

Building technology sba

Technology



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Introduction This research focuses on the production of concrete at a concrete producing factory, Pre-Mix Jamaica, located in the corporate area of Kingston and St. Andrew. The aim of this research was to get a substantial and in depth analyses of the concrete producing company so that a report can be presented.

In the report, definitions, descriptions and explanations will be given on the contents presented and also, the details of the aggregates used and the tests done to ensure acceptable quality of the products ; this will be outlined with the aid of pictures and diagrams. The data was collected by visiting the production site where an analysis was done after interviewing managers, specialists and other officers and personnel on the ground. Cameras were used to take photos of critical areas of production and testing.

Table of Contents

Topics	Page	?	Jamaica	Pre-Mix	Ltd.	•	Careers	•
Norms/regulations/codes			Impact	of	technology	on	careers	•
Employment/Unemployment			•	Security	or	Processing	•	Environmental
?			How	Moral	and	ethical	issues	are
addressed			•	Legal	policies	on	safety,	health
and			welfare	•	Moral	approaches	to	handling
health,			•	safety	and	welfare	issues	?
Summary	?		Appendices	Jamaica	Pre-Mix	Ltd.	Careers	As
with			any	other	organization,	Jamaica	Pre-Mix	Ltd.
has			workers	of	several	different	career	fields
in			each	of	their	departments.	Through	the
employment			of	these	various	professionals	and	skilled
workers			the	company	is	able	to	adequately
function			and	achieve	its	objective.	In	fig.
1.			a	sample	of	the		

various skilled areas and career/posts are shown. | Careers | | | | Site Managers | Quality Controller | | Drivers | Office staff | | Pump Operators | Security personnel | | Supervisors | Maintenance | | Batchers | personnel |

Table outlining the career fields present at Jamaica Pre-Mix Ltd. Fig 1. 1

Norms/Regulations/Codes For any organization to function properly there must be regulations and codes to guide its operations. Every organization also has a culture, norms and values that it develops overtime. Outlined below are norms that were observed as well as some of the codes and regulations, that governs the operations of Jamaica Premix Ltd. Codes-

- The workers in the production department wear vests of different colours. This is done as a means of identification. Workers | Colour Codes | | | | Supervisors | Red | | Driver | Green | | Pump Operators | Orange |

Table outlining the colour codes of the workers Fig 1. 0

- While some of the workers wear vests, others wear formal clothes on which the logo of the company is attached.

Norms/Regulations-

- While on the plant, it is ensured that safety precautions is taken, such as wearing safety gears. Some of the safety gears worn are goggles, hard hats, gloves , hard boots and dust masks. Pictures of some of the safety gears used on the plant Fig1. 2
- Before each batch of concrete is dispatched to its destination, samples are taken and tested.

This is done to ensure that the best quality is delivered at all times

- Concrete mixing/ delivery trucks and other concrete carrying equipment are weighed before and after they enter and leave the plant in order to ensure that they contain the right amount of concrete desired by customers ; and also to ensure that their weights are appropriate to traverse the public roads.

Impact of Technology on Careers Employment/unemployment Technology has great impacts on jobs and opportunities in organizations on a whole.

Through the employment of machines, the need for an intensive labour force is reduced. This will result in reduced labor cost and may subsequently result in reduced production cost. Pre-Mix Jamaica has made much use of technology for its everyday operations which has made them less reliant on human labor for certain every day routine tasks. Processing Technology has impacted careers involved with processing in both positive and negative ways. Careers such as quality controlling, batching and maintenance engineering all involved some form of processing.

Positives- • Tasks are able to be carried out more efficiently and in a logical manner, for instance, one mixing truck can mix much more concrete than several laborers mixing manually. Negatives- • The application of technology to processing can result in loss of jobs for unskilled workers • It can also make us overly dependent on machines such that we lose our craftsmanship. • Technology is antisocial and thus can promote this at the workplace. Environmental Careers relating to the environment are very important and they also are greatly impacted by technology.

Pre-Mix Jamaica is located in a built up area where there are institutions such as schools and other business close by. Hence Pre-Mix has the responsibility to be as environmentally friendly as possible, especially because their production of concrete produces a lot of pollutants. In mitigating against this problem, the supervisors at the complex ensure that the compound is watered regularly using water trucks. Methods of

addressing Ethical and Moral Considerations Legal policies on safety, health and welfare

At any established organization, the safety health and welfare of the staff must be considered. In other words, policies have to be put in place to ensure that the staff rights are observed and respected. Companies such as Pre-Mix Jamaica Ltd. adhere to guidelines or regulations that are enforced by trade unions such as the National Workers Union. Some of the policies at the Pre-Mix Jamaica Ltd. involve;

- Providing health covering arrangements such health insurance through the company for the benefit of the staff and their families

Moral approaches to handling health, safety and wealthfare issues As welfare issues are encountered in our day to day lives whether at home or at a plant, moral approaches have to be made concerning how they are handled. Pre-Mix Jamaica Ltd. ensures that they make responsible approaches in handling these matters as they are mostly dealt with by persons in authority such as their managers or their human relations officers.

- Before entering the plant, visitors are briefed on the rules and regulations concerning their safety while on the plant. Personnel from the Ministry of Health visit the plant to make sure the immediate surrounding contains uncontrolled toxic elements that could threaten the life of anyone.
- Vehicles are made available so that that if anyone on the plant should have an accident, reliable transportation

Summary Major Findings ? Jamaica Pre-Mix Limited is the only fully computerized concrete plant on the island of Jamaica ? The have maintained a high standard of being the islands top producer of concrete. ? The

company is a ready mix organization, meaning they manufacture in a batching plant according to a set recipe, then deliver to construction sites.

Recommendations ? It is recommended that enough protective gears are available to visitors on the site for future use. ? It is also recommended that the organization is given advanced notice for research visitors so that they can be well prepared. Limitations ? The length of time of the visit was too short; hence it limited the amount of knowledge that could be gained. ? Not all departments were visited at the company; therefore a lot of useful information was unfortunately not received. Appendices Fig1. 3 Figure 1. depicts concrete being batched into a mixing truck from one of the silos. The Aggregates will then be mixed into the truck so that the concrete may be suitable for use. Fig1. 4 Figure 1. 4 shows samples of concrete placed into moulds. After they are hardened, they are demoulded then placed into a curing tank for seven days. Their strength is then tested by compressing them with machines. Fig1. 5 In Figure 1. 5, there is a heavy duty machine seen on the plant. It is used to get large quantity of materials such as gravel from one point to another. [pic]