

Case Study of Working Conditions in Tijuana, Mexico: The Sanyo Maquiladora

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Abstract In 1996 the Comité de Apoyo Fronterizo Obrero Regional (CAFOR) administered a survey to maquiladoras workers in Tijuana and Tecate, Mexico with the help of the Maquiladora Health and Safety Support Network (MHSSN). 177 workers representing 72 factories in the Tijuana\Tecate area responded to the surveys. The surveys and follow-up interviews suggest that claims by U.S. transnationals that they implement “one global standard” of workplace health and safety, at least as effective as local regulations, in facilities throughout the world are not factually accurate with regard to their Mexican Maquiladoras. This report is a case study on the Sanyo maquila in Tijuana, Mexico that uses the 1996 survey as a basis. The survey used is slightly modified from the original one. Questions are worded exactly the same, but some have been removed for reasons such as not being relevant to what I am interested in and time constraints. After administering the survey to 20 workers at the Sanyo plant. I have discovered that the results are similar to those from the 1996 survey. Some key statistics are: 50% of all respondents reported illness that they felt was caused by working with chemicals without proper safety equipment, 100% had not received any material safety data sheets explaining the hazards of the chemicals with which they work and 100% had not received any training from their employer regarding these hazards and recommended protective measures. While I would like to say that the Sanyo maquila is not a safe place to work, I do not believe that 20 respondents is sufficient to make that claim. I do not know the total number of workers in the facility but I would need to survey 70% to have a representative sample size.

Introduction

The North American Free Trade Agreement (NAFTA) brought to public attention the question of the impact of trade on environmental issues in countries with different levels of economic development (Husted, Logsdon 97). One of those issues is environmental and occupational health in the workplace, more specifically in the maquiladoras. The definition of a maquiladora is a 100% foreign-owned assembly or manufacturing operation located and incorporated in Mexico. Companies participating in the maquiladora program combine U.S. and Mexican resources to produce quality and competitively priced products. Under the program, raw materials and components are temporarily imported into Mexico from the U. S. and other countries. The plants assemble or process these materials and then re-export the product for final processing or packaging. Materials and equipment are brought into Mexico under a bond in lieu of customs duties. The bonds are self-liquidating as the material leaves the country.

The maquiladora program allows foreign companies to take advantage of the abundant and competitive labor costs offered in Mexico (Sargent and Matthews 99). Because Mexico has less stringent labor and environmental laws, it is easier for American corporations to neglect responsibilities to their workers (Husted, Logsdon 97). Over the past decade, more complex production has expanded in these special industrial zones to take advantage of the readily available cheap labor. Over 1 million workers are currently employed in over 4,000 maquilas. About two thirds of those are women and over 60% are migrants to the border region from other parts of Mexico. Due in large part to this migration of workers to the area, the border region is the fastest-growing manufacturing zone in North America (Takaro 99). The Clinton administration promised that “With NAFTA, Maquiladora development will tend to be dispersed away from the border area to other parts of Mexico, thus reducing its impact on the border area” (The Clinton Administration, 1993 – from Public Citizen report). Miguel A. Conchas gives a more accurate account of what we have been experiencing, "Everybody I'd talked to had predicted that with NAFTA, the maquiladora industry would disappear, but now it turns out in the second year of NAFTA, with the peso devaluation, they're going strong" (Miguel A. Conchas, President, Laredo Chamber of Commerce, 1995– from Public Citizen report) After NAFTA, the Maquiladora workforce has in fact increased by over 20% (Public Citizen, 1996) This fact further stresses that enforcement of environmental and labor standards needs to be carefully regulated (Quinones, 1995).

Free trade permits the importation of pollution control technologies that have been developed elsewhere (Bhagwati, 1993). Also with economic growth and higher per capita incomes will come the resources to invest in pollution control and the ability of consumers to select less “environmentally intensive” products (Globerman, 1993). One opposing argument is that First World countries use free trade to export the ecological costs of capitalist production to the Third World. According to this reasoning, high-polluting industries will tend to locate away from affluent nations where their costs are higher and instead choose to locate in poorer countries where local governments are more desperate for economic development and will tolerate little or no pollution control (Faber, 1992). Free Trade has made relocation of United States’ corporate owned assembly plants to Mexico look more attractive than ever (Bhagwati, 1993). This potentially could be a major benefit to both countries, but our two countries must figure out a way that economic growth and development can co-exist with an environmentally safe workplace (Debellevue E.B, 1994).

Methods

The data come from the survey administered to the workers of the Sanyo maquiladoras in Tijuana, Mexico. Each respondent has been asked a series of questions and their responses will reveal the quality of the environment in which they spend eight hours or more every single day. The initial run of the survey was a pretest in a community called Colonia Obrera where a large number of maquila workers reside, next to the industrial park known as Nueva Tijuana. The final run was done in the Sanyo maquila at Tijuana, Mexico.

The pretest was done in a small community where maquiladora workers were known to live. The goal was to get ten completed surveys that would allow a pretest of its relative effectiveness and make revisions where there are weaknesses. A translator and I went door to door to administer the surveys and were able to reach our goal in a short amount of time do to the enthusiasm that the community showed towards the study.

The final run was met with some resistance. The Environmental Health Coalition (EHC) was supposed to administer the survey, but due to complications on both our parts it didn’t take place. Instead I stood outside the Sanyo plant at closing time (4:30-5:30pm PST) for two days and administered the survey to workers leaving the plant. This was not an ideal situation because it

did not allow me to get as many responses as I could have if the EHC has administered it. It also prohibited me from doing a completely random sample.

Results

The data presented are taken from 20 completed surveys completed by workers of the Sanyo electronics maquila located in Tijuana, Mexico. No concrete comparisons can be made between this survey and the one administered in 1996 because the settings could not be replicated. However, I will make assumptions within the data based on trends that I have observed within my own survey and draw overall conclusions comparing my results to the results of the entire 1996 survey.

All survey questions and their results can be found at the end of this report. The first interesting deduction involves questions one and five. Only people who have worked there for six months or less work with chemicals, 12 of the 20 or 60% of the workers I surveyed fall into this category this is significant with a p-value of 0.0027 and a chi square value of 26.92. Maquiladora jobs have a high turnover rate, meaning that people do not stay in the same position for very long. The answers in this survey support that assumption; only four of the 20 surveyed or 20% have worked at the Sanyo plant for more than one year. As question six demonstrates, not one of the workers that use chemicals in their job know the names of them. The answers to question 13 support this point. Not one of these workers who have been with the company for six months or less have received information regarding the chemicals that they work with. However, 14 of the 20 said that they do have air extractors available to them and everyone said they have fans. No one works near windows that open, suggesting that they work in a very hot, completely enclosed environment.

100% of the respondents worked with machinery according to question 11. Surprisingly, 100% of them also said that there are no projectile guards (question 12) on these machines to prevent accidents and that they also have received no training or information regarding the equipment that they work with everyday (question 14).

Question 16 asks whether they have ever been sick due to their job. 50% said that they have been sick and 100% said that there is a committee for hygiene\safety on-site, but that it does not function well (question 15) and provides no real help to the workers. Respondent 19 who has been working at the maquila for two years, longer than any other respondent says: “during my

first six months I worked with a lot of chemicals that I didn't know the names of. My throat and nose always burned". Question 18 is regarding on the job injury. 13 of the 20 or 65% stated that they have been injured on the job.

Questions 19 and 20 are demographics questions. The average age of the workers polled is 23.5 with the oldest being 30 years old and the youngest being 18. 7 males and 13 females make up the respondent pool.

Discussion

In some respects, things seem to be getting better. While I cannot make a statistical comparison between my survey and the CAFOR study, because there is only one data point for the Sanyo plant in it, I can say that there are some improvements when comparing my study on the single maquila to the overall results of the 1996 survey. For example, other than not having any open windows, the ventilation available to workers is very good. They all have fans and most have air extractors. This is much improved over the 1996 survey. However, most areas need major improvements. The biggest safety hazard as I see it is the utter lack of information and training given to the workers when they are hired. An astonishing 100% of the workers surveyed claim to have not been given any sort of safety training on the machines and chemicals they work with. It seems like they were basically told what to do, without any regard to their personal safety whatsoever. The results of my survey support this assumption. No training on proper use indicates lack of regard for the personal safety of the employees. In addition to the lack of training, 100% also reported that there are no safety guards on the machinery they work with. This is likely the cause of all injuries reported.

Another interesting finding is that only the recently hired (within 6 months) work with chemicals. After surpassing the six-month mark, they work only with machinery. Maybe this is some sort of benefit of staying with the company longer or reward given for not hopping to another maquila.

This all makes me want to believe that this is not a very safe place to work. However, I feel that I cannot safely make the claim that the Sanyo plant is not safe, solely because the number of responses I received is not a representative sample size. I do not know the total number of workers in the plant, but for me to make the claim that the Sanyo plant is not a safe place to work I would need at least 70% of the workers to respond and it would need to be a random sample.

Ventilation seems to be adequate, but adding some windows would further support this, and wouldn't be too difficult a task, because there are already windows in place they just do not open. The most important thing to do is to get a training program in place so that the workers a.) Know what kinds of chemicals they are working with and the possible hazards associated with them and b.) How to use them in a manner that will not cause injury to themselves or others. This in addition to getting projectile guards placed on the machinery would make this a much better place to work.

This project certainly had its share of problems; some of which were overcome and some were not. The things that went wrong with this project were results of the following three barriers: distance from Tijuana, the fact that I am not fluent in Spanish, and that owners of maquiladoras really do not want people investigating their factories and will not give access to view the workplace.

The distance factor proved to be easily overcome; it just limited me to only two trips to Tijuana. This has not proved to be too much of a problem because I only needed to go to administer my survey and take a look at the area. I got around the language barrier by having a translator accompany me. The third problem is more of a cosmetic issue. It isn't really necessary for me to see the insides of the plants and witness first hand the sort of conditions that these people work in every single day, it is just something that I really wanted to do and would have made my study that much more powerful. Some other problems I encountered were with the administration of the survey. If the EHC could have administered it, there would be many more completed surveys.

While this project is by no means definitive, I do feel that it offers a snapshot of this particular maquila, which could possibly be extrapolated to include a view of the industry in Tijuana. This study will be submitted to the Mexican Department of Labor and Social Welfare (STPS) so that, they are aware of the problems in this particular maquiladora.

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*Survey Instrument**

1. What kind of labor do you perform at the Maquila you work for?
2. How long have you worked there?
3. What department do you work in?
4. What do you do there?

5. Do you work with chemicals? Yes_____ No_____ If no skip 6 and 13

6. Do you know the names of the chemicals?

Yes_____ No_____ If yes list the 3 most common

Chemical_____

Chemical_____

Chemical_____

7. Are there loud noises at your job?

Yes, often_____ Yes, once in a while_____ No_____

8. Which of the following do you encounter at work?

-vibrations -repetitive actions -broken tools -confined spaces

-severe cold -severe heat -oil or water spills

-lifting heavy objects -other_____ -none

9. Do you have the following types of ventilation available to you?

Air extractors: yes_____ no_____ I don't know_____

Fans: yes_____ no_____ I don't know_____

Open windows: yes_____ no_____ I don't know_____

10. Do you have the following types of personal protection available to you?

Gloves: yes_____ no_____ I don't know_____

Goggles: yes_____ no_____ I don't know_____

Ear plugs: yes_____ no_____ I don't know_____

Protective masks: yes_____ no_____ I don't know_____

Masks w\ filters: yes_____ no_____ I don't know_____

11. Do you work with machinery? yes_____ no_____ If no skip 12 and 14

12. Do the machines have projectile guards to prevent accidents? yes_____ no_____

13. Does your boss provide informative brochures\manuals pertaining to the dangerous chemicals that you work with? yes_____ no_____

14. Does your boss provide informative brochures\manuals pertaining to the dangerous machines that you work with? yes_____ no_____

15. Is there a committee for hygiene and safety at your job?

Yes and it functions very well_____ no_____

Yes but it doesn't function well_____ I don't know_____

16. Do you have any symptoms or illnesses due to your job? Yes_____ No_____

17 Why do you think they were caused by your job?

18. Have you ever been injured at your workplace? yes _____ no _____ If yes, how were you injured?

19. Age:

20. Sex: Male _____ Female _____

21. Open response question: Please tell me why you choose to work in a maquiladora rather than another type of job.

* Some questions were omitted from the 1996 CAFOR survey because they were not related to my interests. Other questions were reworded to remove some bias present in them. These changes have made the survey much better if one is only interested in determining the working conditions in a plant.