

## U.S. Department of Labor

Occupational Safety and Health Administration  
Marlton Area Office  
Marlton Executive Park – Bldg. 2, Suite 120  
701 Route 73 South  
Marlton, NJ 08053  
Phone: (856) 596-5200 Fax: (856) 596-5201



OSHA Website Address: <http://www.osha.gov>

Kyle Sullivan  
Senior Manager of Environmental, Health and Safety Governance  
Amazon NAFC  
345 Boren Ave North  
Seattle Washington, 98109

Dear Mr. Sullivan,

An inspection of the workplace at Amazon Fulfillment Center 50 New Canton Way Robbinsville, NJ 08619 was performed on or about July, 2015 in the pick area. A review of your OSHA 300 logs for the years 2014 and 2015 and the first aid notes and logs shows a number of injuries or illnesses that are consistent with exposure to ergonomic risk factors. Observations were made and interviews were taken over the course of several days. Video documentation was obtained and reviewed and several potential hazardous situations were identified.

In the interest of workplace safety and health, I recommend you voluntarily take reasonable steps to address and reduce or eliminate the issue of ergonomic stressors to which your employees are exposed. The following recommendations are actions which could be taken to enhance the safety of your employees.

Hazards identified during the visit in addition to some potential solutions to those hazards are discussed in greater detail in the sections below:

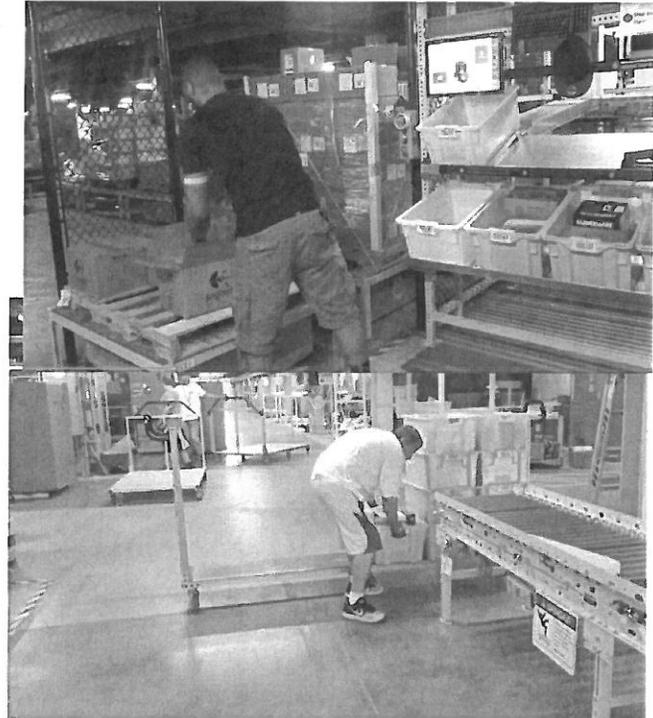
### Task Description

- This warehouse uses picking stations where employees select items from pods that are 80 inches in height when full and 54 inches in height when filled half way. Items on the top of the pod compartments are not to exceed 10 pounds and those on the lower levels can weigh up to 29 pounds. Products are placed into one of several totes that can extend up to 96 inches from the location of the pod.



Wide band retaining straps are used to keep products from falling out of the pod compartments.

- Employees also pick items that are stacked on pallets. The pallets are 24 inches above the ground level and products are placed into bins that extend up to 96 inches from the pallet. Product weight does not exceed 29 pounds. Employees sometimes have to reach across the pallets to retrieve items.
- Employees performing water spider activities collect the bins from the picking station, stack them onto tote limos and unload them onto an automatic conveyor system. The totes are located on a conveyor that is 30 ½ inches above the ground level and the tote limo is 8 inches above the ground. The limo is not height adjustable. Totes can weigh up to a maximum of 40 pounds and can be stacked up to the top of the limo handle, which is 52 ½ inches from the base of the cart. The length of the cart is 99 inches.



### Potential Hazards

- These activities described above force employees to reach down to access items from low areas and to perform elevated reaches to access items from upper bin areas for four or more hours per day. Repeated bending at the waist to access loads at low locations is stressful even if there is not load in the hand as this forces the worker to bend at the waist and to support the weight of the upper body. Bending over also forces the load away from the body especially if the knees are bent and the farther the load is away from the body the more the stress on the low back is increased. Reaching overhead is often a problem for the shoulder since the arms are in a weaker posture and there is an increased chance of imbalance of the load which could result in items falling and striking the employee.
- Employees are required to stand during the entire work shift, which is up to 10 hours four days a week and sometimes includes mandatory overtime shifts. Employees receive only two 15 minute breaks and a 30 minute lunch. Prolonged standing causes blood to pool in the feet and legs causing increased pressure and increasing the rate of fatigue. Anti-fatigue mats are provided at the pick stations, but do not cover the entire work area.
- Manipulating the retaining straps on the individual compartments in the pods require forceful repeated exertions. This can lead to increased muscle fatigue and injury. The bones of the hands and arms are connected by ligaments, tendons and muscles and as a result the repeated forceful movements of the fingers can lead to injuries of the hand as well.

At this time, we do not feel that it is appropriate to issue a citation but in the interest of workplace

safety and health, I recommend that you voluntarily take the necessary steps to materially reduce or eliminate your employees' exposure to the conditions listed above.

### **Potential Solutions**

- Stock frequently picked products on the pods between 30 to 50 inches above ground level to reduce bending and reaching above shoulder height.
- Utilize smaller retaining straps to reduce the amount of force that has to be used to access products stored in the compartments of the pods.
- Consider providing a choice of shoe inserts for employees who stand for long periods of time.
- Consider providing shoe inserts to employees conducting water spider duties.
- Attempt to keep all loads at a height of between 30 and 50 inches to reduce the number of deep torso flexions and reaches above shoulder height. This can be accomplished for Water Spider activities by providing a height adjustable cart. This can also be accomplished for pallet pickers by limiting the height of the products on the pallet or providing adjustable height work stations.
- Rotate employees through jobs throughout the day. Tasks should allow employees to use different body positions and motions to reduce concentrated repetitive movements.
- Consider providing an extra break throughout the shift to allow employees to rest.
- Provide chairs at work stations to allow employees to rest during breaks rather than walking to the break room, which can take several minutes and reduce the period of rest.
- Reduce reaches at the pallet picking stations. Provide and require the use of hooks, pick sticks or other devices to pull products closer to the body. Design the Kiva system to rotate at the pallet pick station to place items in front of employees.
- Implement the ergonomic policy and procedures manual developed by the company including, performing biomechanical screening assessments and ergonomic risk assessments to measure ergonomic risk to workers and analyze safety incident data for jobs or processes that would require further assessments to measure ergonomic risk.
- Conduct a trend analysis using the number of first aid visits to Amcare involving musculoskeletal disorders. Use this information to determine what job functions require an ergonomic intervention. Measure the success of these interventions to determine their effectiveness
- Form a labor-management ergonomics team to investigate ergonomic hazards and institute ergonomic solutions to prevent musculoskeletal symptoms and injuries.

Your OSHA-300 records confirmed that employees have experienced injuries and illnesses to the back, shoulder, and lower extremities that are consistent with ergonomic risk factors observed in your facility.

You may voluntarily provide OSHA with progress reports on your efforts to address these conditions. Under OSHA's current protocol, we may return to your worksite in approximately one year to further examine the conditions noted above.

In the interest of workplace safety and health, I would like you to consider the recommendations we

are making and to voluntarily increase your current efforts to materially reduce or eliminate your employees' exposure to the hazards listed above. While some hazards may be materially reduced or eliminated by implementing a single means of abatement, in most cases a process using the well-established elements of a safety and health program, will provide the most effective method of addressing these ergonomic risk factors. These components include accurate injury and illness recognition and record keeping, work place analysis of jobs and tasks sufficient to assess the hazards and propose steps for their abatement, development of engineering, administrative and work practice controls or actions to materially reduce the hazards, and education and training of workers and management such that they can recognize and report hazards at their earliest stages, and fully understand and comply with proposed work practices and abatement techniques. Additionally, the commitment of both management and employees are important to the success of a program, as is a process to continually evaluate the effectiveness of your interventions.

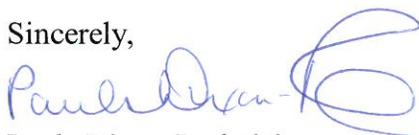
Attached is a list of available resources that may be of assistance to you in preventing work-related injuries and illnesses in your workplace.

- OSHA's Internet web page on ergonomics.
- OSHA's Safety and Health Program Guidelines
- Free consultation, including onsite visits, from OSHA's 24(d) on site consultation
- Free publications on ergonomics from the National Institute Of Occupational Safety and Health (1-800-35-NIOSH or <http://www.cdc.gov/niosh/homepage.html>); Elements of Ergonomics Programs (Pub #97-117)
- California-OSHA's free publication: *Easy Ergonomics* (1-800-963-9424 or [www.dir.ca.gov](http://www.dir.ca.gov))
- Universities/colleges with industrial engineering and/or ergonomics programs
- Your trade association

In addition, loss control services from your insurance carrier may be available.

If you have any questions, please feel free to call Paula Dixon-Roderick at (856) 596-5200.

Sincerely,



Paula Dixon-Roderick  
Area Director