from workers, presents a more representative picture of actual air quality conditions in the factories, all of which point to a significant fabric fiber dust problem in these operations.

2.4 Respiratory Protection Issues

It is not uncommon in these types of audits for all workers to wear dust masks in a misguided show of health and safety compliance. Based on observations during the site visits, it is possible that some workers assigned to wear dust masks were not exposed to levels that represent a health hazard for most healthy individuals. Some of these include security guards working outdoors, mechanics in the maintenance shops, wastewater treatment plant operators, workers in the fabric or accessories warehouses or the large chemical storage buildings, or shipping areas where no fiber dust generating activities take place. In such cases, internationally recognized occupational health standards, such as the American Conference of Governmental Industrial Hygienists (ACGIH), which is referenced in the NOSA reports, allow for voluntary use of filtering face pieces, such as the NIOSH N-95 or EN-149 FFP1 single use respirator, if the worker requests it for personal reasons. It should be noted that individuals with underlying medical conditions or chronic illnesses that affect the immune system, such as HIV, are more susceptible to airborne contaminants, and need respiratory protection even if air concentrations are below occupational exposure limits.

2.5 Audit Findings and Corrective Action Plan

The individual findings in each of the categories with their regulatory citations are presented in the Audit Findings and Corrective Action Plan in Attachment "A".

3.0 STUDY LIMITATIONS

The present Occupational Health and Safety Audit is not intended to be an exhaustive or comprehensive investigation of the facility. The information contained in this report relates only to the referenced subject facility as it existed at the time of the investigation and should not be extrapolated or construed to apply to any other facility or operation whatsoever. The contents of this report are valid as of the date of the investigation and are applicable only for the purposes and conditions described in this report. Any change in the conditions, standards, regulations or other professional interpretations outside of our control, may invalidate a part or all of the conclusions in this report, without implying any responsibility on the part of Alliance Consulting International.

Respectfully submitted:

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Date: 11/10/2018

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ATTACHMENT "A"