

# **Apple**

**CSR Company Profile** 

Michiel van Dijk & Irene Schipper

Amsterdam, February 2007



## Colofon

## Apple CSR Company Profile

#### By:

Michiel van Dijk & Irene Schipper February 2007

Stichting Onderzoek Multinationale Ondernemingen (SOMO) Centre for Research on Multinational Corporations



This document is licensed under the Creative Commons Attribution-NonCommercial-NoDerivateWorks 2.5 License. To view a copy of this license visit: <a href="http://creativecommons.org/licenses/by-nc-sa/2.5">http://creativecommons.org/licenses/by-nc-sa/2.5</a> SOMO, Amsterdam

SOMO Keizersgracht 132 1015 CW Amsterdam Phone: +31 (0)20 6391291 e-mail:info@somo.nl

## **Contents**

1	Introduction	4
2	Company Overview	6
3	Supply Chain	7
4	CSR Policies	8
4.1	Human and Labour Rights Policies	9
4.2	Environmental Policies	10
4.3	Compliance with CSR standards	
5	Field Research	
5.1	Apple Suppliers	18
5.2	Working Conditions in Supplier Companies	19
5.3	Hard Disk Drive Supply Chain in Thailand	24
5.4	Working Conditions in the Thai HDD Supply Chain	27
5.5	Apple Hard Disk Drive Supply Chain in the Philippines	37
5.6	Working Conditions in the Philippine HDD Supply Chain	40



#### 1 Introduction

This corporate social responsibility (CSR) company profile on Apple is part of a research project on the ICT hardware sector by SOMO, co-financed by the Ministry of Foreign Affairs in the Netherlands. Other financers are member organisations of International Consumer Research and Testing (ICRT) and two development organisations, namely Bread for All and the Swiss Catholic Lenten Fund. In addition to this profile, profiles are made on Hewlett Packard (HP), Acer, Fujitsu Siemens Computers, Dell, Toshiba, Sony and Packard Bell.

The methodology used for the survey consists of:
Website analyses;
Analyses of annual- and CSR reports;
Questionnaires to major computer brands sent by ICRT;

Workers interviews in China, The Philippines, and Thailand;

☐ Interviews with the management of production sites.

The research is conducted by SOMO in collaboration with research and labour organisations in China, The Philippines and Thailand: like SACOM in China (Students and Scholars Against Corporate Misbehavior); the Workers' Assistance Center, Inc (WAC) in The Philippines; the Centre for Labour Information Service and Training (CLIST) and Asia Pacific Workers Solidarity Links (APWSL) in Thailand. The definition of CSR used by SOMO is based on the "CSR Frame of Reference" published by the Dutch CSR Platform: a Coalition of 30 Dutch Civil Society Organisations and Trade Unions actively promoting CSR.<sup>2</sup>

The first part of the profile provides a short general company overview and then focuses on the companies' CSR policies and operational standards like supply chain responsibility, stakeholder involvement, independent verification and transparency and reporting.

The second part of the profile provides research findings of the field studies on social issues based on workers interviews. Where relevant, the violations of workers rights reported by the Centre for Labor Reflection and Action (CEREAL) in its 2006 report are also included.<sup>3</sup> For the analyses of the environmental policies and practices SOMO relies on the research reports of Greenpeace.<sup>4</sup>

The research by SOMO and its partners covers in total 33 supplier companies: 9 suppliers of The Philippines, 6 suppliers in China, 12 suppliers in Thailand. In addition information on 6 Mexican suppliers is available from the CEREAL report. 4 of these suppliers are identified as being a direct supplier of Apple and 1 as an indirect supplier. Information about working conditions at these

Participating ICRT members include consumer organisations of Austria, Belgium, Finland, Switzerland, Italy, Portugal, Spain and the Netherlands. The results of the study will be used for publications in the consumer magazines of the ICRT members aimed to inform their members about both the price quality proportion of PC products and the CSR policies and practices of the brand companies.

<sup>&</sup>lt;sup>2</sup> www.mvo-platform.nl

http://mvo-platform.tuxic.nl/files/Publicaties/MVO%20Normen/CSR%20frame%20of%20reference.pdf

<sup>&</sup>lt;sup>3</sup> CEREAL, "New Technology Workers", June 2006,

http://www.cafod.org.uk/var/storage/original/application/0788568b70a3b716f223722ad2729a0c.pdf (29 Nov 2006).

<sup>&</sup>lt;sup>4</sup> Greenpeace, "Your Guide to Greener Electronics", 18 September 2006, http://www.greenpeace.org/raw/content/international/press/reports/greener-electronics-guide.pdf (29 Nov 2006) Greenpeace, "Toxic Chemicals in Computers" 18 September 2006, <a href="http://www.greenpeace.nl/raw/content/reports/toxic-chemicals-in-computers-e.pdf">http://www.greenpeace.nl/raw/content/reports/toxic-chemicals-in-computers-e.pdf</a> (29 Nov 2006).

suppliers can be found in this profile. Most of the suppliers are shared by the other brand companies.

Finally, this report also includes information on working conditions in the Hard Disk Drive (HDD) supply chain in Thailand and the Philippines. The HDD market is dominated by six HDD manufacturers (Fujitsu, Hitachi Global Storage Technologies, Toshiba, Seagate/Maxtor, Samsung and Western Digital), which together produce 98.4 percent of total factory unit shipments of HDDs in the world<sup>5</sup>. A survey among computer repair shops and the technical research department of the Dutch consumer organisation indicates that, similar to other PC brands, the HDDs brands used by Apple varies, implicating that all 6 HDD brands can be found in Apple computers. This means that the suppliers of these 6 HDD manufacturers are also part Apple's supply chain and therefore Apple can be held accountable for possible social and environmental problems at these second-tier suppliers.

To prevent the publishing of any inaccurate information about the company subject in this profile SOMO has executed a review process in which the companies are requested to review the draft profile and inform SOMO about factual misunderstandings.

The comments of Apple on the draft version of this report are incorporated. Their comments are focused on the first part of this profile: the description of the CSR policies. Although Apple has passed along the sections of the draft profile with the results of the field research to all of their direct suppliers who were mentioned, and asked their direct suppliers to pass along the draft profile to their suppliers, SOMO did not receive corrections related to the field research.<sup>6</sup>

As this profile is written to serve as a basis for other publications, as one of eight profiles, it offers the information in a way it is comparable with the other 7 profiles, with analyses but without conclusions. The ICRT member organisations together with the participating development organisations are responsible for the task to rate the included companies on CSR policies and practices and will publish their own publications based on this research.

Apple - CSR Company Profile

5

Source: iSuppli Corp. April 2006. <a href="http://www.emsnow.com/newsarchives/archivedetails.cfm?ID=12618">http://www.emsnow.com/newsarchives/archivedetails.cfm?ID=12618</a> Table: Worldwide Top-Seven HDD Supplier Ranking for 2005 (Ranking by Percentage of Total Factory Unit Shipments)

<sup>&</sup>lt;sup>6</sup> Comments received by email on December the 23<sup>rd</sup> 2006, by Tim Mohin, Senior Manager Social Responsibility of Apple.

## 2 Company Overview

Name:	Apple Computer Inc.
Business Address:	1 Infinite Loop, Cupertino, CA 95014
Telephone:	408-996-1010
Fax:	408-974-21131-1
Internet:	http://www.apple.com
Logo:	

Apple Computer, Inc. is an American computer technology corporation headquartered in Cupertino, California. It develops, sells, and supports a variety of electronic products including personal computers, portable media players, computer software, and computer hardware accessories. The company's most well known products include the Macintosh line of personal computers, the Mac OS X operating system, the iPod portable music player, and the iTunes Music Store. Apple Computer's desktop and laptop computers include its Mac mini, iMac, and MacBook for the consumer and education markets, and more powerful Power Mac and MacBook Pro for high-end consumers and professionals involved in design and publishing.

Although computers make up the largest share of total sales (45 %), music-related goods have increasingly become important part of Apple's total revenue. The main reason for this has been the world wide popularity of the iPod. The US is the company's most import sales market.

Table 1: Sales by Segment, 2005

Segment	Sales (million US\$)	Sales (%)
Computers		
Desktop & server	3,436	25
Portable	2,839	20
Music-related products		
iPod	4,540	33
iTunes Music Store & Other	899	6
Peripherals & other hardware	1,126	8
Software, services & other	1,091	8
Total	13,931	100

Source: Hoover's Company Information

Table 2: Sales by Region, 2005

Region	Sales (million US\$)	Sales (%)
US	8,194	59
Japan	1,021	7
Other countries	4,716	34
Total	13,931	100

Source: Hoover's Company Information

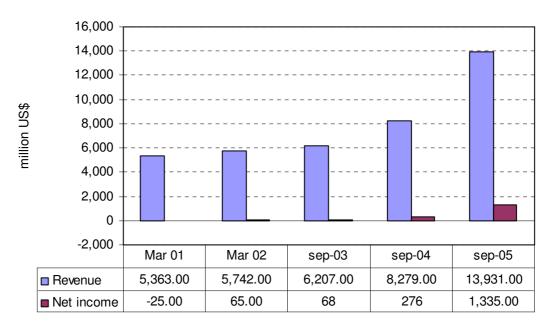


Figure 1: Key Financial Figures, 2003-2005

Source: Apple five-year financial history, <a href="http://media.corporate-ir.net/media">http://media.corporate-ir.net/media files/irol/10/107357/reports/AAPL 5yr FinHist FY05.pdf</a> (2 October 2006).

In 2005 Apple employed 14,800 people. In the same year its total sales were almost 14 billion and net income 1.4 billion. The financial data over the last five year clearly shows the successful expansion of the company as a consequence of its iPod sales. The CEO and Director of Apple is s Steven Jobs and its Chief Operating Officer is Timothy D. Cook.

## 3 Supply Chain

In its annual report, Apple indicates that the following suppliers are essential for its business: Agere Systems, Inc., Ambit Microsystems Corporation, ASUSTeK Corporation, ATI Technologies, Inc., Broadcom Corporation, Cypress Semiconductor Corporation, Freescale Semiconductor, Inc., Hitachi Global Storage Technologies, Hon Hai Precision Industry Co., Ltd., IBM Corporation, Intel Corporation, International Display Technology, Inventec Appliances Corporation, LG. Phillips Co., Ltd., Matsushita, Mitsubishi Electric Corporation, NVIDIA Corp., Portal Player, Inc., Quanta Computer, Inc., Samsung Electronics, Synaptics, Inc., and Toshiba Corporation.<sup>7</sup>

Most of the Apple's products are manufactured in whole or in part by third-party manufacturers. In addition, the company has outsourced much of its transportation and logistics management. Final assembly of products sold by the company is currently performed in the company's manufacturing facility in Cork, Ireland, and by external vendors in Fremont, California, Fullerton, California, Taiwan, Korea, the People's Republic of China, and the Czech Republic. Currently, manufacturing of many of the components used in the company's products is performed by third-party vendors in Taiwan, China, Japan, Korea, and Singapore. Final assembly of substantially all of the company's

Apple Computers Inc, "Form 10-k", 2005, p. 14, http://media.corporateir.net/media\_files/irol/10/107357/reports/10K\_FY2005.pdf (4 October 2006)

portable products including PowerBooks, iBooks, and iPods is performed by third-party vendors in China.<sup>8</sup>

#### 4 CSR Policies

Apple does not publish a separate CSR report. It also does not provide a 'glossy' annual report for its shareholders. Instead one can download a copy of the Form 10-K, the annual report required by the U.S. Securities and Exchange Commission. The 10-K includes information such as company history, organizational structure, executive compensation, equity, subsidiaries, and audited financial statements, among other information. However, in the case of Apple, it does not contain information on CSR issues. In this respect two documents are relevant:

- (1) Ethics, Apple's company code of conduct, which deals, among others with corporate governance, information disclosure, environmental health and safety, and procurement<sup>9</sup>;
- (2) The Apple Supplier Code of Conduct, which in particular deals with working conditions of suppliers.

Also the Apple's website contains CSR information. 10 The latter states that

"Apple is committed to ensuring the working conditions in Apple's supply chain are safe, that workers are treated with respect and dignity, and that manufacturing processes are environmentally responsible. Apple's suppliers are obligated in all their activities, to operate in full compliance with laws, rules and regulations of the countries in which they operate."

The Apple Supplier Code of Conduct is modelled on:

Electronic Industry Code of Conduct (EICC) Implementation Group. Apple is also member of the EICC Steering group.
International Labour Organization (ILO) Standards
Universal Declaration of Human Rights (UDHR)
Social Accountability International (SAI)
Ethical Trading Initiative (ETI)
Eco Management & Audit System
Ethical Trading Initiative
ILO Code of Practice in Safety and Health
ISO 14001
National Fire Protection Agency
OECD Guidelines for Multinational Enterprises
OHSAS 18001
SA 8000
United Nations Convention Against Corruption
United Nations Global Compact

Apple Computers Inc, "Form 10-k", 2005, p. 14, http://media.corporateir.net/media\_files/irol/10/107357/reports/10K\_FY2005.pdf (4 October 2006), p. 49.

<sup>&</sup>lt;sup>9</sup> Apple, "Ethics: the way we do business", May 2004, <a href="http://media.corporate-ir.net/media\_files/irol//10/107357/corpGov/AppleEthicsPolicy.pdf">http://media.corporate-ir.net/media\_files/irol//10/107357/corpGov/AppleEthicsPolicy.pdf</a> (3 October 2006)

<sup>10</sup> http://www.apple.com/environment/materials

<sup>&</sup>lt;sup>11</sup> Apple, "Apple Supplier Code of Conduct", version 1.0, 13 November 2005, <a href="http://media.corporate-ir.net/media.files/irol/10/107357/corpGov/AppleSupplierCoc111305.pdf">http://media.corporate-ir.net/media.files/irol/10/107357/corpGov/AppleSupplierCoc111305.pdf</a> (3 October 2006).

UN Norms on the responsibilities of Transnational Corporations and other Business Enterprises with Regard to Human Rights

Relevant parts of the Supplier Code of Conduct, with respect to social and environmental policies, are summarized below. Where necessary, reference is also made to Ethics.

#### 4.1 **Human and Labour Rights Policies**

With respect to social policies, the Apple Supplier Code of Conduct contains the following parts. Only where the code substantially differs from the EICC further explanation is given.

#### **Labour and Human Rights**

Discrimination: The EICC includes a sentence which argues that workers should not be
subjected to medical tests that could be used in a discriminatory way. The Apple Code of
Conduct includes a similar sentence but is more specific by mentioning that suppliers may
not require pregnancy tests. <sup>12</sup>
Harsh treatment and harassment
Involuntary labour
Child labour

- Working hours: it seems that the Apple Supplier Code of Conduct is more elaborate than the EICC as it clearly specifies that suppliers must offer vacation time, leave periods and holidays in accordance with applicable laws. The EICC does not include such a clause.
- Remuneration Freedom of association: the part on freedom of association is more specific and stronger than the one in the EICC as collective bargaining is explicitly mentioned.

Healt	h and Safety
	Protective measures
	Industrial hygiene
	Emergency prevention, preparedness and response
	Occupational injury and illness
	Physically demanding work
	Dormitory and canteen
	Communication: this clause calls for suppliers to provide information on health and safety to workers. It is not part of the EICC
	Work health and safety committees: this part states that suppliers are encouraged to form health and safety committees. It is not part of the EICC.

The EICC includes a section on 'machine safeguarding' which is not part of the Apple Supplier Code of Conduct.

<sup>&</sup>lt;sup>12</sup> Apple's updated Supplier Code of December 13 2006, states that 'Suppliers may not require a pregnancy test or discriminate against pregnant workers except where required by applicable laws or regulations. In addition, suppliers may not require workers or potential workers to undergo medical tests that could be used in a discriminatory way except where required by applicable law or regulation or prudent for workplace safety.'

The draft version of this CSR profile, sent to Apple for review on the 1st of December 2006, was based on Apple's Supplier Code of Conduct of November 13, 2005.

#### 4.2 Environmental Policies

The Ap	ple Supplier Code of Conduct includes the following parts on environmental policies: Wastewater and solid waste emissions: the Apple Code specifically states that wastewater and solid waste should be treated as required by applicable laws. The EICC is more general on this issue; Air emissions: the Apple Code specifically states that air emissions should be treated as
0	required by applicable laws. The EICC is more general on this issue; Environmental permits and reporting; Pollution prevention and resource reduction.
	Hazardous Substance Management and Restrictions: apart from a general part similar to the EICC, the Apple Code states that suppliers have to comply with Apple's Regulated Substances Specification (069-0135). These specific requirements are included under "Hazardous Substance Management and Restrictions" in Apple's Code: Suppliers must comply with the most recent version of Apple's Regulated Substances Specification, 069-0135 and with any applicable laws and regulations prohibiting or restricting specific substances. To ensure safe handling, movement, storage, recycling, reuse, and disposal, suppliers must identify and manage substances that pose a hazard if released to the environment and comply with applicable labelling laws and regulations for recycling and disposal.
	ion to the Apple Supplier Code of Conduct, the document on Ethics presents the following ents on environmental health and safety. 13 Apple will:
0	Comply with applicable environmental, health, and safety laws and regulations in those countries in which they do business;  Adopt their own corporate standards for protection of human health and the environment Provide a safe work environment by integrating a comprehensive program of safety training an evaluation.  Strive to anticipate future environmental, health, and safety risks and regulatory requirements, and have a proactive approach to dealing with them whenever appropriate.
Apple h	nas adopted the precautionary approach and claims that throughout the complete production

Apple has adopted the precautionary approach and claims that throughout the complete production process, from design through manufacturing, use and recycling, it ensures that its products and activities are environmentally sound. It focuses on four areas: product design, manufacturing, energy efficiency and recycling. Since 2001 all Apple computers and displays have earned the Energy Star Rating.

Apple states that their manufacturing sites are certified to the ISO 14001 standard. As noted on <a href="https://www.apple.com/environment">www.apple.com/environment</a>: 'Apple's manufacturing site is certified to the ISO 14001 standard, which helps companies manage environmental impacts in an integrated, systematic way'. It is however not clear which manufacturing sites have obtained certification.

Apple claims that all its products are RhoS compliant. [More info on environment available on site].

#### The environmental performances of Apple according to Greenpeace

According to Greenpeace<sup>14</sup>, for a company that claims to lead on product design, Apple scores badly on almost all criteria. The company fails to embrace the precautionary principle, withholds its

<sup>&</sup>lt;sup>13</sup> Apple, "Ethics: the way we do business worldwide", p. 9.

<sup>14</sup> http://www.greenpeace.org/raw/content/international/press/reports/greener-electronics-guide.pdf

full list of regulated substances and provides no timelines for eliminating toxic polyvinyl chloride (PVC) and no commitment to phasing out all uses of brominated flame retardants (BFRs). Apple performs poorly on product take back and recycling, with the exception of reporting on the amounts of its electronic waste recycled. Apple reports on amounts recycled based on weight and not percentage of sales. On the positive side, Apple acknowledges importance of responsible recycling i.e. no export of collected e-waste and bans recovery of plastics in smelters.

In their response to the draft company profile Apple claims that they have 'a precautionary approach toward substances, taking into account customer feedback, new legislation, guidance from non-governmental organizations, recyclers, and our own internal assessments. This rigorous review process ensures that we meet the requirements of consumers and regulators in all countries where our products are sold, with no regional variances. Apple's environmental web site provides examples of how we have applied this approach since 1990. Also Apple has eliminated PVCs and BFRs from a number of products; please see www.apple.com/environment/materials for details.' Apple also comments to Greenpeace criticism with regard to recycling. As noted on www.apple.com/environment/recycling, Apple states that:

'We have instituted programs around the world to facilitate the recycling of electronics — diverting over 21 million pounds of equipment from landfills since 1994. For customers in the United States, Apple offers a free recycling program of old computers and monitors with the purchase of a new Mac. A free iPod recycling program, conducted through Apple's retail stores, offers environmentally friendly disposal and a 10% discount on the purchase of a new iPod.' 15

## 4.3 Compliance with CSR standards

#### 4.3.1 Responsibility

Apple recognizes the company's responsibility to ensure proper working conditions in its supplier factories. In the Apple Supplier Code of Conduct, it states "Apple is committed to ensuring that working conditions in Apple's supply chain are safe, that workers are treated with respect and dignity, and that manufacturing processes are environmentally responsible". 16

#### 4.3.2 Stake holder involvement

Apple does not provide information on whether it involves stakeholders on issues of corporate and social responsibility.

In their response to the profile Apple claims that they are an active member of the EICC, which provides forums to encourage dialogue with stakeholders. EICC stakeholders include customers, non-governmental organizations (NGOs), socially responsible investors (SRI), government representatives, industry associations, universities, worker groups, and communities.

#### 4.3.3 Verification

There is only very limited information available on if and how Apple verifies supplier compliance with the Apple Supplier Code of Conduct. Following allegations on poor working and living conditions at an iPod manufacturing facility in China, the company released a report in which it informs that it approached Verité, an international an internationally recognized leader in workplace standards, to audit Apple suppliers. Apple states that it "will complete audits of all final assembly

Apple - CSR Company Profile

<sup>&</sup>lt;sup>15</sup> Comments received by email on December the 23<sup>rd</sup> 2006, by Tim Mohin, Senior Manager Social Responsibility of Apple.

<sup>&</sup>lt;sup>16</sup> Apple, "Apple Supplier Code of Conduct", p. 1.

suppliers of Mac and iPod products in 2006." Further, with respect to its actions in face of violations of the Code of Conduct it states that:

"We recognize that monitoring compliance is an ongoing process requiring continual progress reviews. When violations are discovered in any supplier, we will require corrective action plans, with a focus on prevention and systemic solutions. We will also ensure that action plans are implemented and in cases where a supplier's efforts in this area do not meet our expectations, their contracts will be terminated."18

In their response to the draft company profile Apple refers to the Apple's Supplier Code of Conduct section management systems to explain how it verifies supplier compliance to the Code. This includes among other things: 'The supplier's commitment to compliance and continuous improvement; periodic self-evaluations to ensure that the supplier and its next-tier suppliers are complying with the Code, audits by Apple or external monitors; and a corrective action process.' In the document on Ethics, Apple states that employees should report any conduct which is inconsistent with the company's policies and standards. Apple provides a mechanism for the anonymous reporting of issues and concerns in the Investor Relations - Governance section of the website. Issues and concerns are mailed to Apple's headquarters in Cupertino and are managed by the Compliance Officer and the General Counsel. As stated on www.apple.com/investor under "Governance", "Reporting Questionable Accounting or Auditing Matters", concerns should be mailed to the following address:

**Accounting Concerns** Apple Computer, Inc. 1 Infinite Loop, MS 3-CL Cupertino, CA 95014

#### Transparency and Reporting

Apple virtually does not publish any information on CSR issues. The information which is made public is reported in:

Annual report
Apple Supplier Code of Conduct
Ethics: Company Code of Conduct
Website: mainly information on environmental issues.1

<sup>&</sup>lt;sup>17</sup> http://www.apple.com/hotnews/ipodreport/ (3 October 2006).

<sup>19</sup> http://www.apple.com/environment/ (3 October 2006)

## 4.3.5 Analysis of CSR Policy.

General international Guidelines and	Part of	Comments	
Standards (not sector specific)	Company Policy?	Comments	
UN Norms on Business and Human Rights	No	Comment SOMO: at the moment there are almost no company signatories of these UN Norms.	
ILO core labour standards and Conventions are included in company policy	No	Comment EICC: The code refers to recognized standards – including the ILO. The EICC is built on internationally recognized standards and conventions such as the ILO conventions, ISO standards, and the United Nations Declarations on Human Rights. We believe that the EICC contains the general wording of the ILO standards. Comment SOMO: Trade unions and NGO's specifically ask for standards in accordance of ILO standards instead of 'referring to' or 'based on' or 'built on' to avoid loopholes.	
Commitment UN Global Compact	No		
Commitment to Universal Declaration of Human Rights	No	See above comment under ILO conventions	
Commitment OECD Guidelines	No	See above comment under ILO conventions	
Development of Company Codes of Conduct			
Development of Code of Conduct by the	Y/N	Mainly on ethics, very general, nothing on labour	
company on social issues?	1,,,,	conditions, more on governance	
Development of supplier Code of Conduct on social issues?	Υ	In principle EICC but on some points stronger.	
Guidelines and standards for the electronics sector			
The Electronics Industry Code of Conduct (EICC)	Y		
The Global e-Sustainability Initiative (GeSI)	No		
Guidelines and standards on Occupational Health & Safety			
ILO Guidelines on Occupational Safety & Health management Systems ILO-OSH 2001	No	Not explicitly but UN and ILO norms are referred to in the EICC	
OHSAS 18001: Occupational Health and Safety Management System specification.	No	Not explicitly but OHSAS norms are referred to in the supplied code	
ILO core labour standards covered			
Core Labour Standards	ILO		
	Convention		
Freedom of association and the right to Collective bargaining	87 and 98, complemente d by 135	Y Comment SOMO: The EICC does not include collective bargaining. The EICC is advised by NGO's and trade unions to remove "in accordance with local laws" and insert in accordance with ILO conventions 87 and 98 (facilitation by a parallel means). Because local laws can	

			effectively suppress FoA as it does in
			China and Mexico for example. Referring
			to local laws is creating a loophole.
			In the Apple Code of Conduct the part on
			In the Apple Code of Conduct the part on freedom of association is more specific
			and stronger than the one in the EICC.
No use of forced, debt bonded or involuntary	29 and 105	Υ	The EICC covers this sufficiently.
prison labour	20 4114 100		The Lieu severe the semicionary.
No Child labour	ILO	Υ	The EICC covers this sufficiently. The
	Convention		Apple Supplier Code of Conduct is similar
	138 and 182		as that of the EICC but Apple specifically
			refers to the ILO Minimum Age
			Convention No. 138 on a number of
N. C. C. C. C.	100 1111		occasions while the EICC does not.
No discrimination in employment	100 and 111	Y	The EICC covers this sufficiently.
			The Apple Code of Conduct includes a similar sentence about medical tests but is
			more specific by mentioning that suppliers
			may not require pregnancy tests.
ILO Conventions	No. of	Subs	Comments
	declaration	cribe	
		d by	
		the	
		comp	
		any?	
Right to security of employment	Tripartite	N	Not included in EICC
	Declaration.		
Living wages are paid	art. 24-28 26 en 131	N	EICC refers to legal minimum wage.
Living wages are paid	20 611 101	l'N	The Apple Supplier Code of Conduct does
			not include a sentence that deductions
			from wages as a disciplinary measure are
			not permitted.
Safe and sound working conditions	155	Υ	The EICC covers this sufficiently. The
			Apple Supplier Code of Conduct includes
			a clause on communication: this clause
			calls for suppliers to provide information
			on health and safety to workers and to
			form H&S committees. Which is not part of the EICC
Maximum number of working hours (48 + 12)	1	Y/N	Comment EICC: all work will be voluntary
Maximum number of working hours (48 + 12)	1	Y/IN	and overtime is to be an intermittent
			solution and is not to be used as a routine
			means for business operations. The code
			reflects a 60 hour cap of working hours
			except in emergency or unusual
			circumstances.
			Comment SOMO 1: by not describing
			emergency and unusual circumstances
			there is a loophole created.
			Comment SOMO 2: the EICC does not
			break work week down into 48 plus 12
			hours so that it is clear when workers are required to work overtime.
			Comment SOMO 3: it would be more
	1	1	Comment Colvic S. It would be more

		.,	voluntary.  Apple Suppli elaborate on	
Compensation for overtime work		Υ	The EICC co	vers this sufficiently.
Operational aspects				
Does the company policy on social issues include external manufacturers and suppliers?	Yes			
Is there a monitoring system in place to check		Ow	n sites	Supplier sites
compliance with the mentioned standards/codes/policy?	Internal Monitoring	No info		No info, but there was an audit after the iPod scandal
	External monitoring (third party organisations involved)	No i	nfo	Hired Verity to audit all final assembly suppliers in 2006
What is the percentage of supplier monitored each year?	No info			
Are (local) stakeholders involved at the design level/at implementation (production) level/ at	Only feedback on policy is requested Yes, via EICC			
monitoring level and at relevant decision- making level?	Real involvement as in multistakeholder initiatives		no	

## The Environmental policies of the computer companies:

General Environmental Policies	Company policy?	Comments
ISO certification 14001	Υ	
ISO certification 9001/9002		No info
Other Eco-Labels that are used by the company,	Υ	Energy star.
like Blue Angel, ENERGY STAR, Green Mark		
etc.		
Environmental guidelines and standards for	Score	Environmental guidelines and standards for the
the electronics sector	methodology	electronics sector based on Greenpeace report
	of	(Bad=0, Partially bad=1, Partially good=2,
	Greenpeace	Good=3)
A chemicals policy based on the precautionary	Greenpeace:	1
principle (includes materials innovation, design		
for less environmental impact, not using		
hazardous materials that could impact recycling)		
Chemicals management: Supply chain	Greenpeace:	1
management via banned/restricted substance		
lists, policy to identify problematic substances of		
future eliminations/substitution		
Timeline for phasing out all PVC	Greenpeace:	1
Timeline for phasing out all BFRs (not just the 2	Greenpeace:	0
banned by RoHS)		
PVC free and/or BFR free models available?	Greenpeace:	0
Commitment Individual Producer Responsibility	Greenpeace:	1

(IPR) (producers finance the end-of-life			
management of their products, by taking			
back/recycle/reuse their own brand discarded			
products			
Voluntary take back in every country where it sell	Greenpeace:	1	
products			
Provides information to individual customers on	Greenpeace:	1	
take back and recycling services			
Reports on amount of waste electrical and	Greenpeace:	2	
electronics equipment (WEEE) collected and			
recycled.			
Operational aspects environmental policy			
Does the company policy on environmental	Yes, via EICC.		
issues include external manufacturers and			
suppliers?			
Is there a monitoring system in place to check		Own sites	Suppliers sites
compliance with the mentioned	Internal	No info	No info
standards/codes/policy?	Monitoring		
	External	No info	No info
	monitoring		

## **Transparency and Cooperation**

Transparency/Reporting	Comments				
Separate website section on CSR?	N				
Reporting on CSR performances?	N				
Are GRI indicators used?	N				
Special Office for complaints CSR issues	Yes, via website and postal address.				
Cooperation with the Research	Comments				
Response to the questionnaire	N (not yet?)				
Disclosure of production and supply chains	Disclosure of production countries?	N			
	Disclosure of production locations?	N			
Assistance with organising interviews with local	N				
management of suppliers?					
Feedback to draft company profile	Yes, but no feedback on the field research.				

### 5 Field Research

This section identifies and describes CSR issues specific to the suppliers of Apple. The findings are based on the analysis of labour conditions of five Apple suppliers, located in China (1), Philippines (2) and Thailand (2). In addition it summarizes CSR issues related to the Hard Disk Drive supply chain of Apple in Thailand and the Philippines.

Most research into working conditions in the ICT sector concentrates on the ILO's eight primary labour rights, which are specified in most model Codes of Conducts such as the International Confederation of Free Trade Unions (ICFTU) base code and the CSR Frame of Reference that SOMO works with.

Much of the overall manufacturing process of ICT hardware is low-tech and labour intensive and thus faces similar working condition issues as in the garment and footwear industries. This research reveals violations including dangerous working conditions, degrading and abusive working conditions, excessive working hours and forced overtime, illegally low wages and unpaid overtime, denial of the right to strike, discrimination in employment, extensive use of contract labour and "trainees", workers without a contract, and lack of freedom of association and unionisation.<sup>20</sup>

SOMO in cooperation with local labour organisations have gathered information about the working conditions in the factories producing (parts of) computers for one or more of the targeted companies. This information is obtained through interviews with the workers and trade unions, field organizers and factory management in some cases. The interviews are conducted outside the factory in an informal setting, in a situation where the workers feel safe to speak openly, i.e. not in the presence of the management. A reasonable amount of workers per factory is interviewed. The workers are selected (as far as possible) on the basis of sex, age and type of job so as to represent the workforce in the factory. The worker interviews are undertaken through individual interviews with each worker, or through group discussions.

Apple's reaction on the field research was as follows: "Given our strong commitment to social responsibility throughout our supply chain, we took the draft profile's comments on our suppliers very seriously. Accordingly, we have passed along the pertinent sections of the draft profile to all of our direct suppliers who were mentioned, and we will continue working with them as part of our supplier social responsibility program. We have also asked our direct suppliers to pass along the draft profile to their suppliers who are mentioned in the report."

\_

<sup>&</sup>lt;sup>20</sup> by Tim Mohin via email of December 23<sup>rd</sup> 2006.

## 5.1 Apple Direct Suppliers

#### 5.1.1 China

#### Volex Cable Assembly (Zhongshan) Co. Ltd.

Volex Cable Assembly (Zhongshan) Co. Ltd. (hereafter Volex Cable) was founded in October 2000 at the Torch Hi-Tech Industry Development Zone in Zhongshan City, Guangdong Province. It is a subsidiary of Volex Asia, part of the Volex Group, a global producer of electrical an optical cable assemblies and power cords (plugs, cables and connectors). Volex Cable's factory occupies 80,700 square meters and has a workforce of about 1,500 to 2,000 persons, with variations between low and peak seasons. It produces 3-wire angled plugs and straight plugs which are widely applied to desktop PCs, notebook PCs, printers, and other home appliances as well as office equipment. The company supplies to Apple, HP (Compaq) Dell, Epson, Canon, Nortel and Ericsson.

#### 5.1.2 Philippines

#### Philippine International Manufacturing and Engineering Services

The Philippine International Manufacturing and Engineering Services (hereafter PIMES) was established in December 21, 1993. It is a 100% Japanese owned company offering a wide range of products. It engaged in the manufacture of compact disc-read only memory (CD-ROM) drives, subcompact passbook, printers parts and peripherals. Its mother company is the Japan International Manufacturing and Engineering Services.

The company employs about 1000 people. The particular products produced in the company as identified by the workers were mobile backlight, PCB assembly, Light guide for computer, plastic injection, computer module, LCD and 4x4 CD-ROM for J.IMES, Sony, Samsung, IBM, Humex, Apple, Nokia, Nanox, Casio and Omron and exported to Japan, Taiwan, Hong Kong, UK and Canada. The raw materials are purchased from Japan but there are local sub-contracting companies identified by PIMES: San Technology, APC, and Astec Power Phil. Inc.

#### Hitachi Global Storage Technologies Philippines Corporation

Hitachi GST was formed as a result of the strategic combination of IBMs and Hitachi's storage technology businesses. Hitachi Global Storage Technologies Philippines investments are focused on the manufacture of Hard disk drive (HDD) and HDD component parts such as head gimbal assembly or magnetic heads, slider and headstack assembly for, among others, IBM, Apple and Dell.. Subcontractors of Hitachi GST are the San Technology, Micro Device Technology (MD Tech) and Luzon Magnetics. The company was established on May 11, 1994, is located in Laguna Technopark Inc. and employs about 7000 employees.

#### 5.1.3 Thailand

#### **Delta Electronics (Thailand) Public Company Limited**

Delta Electronics (Thailand) Public Company Limited is a publicly traded company. The Group's principal activities are the manufacture and export of electronic components. Delta Electronics is established in the Bangpoo Industrial Estate, an economic processing zone (EPZ) near Bangkok. The facility consists of three production sites: Delta 1 (monitors and televisions), Delta 3-4 (components and small products for adapters), and Delta 5 (power supplies and adapters). Another production facility, Delta 6, is located in Welgrow, and produces cooling fans for computers. The

company has a workforce of 12,000 employees of which 10,000 are regular and 2,000 are subcontracted workers. Delta Electronics Thailand is part of the Delta Group, the world's largest provider of switching power supplies, headquartered in Taiwan. The company is a supplier of almost all large PC manufacturers, including Acer, Apple, Dell, Fujitsu Siemens, Sony, NEC, HP, Toshiba and IBM. The Company was certified ISO 14001 for environmental safety standard in 1999 and OHSAS (Occupational Health and Safety Assessment) by BVQI.<sup>21</sup>

#### CKL Electronics Co. Ltd.

CKL Electronics Co. Ltd., hereafter CKL, is located in the Bangpa-in Industrial Estate. It exists for 16 years, and was acquired some years ago by APCB, a Japanese company. This is the only facility they have in Thailand. They have two other facilities in China (Shenzhen and Guan Shan). The company produces PCBs (printed circuits boards) of which 40-50% for automotive industry (Amron, TIW and Solectron), 20% is computer related and 20% for home appliances (Panasonic and Sony, Sony via Panasonic). The computer related products concern PCBs for power supplies, fans, fan controls and ear phones. All the computer related products are supplied to Delta Electronics, and Delta Electronics in turn supplies all computer brands including Acer, Apple, Dell, Fujitsu Siemens, Sony, NEC, Toshiba and IBM. CKL Electronics is therefore a second tier supplier of all PC brands in this research including Apple. The company employs 850 workers. A new factory of 100.000 square feet will produce LCD TVs, control boards, and car audio boards. CKL has adopted ISO/TS 16949 and ISO 14001.

## 5.2 Working Conditions in Supplier Companies

#### 5.2.1 Employment is Freely Chosen

No evidence was found of forced, bonded or involuntary labour.

#### 5.2.2 Discrimination and Unequal Treatment of Contract Workers

Two cases of discriminatory practices were found. At *PIMES* workers pointed out that in some cases relatives of high-positioned employees were promoted first. At *Delta Electronics* it was reported that contract workers received less wage than regular workers.

#### 5.2.3 Child Labour

No evidence of child labour was found in any of the factories investigated.

#### 5.2.4 Freedom of Association and the Right to Collective Bargaining

In several factories included in this research (33 suppliers), severe violations of the freedom of association and the right to collective bargaining were reported. At *PIMES* workers report that union organization is strictly discouraged by the management.

But some of the investigated companies in Thailand do have unions.

At *Delta Electronics* there is a strong union with about 5.000 members. According to the management the union only has small complaints like the food quality, the transport ventilators and wages. However, currently there is a labour dispute in preparation by the union because they want wage increases. Some of the workers explained that because of the low wages their debts are increasing each month. The basic wage is not living wage. They are really angry with the company

<sup>&</sup>lt;sup>21</sup> http://www.deltathailand.com/about corporate.html

because their financial situation is getting worse every month while they can read on the Stock Exchange Information that Delta's profits are getting larger.

At *CKL* there is a union and 540 out of the 751 workers are union members. The efforts of the union are geared towards increasing the minimum wage and bonuses of the workers. There is a collective agreement (set every two years) between the union and the management but the union is not positive about its results. There is a monthly meeting between the union and the management but according to the union this is mainly focussed on profits and the need to improve the production level instead of discussing labour conditions. The relationship between the union and the management is described as 'tense'. Contract workers normally do not join the union because they can be dismissed easily and are afraid to loose their job being associated with a union.

#### 5.2.5 Wages and Overtime Payment

In all the factories workers complained about their wage.

At the Chinese supplier *Volex Cable*, the wage for the first month is withheld until the end of next month, seemingly to prevent workers from quitting. This is in clear violation of Chinese labour law. In addition workers state they receive RMB 800-900 including overtime, which seems below the legal minimum wage. If it is assumed that workers needs to do overtime 22 days with 3 hours per shift overtime and receive wage according to the national labour law (i.e. RMB 3.42 minimum wage per hour? and 1.5 times this wage during overtime) s/he should earn: (1) a basic minimum wage of RMB 574 per month (the standard salary at this company) plus (2) overtime wage of RMB 5.12 x 3 hours x 22 days = RMB 337.92. This adds up to RMB 911.92 per month. Even if the workers at *Volex Cable* could receive the highest possible monthly payment of RMB 900, it still falls RMB 11.92 short to receive the legal minimum wage. Finally workers at *Volex Cable*, even have to pay for food and housing. They cannot refuse payments for food and housing which make up about 25 percent of their wage.

At *PIMES* and *Delta Electronics* they stated that their wage is not a living wage because it is simply not enough to cover their living expenditures.

In a number of factories, workers also reported a number of excessive wage deductions. At *Delta Electronics* the yearly attendance bonus -which can climb up to 10.000 bht- is lost in case of 1 day of sickness.

At *CKL* workers get a warning in case they miss the, often unreasonably high, target. The number of warnings has a negative effect on their wage increase and affects the bonus at the end of the year.

#### 5.2.6 Excessive Working Hours and Intensive Production Rhythms

Table 3 is presenting the regular working hours and overtime per factory. In all the factories, a few hours overtime per day is standard practice and in some cases the number of hours exceeds the ILO (48+12) maximum number of working hours. Moreover, in many factories overtime is compulsory, meaning that workers are forced to do overtime and production rhythms are inhumane.

At *Volex Cable* workers are forced to do overtime every day in between 2-4 hours a day and often in the weekends. *Volex Cable* offers its workers a 2 time 45 minutes break, which implies that the

working time is 'only' 10.5 hours a day and therefore does not exceed the maximum of 3 hours overtime per day, specified in Chinese Labour Law. Nonetheless, a shift of 12 hours seems excessively long.

At *PIMES* overtime, about 4 hours per day, is compulsory during peak production. But overtime is not normal for all the workers, some have daily overtime of 4 hours, others do not.

At *Hitachi Global Storage* regular working hours are 8 hours, six days per week for the first two weeks and 8 hours, 5 days a week for the last two weeks of the month. The workers render 8 hours regular work plus 3 hours of mandatory overtime daily. Sunday 8-hour overtime is not normal and happens only when the demand for production is high. There is no evidence that overtime is compulsory. Like in other factories, peak production has no regularity and depends on the volume of order of the customer.

In the Philippines, as may be deduced from the information gathered from the different factories it is normal and standard for a worker to render 12 hours (8 hours regular and 4 hours mandatory overtime) of work daily for 6 days with mandatory Sunday or rest day overtime when production is high.

At *Delta Electronics* daily overtime is 2 - 3.5 hours but they seldom work at Saterdays and Sundays and therefore total working hours including overtime do not exceed the 60 hour standard as set by the ILO.

Workers at *CKL* pointed out that overtime is compulsory during peak production from January till June. In principle overtime during Saturday and Sunday (or any other sixth and seventh day of the workweek) can be refused but as a repercussion workers are excluded from future (voluntary) overtime work. Thus the workers work regularly 6 to 7 days per week, 12 hours per day. Workers also mentioned that sometimes during peak production they have to work two shifts in a row (i.e. 24 hours in total).

Table 3: Regular working hours and overtime per factory

Factory	Regular working hours	Regular Overtime	Comment
Volex Cable	8 hours, 5 days per week	In the weekends and 2.5 hours per day, 6-7 days per week	Compulsory overtime. 12 hour shifts but including 2 times 45 min. breaks.
PIMES	8.5 hours, 5 days per week	4 hours a day but not for all workers.	Compulsory during peak production for all. Between 42.5-62.5 hours per week
Hitachi Global Storage	8 hours, 6 days per week	3 hours per day. On Sunday during peak season	About 66 hours per week.
Delta Electronics	8 hours, 5 days per week	2 hours during day shift, 3.5 hours during night shift	Between 50-57.5 hours per week.
CKL	9.5 hours, 5 days per week	2,5 hours per day and on Saturday and Sunday	Compulsory during peak production. Between 60-84 hours per week.

Note: With regular overtime is meant overtime performed on a day-to-day basis.

#### 5.2.7 Health and Safety Conditions

At *Delta Electronics* workers complain about a terrible smell in the cooler fan department that sticks in their cloths for days. The management has not responded to their complaints. Further, workers reported an accident in 2001 in which six people died after the collapse of a building.

At *CKL* workers have to work with hazardous chemicals and there is not enough safety equipment provided by the company. There is one department where chemicals are mixed just outside the factory, this department is claimed to be very hazardous and very polluting. As was correctly expected by the interviewed workers, this site was not shown by the management to SOMO researchers during their factory visit. Workers complain about coughing and irritated skin and at least two cases have been found of workers having poisonous chemicals in their blood. After complaints by the union the management only installed a fan but the problem remains. Another problem reported by workers at *CKL* is the mixing of ink. They indicate that the provided mouth caps are too thin and of low quality resulting in the inhaling of poisonous fumes. Although the yearly company medical check did not found any medical problem one sick worker went to a hospital where it was found that his lungs were affected by toxics. After notification, the worker was transferred to another department. Finally, workers pointed out hat at *CKL* sometimes chemicals react, for example because different machines are cleaned with the same cloth, and causes fire. Around June-July there were three of such fires. This is dangerous, also because workers report that the fire equipment is of low quality and some of the fire extinguishers are empty.

Finally, for *Hitachi Global Storage* and *Volex Cable* workers indicated that working conditions were in general very good. In particular workers praised the strong environmental commitment of *Hitachi Global Storage*, which aims to reduce the usage of harmful chemical substances.

#### 5.2.8 Housing

At *Volex Cable* offers convenient dormitories in the proximity of the factory but with a rent of RMB 70 per month they are considered to be expensive.

#### 5.2.9 Awareness of Code of Conduct and Audits

In none of the factories workers were aware of the code of conduct of Apple.

At *Volex Cable* workers pointed out that they are afraid of reporting bad working conditions to the auditors because of the risk of losing their job. Visits are known in advance and management instructs the workers what to respond and how to behave when the auditors are in the factory. Allegedly, management has falsified labour contracts to mislead the inspectors and locked up workers in the dormitory to prevent them speaking to the visitors.

The management of *Delta Electronics* said that large buyers stimulate the company to treat its workers well and deal correctly with environmental issues and that some of these companies do come with codes of conduct and perform audits. Some buyers are very specific, like not using child labour and ensuring that the maximum working week does not exceed 60 hours. Some of them also ask about the suppliers of *Delta Electronics* and even check them. The management mentioned the EICC code and said that *Delta Electronics* complies with this standard.

Currently the Green Partnership approval from SONY/Panasonic for *CKL* is pending. *CKL* is recently audited (October 2006). Panasonic is one of their direct partners, they buy the PCBs for Sony. Sony had expressed their concerns about reliabilities; a few items need to be improved for Sony. The management of *CKL* explained that the Japanese standards are high, like using all halogen free materials; standards are higher than in Europe.<sup>22</sup> On October the 12<sup>th</sup> *CKL* expected an audit from *Delta Electronics*, their main client, and Fujitsu had also announced their visit. The

Apple - CSR Company Profile

<sup>&</sup>lt;sup>22</sup> Source SOMO interview with the management of CKL Electronics, 11 October 2006.

management of *CKL* made clear that none of the customers asks for social standards. The manager interviewed (Sales Assistant manager) had no knowledge of company codes supplied by customers.

## 5.2.10 Summary of Violations

**Table 4: EICC Violations of Apple Suppliers** 

	PIMES	Hitachi Global Storage	Volex Cable	CKL	Delta Electronics
Supplier Country	Philippines	Philippines	China	Thailand	Thailand
Labour					
Freely chosen Labour					
Child Labour avoidance					
Working hours more than 60 hours	х	Х	Х	Х	
Working hours: forced overtime	Х		Х	Х	
no minimum wage paid/overtime not paid/unreasonable wage deductions			Х	Х	Х
Workers indicate it is not a living wage	Х			Χ	Х
(in)Humane treatment					
Non discrimination					
Freedom of association	Х		see note 1		
Health and safety					
Occupational safety	Х				
Emergency preparedness					
Occupational injury and illness				Х	
Industrial hygiene					
Physically demanding work					
Machine safeguarding					
Dormitory and canteen			Х		

Note 1: Under Chinese law, the All China Federation of Trade Unions (ACFTU) is the only trade union recognized in China. It exercises a legal and heavily protected monopoly over all subsidiary union organizations and trade union activities. It remains under the control of the Communist Party, which appoints its officials. This means that by law there is no possibility of truly independent unions forming in China, which compromises workers' freedom of association.

## 5.3 Apple's Hard Disk Drive Supply Chain in Thailand

#### Fujitsu (Thailand) Co., Ltd.

Fujitsu (Thailand) Co., Ltd (hereafter Fujitsu) established in 1988, is located in the Navanakorn Industrial Estate and employs total about 4000 people. It mainly produces hard disk drives (HDDs) for a variety of customers, including besides HP, Sony, Dell, Matsushita, Hitachi, Toshiba, IBM, Sony and National (Panasonic).

#### **Western Digital Thailand**

Western Digital (US company) is the second largest Hard Disk Drive manufacturer worldwide (after Seagate which recently acquired Maxtor). Like Fujitsu, Western Digital Thailand (hereafter Western Digital) is located in the Navanakorn Industrial Estate. The facility consists of former Fujitsu and Read Rite factories, which were acquired in 2001 and 2003, respectively. Since July 2006 the facility is named Western Digital. Its main customers are HP, Lenovo/IBM, Sony, Panasonic, and Dell. Western Digital employs about 22,000 workers in Thailand of which about 8000 work at the facility in Navanakorn. Western-Digital is investing this year to expand capacity at its two plants in Thailand.

Figure 2 depicts a part of the Hard Disk Drive (HDD) supply chain in Thailand. The working conditions in six suppliers (including one second-tier supplier) of HDD manufacturers have been analysed. The figure shows that almost all suppliers produce equipment for more than one HDD manufacturer (indicated by the arrows). Below, first a brief description of the HDD suppliers is presented, followed by a summary of the findings on working conditions in the next section.

SOMO received corrections and supplementing information by Seagate (one of the HDD manufacturers operating in Thailand) related to their suppliers subject in this field study.<sup>23</sup> Seagate took the initiative to send the draft report to its (former) suppliers for verification.

#### LTEC Ltd.

LTEC Ltd. (hereafter LTEC) is a joined Thai-Japanese company. The company produces components for Nokia mobile phones, microwaves, digital cameras, airbag switches, National electric thermoses, Sony cameras, Acer computer notebooks, Fujitsu microchips, IBM SIMs, Toshiba calculators, control screens for Sharp microwaves and HDDs for Seagate/Maxtor. LTEC employs 6,400 persons and plans to expand to 10,000 employees. Female employees account for 82% of all employees. Five years ago, LTEC upgraded its factories and installed automatic machines, now the factories have regular, semi-automatic, and fully automatic packaging machines. Previously, three workers were needed for each machine, now only one person per machine is needed.

#### MMI Precision (Thailand) Co. Ltd

MMI Precision a Singaporean owned company. The company operates in four countries – Singapore (Headquarter), China, Malaysia and Thailand – and in Thailand there are four branches of MMI precision. The information in this report refers to 2 production sites situated in Nawa Nakhorn Industrial Estate 1 (project 1 and 3) and is hereafter referred to as MMI. Its main client is

<sup>&</sup>lt;sup>23</sup> SOMO received the comments of Seagate on February the 16<sup>th</sup> 2007 relating to the following suppliers: Innovex, MMI, Ltec, Mektec and Paragaon. According to Seagate MMI is not one of their suppliers anymore since December 2004.

Seagate/Maxtor but the company also supplies NEC, Minibear, Fujitsu and Fujikura. The interviewed workers are producing the metal covers for HDDs.

Info provided by MMf<sup>24</sup>: Overall the company has 211 regular workers and 517 contract workers. Overall workers composition: Female=46.5%, Male= 53.5% in both Zone 1 & Zone 3. MMIT took over TPW and continued the Maxtor (now Seagate) business until 2004. Zone 1: Motor Brackets for spindle motor [HDD] & also other non-HDD businesses, e.g. automotive, telco, medical businesses. Zone 3: All non-HDD business [machining]. Current main clients: SC Wado/JVC, Fujikura, Shindengen, Fabrinet-Avanex. Since the ceasation of Maxtor's business in 2004, MMIT has shifted the business focus to non-HDD businesses.

The activities and main clients mentioned by the workers do not correspond with the information provided by the management of MMI.

#### Innovex

Innovex is owned by Hana Company and was previously named Adflex. Its parent company which supplies raw materials is located in America. Starting in 1999-2000 the company transitioned from the lead wire business to flexible circuit interconnects. Over 95% of the company revenue is from the flexible circuit business. There are two branches of Innovex in Thailand: one is in Korat and the other is in Lamphun province. The information below pertains to the latter production site. It mainly produces electronic components for various brands, including: Nokia (mobile phone circuit board chips), IBM (hard disk processors), Philips (TV and computer circuit boards), Hitachi (electric circuit boards), Samsung (televisions and digital cameras), Seagate/Maxtor (hard disk drives). IBM (Now Hitachi) and other customers order erratically. There are about 3000 employees at Innovex. *Comment Innovex: although most of their production in intercompany; 3M is the largest flexible circuit manufacturer in North America*.

#### Mektec

Mektec's main business is flip-chip "assembly" for disk drives. It attaches semiconductor dies using the flip-chip method to FPC for the disk drive industry for which as noted earlier Thailand is the number 2 spot in the world. Mektec's main customers are Seagate/Maxtor, Western Digital, Hitachi, TI and Fujitsu. The company states that: "We are the world's largest flex and flip chip assembler, and supply to computer, automotive and communication manufacturers worldwide. Our plants are located in Bangpa-in Industrial Estate and Hi-Tech Industrial Estate, Ayutthaya." Mektec has 3,600 employees as of Jan. 2007. 25

#### Paragon

Paragon has 350 employees. Paragon is a supplier of Mektec according to the interviewed workers. Paragon is Mektec's Subcontractor (outsourcing) .The interviewed workers (female) work on the production department checking the APC for computers and digital camera's. It concerns flip chip assembly.

#### **Murata Company**

Murata Company (hereafter Murata) is Japanese-owned producer of Panasonic, <u>Hitachi</u>, Cannon, and Toshiba products, the majority of which are Toshiba televisions and copiers. After five years, Murata has repaired and refurbished its factories and added one more to bring the total number of factories to eight. It has increased the number of employees continuously and is currently hiring.

<sup>&</sup>lt;sup>24</sup> Info supplied by MMI through Seagate.

<sup>&</sup>lt;sup>25</sup> SOMO received comments from Seagate by email on February the 16<sup>th</sup> 2007 relating to the following suppliers: Innovex, MMI, Ltec, Mektec and Paragaon. Mektec provided feedback on the draft report.

Murata Company employs over three thousand workers, of which about 1,000 workers are male, and it does not have any policy to discontinue hiring. Usually when there is little work, the company will rotate workers and responsibilities to other busy areas. Many workers have left Murata in the past because of job monotony and boredom, to look for a better workplace, problems with co-workers, or long-term health problems. Full time employment is offered to workers who pass a probationary period, after which they are paid on a daily rate.

#### Fujitsu (Thailand) Co., Ltd.

Fujitsu (Thailand) Co., Ltd (hereafter Fujitsu) established in 1988, is located in the Navanakorn Industrial Estate and employs total about 4000 people. It mainly produces hard disk drives (HDDs) for a variety of customers, including besides HP, Sony, Dell, Matsushita, Hitachi, Toshiba, IBM, Sony and National (Panasonic).

#### **Western Digital Thailand**

Western Digital (US company) is the second largest Hard Disk Drive manufacturer worldwide (after Seagate which recently acquired Maxtor). Like Fujitsu, Western Digital Thailand (hereafter Western Digital) is located in the Navanakorn Industrial Estate. The facility consists of former Fujitsu and Read Rite factories, which were acquired in 2001 and 2003, respectively. Since July 2006 the facility is named Western Digital. Its main customers are HP, Lenovo/IBM, Sony, Panasonic, and Dell. Western Digital employs about 22,000 workers in Thailand of which about 8000 work at the facility in Navanakorn. Western-Digital is investing this year to expand capacity at its two plants in Thailand.

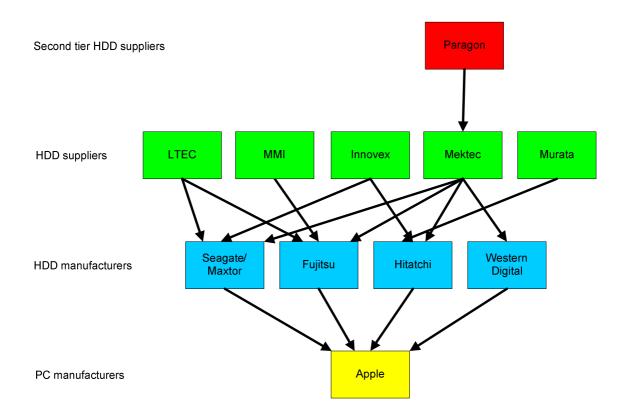


Figure 2: Apple's HDD Supply Chain in Thailand

## 5.4 Working Conditions in the Thai HDD Supply Chain

#### 5.4.1 Employment is Freely Chosen

No evidence was found of forced, bonded or involuntary labour.

#### 5.4.2 Discrimination and Unequal Treatment of Contract Workers

Some cases of discrimination were reported.

At *LTEC* it was reported that workers who have hepatitis B only get a year-to-year contract. Further, workers pointed out that obtaining sick leave and the size of the end-of-year bonus and promotions strongly depend on personal contacts with the supervisor.

Comment LTEC: LTEC does not discriminate against employees on the grounds of infection with Hepatitis B virus. Supervisors cannot decide rankings or promotions of their subordinate by only their preferences.

A number of discrimination cases were found relating to discrimination of contract workers. The workforce of several companies in this research mainly consists of this type of workers. For example, in *Western Digital* 60 percent are agency hired. At *Western Digital* and *Fujitsu* contract workers received a lower wage. At *Fujitsu* contract workers were denied certain bonuses and insurances, and when female workers apply for a job they have to take a urine/pregnancy test, contract workers getting pregnant will be fired.

At *Western Digital* most males are regular workers but the majority of female workers, mainly in the assembly line, are hired through an agency. The agency requires the female candidates to take a urine test, which is very likely used to determine pregnancy. This is confirmed by the fact that one of the workers was dismissed after she got pregnant. Only after a lawsuit, filled by CLIST, the worker could return to the factory as a subcontracted worker.<sup>26</sup>

Only 30% of the workforce in *MMI* is employed on a regular basis, the rest have their employment outsourced through agencies. The outsourced workers don't have any job security. Their length of employment contract is completely dependent on the amount of orders the company receives. Resulting from this uncertainty was a high turnover rate of around 50% for a given day. The wages of the workers at MMI are different between the regular workers and the contract workers. The regular workers earn at least 8,000 Baht per month (the highest amount we learned was 15,240), and benefits like an annual bonus equal to one month wages and monthly diligence bonus of 450-500 per month, and transport allowance and rice, social security and their uniform is provided for free. The contract workers earn 184 baht per day, making 4,784 per month (26 x 184), they get no annual bonus and their monthly diligence bonus amounts 150-200 baht per month, they have to pay 160 baht for a shirt, 99 baht for the trousers, 350 baht for safety shoes. Subcontracted workers also have to buy their safety mask and safety glasses themselves (!), these costs were deducted from their salary. Moreover, contract workers have less air-conditioning, and no medical check-ups for the contract workers.

Comment MMI: Contract workers pay 170 baht for their shirts and they are allowed to wear their own pants. Personnel protective equipment [PPE] are provided free-of-charge to all staff, contract workers included, if the jobs condition requires them, as per safety regulations. Contract workers are provided free annual health checks. The regular workers had been with the company and previous company (TPW) for more than 10 years and hence, the higher salary as compared to the new recruits.

<sup>&</sup>lt;sup>26</sup> CLIST is a Thai non governmental Thai workers' rights organization.

Also at LTEC the benefit is different between temporary workers and permanent workers.

At Murata, if the company finds out that some of the subcontracted workers are union members then these workers will be fired immediately. One interviewed female worker (contract worker) of Murata said the medical test for the labour agency includes a pregnancy test. The workers have to pay themselves for the medical test. Also at *Murata*, women who become pregnant during the probation period will not obtain fixed employment. Also when women are found to be pregnant during the application the company will not offer her employment.

#### 5.4.3 Child Labour

No evidence of child labour was encountered in any of the factories investigated.

#### 5.4.4 Wages and overtime payment

At 6 production sites, *MMI*, *LTEC*, *Innovex*, *Fujitsu*, *Western Digital* and *Murata*, workers state their wage is not enough to cover the cost of living, let alone save money, although it meets Thai labour Law. They also point out they feel forced to work overtime in order to earn additional income to cover basic expenditures.

Comment LTEC: The legal minimum wage rate is periodically reviewed and adjusted by the Wage Committee to suit the economy and standard costs of living. The basic minimum wage rate is generally considered as appropriate and acceptable by the government, employers, and employees.

Workers at *Paragon* also mention a case of unjust wage deductions because that their annual bonus will be cut if they do not meet their production targets. They may loose up to 4/5 of their bonus.

At Western Digital the bonus is reduced in case of sickness

#### 5.4.5 Freedom of Association and the Right to Collective Bargaining

The findings with respect workers' freedom of association and the right to collective bargaining vary across production sites.

There is no union at *LTEC*. This can be explained by saying that the Northern region of Thailand is known for being really tough to unionise and as a subsequence the workers in this region are not familiar with unions. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there.<sup>27</sup>

At present there is no labour union at the *Fujitsu* Thailand factory. The main reason for this is that in 1998 after a major strike the company shut down and fired all the union leaders. It also started to hire more contract instead of regular workers, which makes it more difficult to set up a union. Workers indicate that in the past the company actively discouraged the formation of a trade union but this is less the case now. Nonetheless, workers feel that setting up a union is not possible.

\_

<sup>&</sup>lt;sup>27</sup> Interview SOMO with fieldworkers, October 2006, Bangkok.

There is no union at *Western Digital*, but only a welfare committee. It is not known what they do and whether they function on behalf of the workers. Workers feel it is very difficult to organise because they are all covered up with protective clothing, do not have time to talk and the breaks are very short. Workers are afraid they will lose their jobs when they start forming a union.

According to the workers at *MMI* are now 235 regular workers and 600 subcontracted workers. 80% of the regular workers are member of a union. Three years ago this location had 1600 workers of which 1400 union members. After a major labour dispute three years ago, all union members were laid off (1400!). This weakened the union to great extent; this is also called 'union bashing'. The current union members have a better relationship with the management since the management is replaced. The subcontracted workers do not join the union because they are afraid to be dismissed because of this. According to them, the union only supports the regular workers. The use of contract workers has reduced the unions bargaining power.

Comment MMI; Staff were laid off based on business exigencies and severance compensation as per labor law were provided. Not all union members were laid off. The past union chair is still employed by MMIT and he continues as the union lead in MMIT.

Moreover, in 2004 MMI successfully dismantled the trade unions at two of its other factories by spinning of these factories and making them subcontracted factories, with new workers via labour agencies and no trade unions anymore. The workers expect the same will happen at one of the two factories in Nawa Nakorn, at the moment workers of this factory experience quite some sabotage from the management.

Comment MMI: MPMT and MMI's Korat project [MPA] were expansions of MMI Group's business and have nothing to do with MMIT's operations. Management adhered to the CBA closely.

At *Innovex* there is no union. It seems as if workers are not aware of their right to form unions. They mention that there exists some kind of labour rights training but only supervisors attend. The workers indicate they are not informed nor invited about them. Allegedly, the trainings are not about labour rights but deal with issues like working hours and wages.

Comment Innovex: At every quarterly communication meeting, every employee is given the opportunity to submit questions or complaints and every submission is answered. There have also been regular, random skip level meetings with the workers by senior management. The safety committee, which has 4 daily production workers out of the 15 members, meets monthly. The Safety Officer performs daily facility walks to monitor compliance and look for potential problems.

Also at *Mektec* there is no trade union. The company does not seem to discourage the trade union actively but it rather provides alternatives to avoid trade union. The factory has set up an association for the workers, with activities as library services, renting CD and karaoke for the break time etc. Workers rights are not an item.

Comment Mektec: Mektec always encourages its employees to express their opinions regarding to their work. The company also set up systems for their employees to express their concerns or complaints through several activities. Furthermore, Mektec allows its employees to express their abilities through activities such as Quality Circles Committees (QCC) and several other improvement projecst.

At *Paragon* the management discourages the formation of a union by prohibiting people to talk with more than 5 persons together and states workers have to talk to the management when there are problems. The workers strongly feel that the management does not want a union in the factory. Hence, not surprisingly, so far no union has been formed at *Paragon*.

There is no union at *Murata*. Similar to *Innovex*, it seems that workers are not aware of the freedom of association and the right to collective bargaining. There are trainings which deal with working hours, pay rates ad the like in which only staff participates. When workers have complaints they can put them in a suggestion box but it seems that nothing is done with them.

#### 5.4.6 Excessive Working Hours and Intensive Production Rhythms

Table 5 presents an overview of regular and overtime working hours per production site.

During the time of the investigation there was due to limited orders not much work at *Innovex*. Workers indicate they want to work more but there is simply no work. This raises also problems. It is the company's policy to compensate workers during regular workdays. As a consequence, it forces workers to take up holiday when there is no work in order to avoid paying them salary. It regularly happens that workers show up at the factory but sent home again and told they have to use one of their rest days. Finally, workers also mention that when workers are ill they are only allowed to rest for two hours. If they need longer they have to take a sick day and lose their daily pay benefits.

At *LTEC*, workers mention that their regular workweek is 8 hours per day during 6 days a week. Moreover, they indicate they are forced to work overtime for an additional 4 hours per day and on Sundays. This means that working hours at *LTEC* exceed the ILO standard.

Comment LTEC: LTEC working hour is 8hours/day + overtime 2.5 hours/day (Max 10.5hours/day). LTEC adjusts the worker's working schedule to avoid 7 days working in a row. LTEC has not forced the workers overtime working and had got the consent of overtime working from the workers. LTEC ensures that the number of hours for working overtime and working on holidays should not exceed the 36hours / week. Thai law)

But even when LTEC workers work 10.5 hours per day instead of the 12 hours as claimed by the workers, LTEC still exceeds the ILO standard and the EICC.

At Murata workers state they work 12 hours per day, including overtime for five or six days per week, depending on the company's schedule. There is regular overtime work, depending on orders. If there is a large order workers overtime is compulsory also during holidays. If there aren't many orders, workers can take some holidays. Overtime and holiday pay is paid in accordance with company regulations.

At Innovex workdays are eight hours long, and the workweek is six days long, with Sundays off. During peak production workers overtime is compulsory. Currently there is not enough work so there is no overtime at all, moreover, workers are forced to take holidays even if they have showed up at the factory dressed and ready for work, only to be told that they must use one of their rest days, and the worker has no choice but to follow the orders

Comment Innovex: This is not Innovex practice. Over the past two and a half years, we have had two shutdowns (one in August 2006 and one in December 2006). Both of these shutdowns were announced well in advance, employees were paid half their daily wages and given the option of supplementing that pay by taking annual leave for the other half of the day.

At *MMI* the workers must work 12 hours per day. Overtime is automatically required. For the outsourced workers it is written into their hiring contracts that they must work 12 hours per day. A temporary worker was intimidated by the agency that he cannot refuse overtime and will get dismissed immediately in case overtime is refused. One interviewed worker said that if they refuse overtime on Sunday, their salary will be cut with 1 day salary. Her working schedule over 2006

showed that she worked 2 Sundays per month in the low season. The peak season was 4 months this year, in that period she worked every Sunday (thus 7 days per week, 12 hours per day).

Based on other interviews MMI: The employer requires the workers to work 36 hours of overtime per week. Often the workers have no opportunity to take any day off in a month. The only time off is when the shift is changed (one per month), where workers will have almost a whole day before they will have to go to work again. The workers will have to work 324 hours per month. The employer will inform on Saturday whether the workers will have to work the following Sunday. As for Monday through Saturday the workers must work 12 hours per day. If the workers don't want to work overtime they must provide the line leader with a reason. The line leader will at these occasions ask/plead/threaten the workers to stay as there is so much work to do.

Comment MMI: Overtime is performed only with the consent of our staff. We do not force our staff to work overtime if they do not agree to do so for whatever reasons that they may have.

At *Mektec* overtime is also forced by the management. Workers point out that in practice they cannot refuse overtime because only with a 'very good' reason they are allowed not to work. A normal working day is 10,5 hours for 6 days per week. During peak season they also work on Sundays which is about three months per year.

Comment Mektec: Regular working hour is 7 hours per day. Should there be any overtime in each day; Mektec would allow its employees to volunteer to work overtime. Mektec also makes sure that within one week, including their day off or any holidays, overtime would not exceed 36 hours per week. This is enforced by Thai Labor Law.

It would be better if Mektec refers to the EICC instead of referring to Thai labour Law which is legalising work weeks up 84 hours.

At *Paragon* overtime is not compulsory as is the case at *Mektec*. However, as wages are very low workers generally want to work more than the regular workday of 8 hours. The overtime is usually 3,5 hours. The company knows this and therefore has made overtime conditional on reaching the daily production target. In other words, workers are denied overtime if they do not reach the set production target, which is hard to meet.

Excessive working hours were also reported by some of the workers of *Fujitsu*, and *Western Digital*; 2-4 hours overtime plus overtime during the weekends is regular practice. This overtime is perceived as compulsory. At *Fujitsu* labourers stated that if they refused to work overtime without a very good reason they are put on a black list and receive warnings. After three warnings there is a chance you will be dismissed. In addition, it was reported that in case overtime is refused, the annual bonus is deducted, salary is cut or wage increases are not followed up. Further, workers said there are mandatory exercises of 15 minutes with music and trainer to prevent workers from falling asleep because they are so tired of the work.

At *Western Digital* workers indicate that supervisors threaten them with dismissal if they do not accept the overtime work. With 12-hour shifts, 7 days a week during peak season (which lasts 10 months a year according to workers) working hours in this factory are particularly excessive and unreasonable.

Finally, at *Mektec* and *Paragon*, workers are subject to degrading treatment and intensive production rhythms. Every month the manager is speaking to the workers just to yell and shout at them to make them work harder. Moreover, workers feel that targets are set which are impossible to complete. At *Paragon* there is also a weekly meeting with the supervisors to make them work

harder and the management threatens to close the factory in case they do not increase their efforts.

Comment Mektec: Yelling is not practiced within Mektec. Mektec has many other ways to encourage workers to work harder such Quality Circle Committee activities. Mektec set targets with careful consideration and we have exceeded our targets every year. Mektec to have records and evidence to support this. At Paragon there is a weekly meeting with supervisor to enhance workers attitude and guide them to work happily and effectively.

Table 5: Regular working hours and overtime per factory

Factory	Regular working hours	Regular Overtime	Comment
LTEC	8 hours, 6 days per week	2.5 according to LTEC, 4 hours per day according to the workers and every Sunday.	Compulsory overtime. 10.5 or 12 hours in each day, 63-84 hours per week.
MMI	8 hours, 6 days per week	4 hours per day and 2 out of 4 Sundays.	12 hours in total each day, 72-84 hours p.w.
Innovex	8 hours, 6 days per week	No overtime	48 hours p.w.
Mektec	8 hours, 6 days per week	2.5 hours per day. During peak production (about 3 months per year) also on Sunday	Compulsory overtime. 10.5 hours in total each day, 63-73.5 hours p.w.
Paragon	8 hours, 5-6 days per week	3.5 hours per day. During peak production (June-January) every day including Saturday and Sunday	11.5 hours in total each day, 57.5-80.5 hours per week.
Murata	8 hours, 5-6 days per week	4 hours,per day	12 hours in total each day, 60-72 hours per week.
Fujitsu	8 hours, 6 days per week	4 hours per day and 2 Sundays per month	Compulsory overtime
Western Digital	8 hours, 5 days per week	4 hours overtime per day. During peak season (10 months per year) a 12 hour shift, 7 days per week.	Compulsory overtime

Note: With regular overtime is meant overwork performed on a day-to-day basis.

#### 5.4.7 Health and Safety Conditions

At *LTEC* workers have mixed feelings about the working conditions. On the one hand, they point out that there is a nurse and on some days a doctor, sufficient protective gear and drinking water, trainings on hazardous chemicals and a clean canteen. On the other hand, they report there have been some minor and two major accidents in the factory, that several workers feel sick although they passed the annual health check, there are not enough toilets and protective clothing is not comfortable and is often not used because workers feel it prevents them from meeting production targets. Nonetheless, all and all it seems that *LTEC* takes working conditions serious. This is illustrated by the companies willingness to investigate the before mentioned accidents. *Comment LTEC: LTEC conducts health & safety education when they join the company. Protective equipments such as eye glasses, gloves, mask, helmet, and boots which is necessarily for their safety are provided and workers are required to wear protective clothing. LTEC displays sign boards to inform employees of hazards in the work place. The company does not set unrealistic production targets which can not be met with protective clothing.* 

Workers at *MMI* have a number of complaints concerning their working environment and are very concerned about their health and safety. First, the work *MMI* entails very heavy lifting. Second, the factory is very hot due to the casting oven with hot aluminium. The workers have heat rashes, sore and dry throats before they have completed their first year. Third, in the factory with the casting

oven, workers have to take out hot pieces with only simple cloth gloves. Further, as they are pressured to speed up – it is said that some workers even take amphetamine to work faster - there is not sufficient time to let the products cool off. Hence, sometimes the aluminium is splashing around, occasionally leaving skin burns in case it hits the workers. Fourth, workers complain about aluminium dust in the factory. When it rains, the water leaks which sometimes results in electrical sparks because the electrical plugs are all covered in aluminium dust, which serves as the leader of electrical current to the outside. The aluminium dust when wet turns into acidic waste with a foul smell. The workers complained about this pool of acid to the management but it has not been cleaned up. The factory building is old and workers are afraid it will collapse some day. Besides aluminium dust and lead dust there dust from the sand paper used for polishing the pieces. Some workers have to go regularly to the doctor to scrape out lead dust form the throat. When workers cannot take it any longer they will be replaced to another department but the problem remains. Fifth, the noise impacts the workers hearing. They are using headphones and mouth caps but they do not offer sufficient protection.

One female worker even fell sick and appeared to have aluminium dust in her longs. She only partly recovered and no improvements have been made since. Finally, the drinking water is not clean in both factories. To the astonishment of the workers a public health and safety inspection did not confirm their complaints.

Comment MMI: Workers' performance based on targets was developed by Industrial Engineers and is within stipulated standards. PPE is provided as appropriate, e.g. thick gloves for handling hot work. There were no cases of amphetamine consumption that MMIT is aware of and MMIT's clinic do not possess or prescribe such drugs. MMIT does not engage in the use of lead or its derivatives. PPE are provided as appropriate. There are also no records or medical reports of these mentioned OHS related, or cancerous cases. MMIT has an in-house Safety Committee with a certified Safety Officer. The Union Chair is a committee member of the Safety Committee. There was no complaint receive from the workers nor the union regarding insufficient toilets and unhygienic canteen conditions. A Canteen Committee, which is also comprised of mainly union committee members, oversees the proper operation of the canteen and the selection of the caterer. UV and filters are installed for the drinking water.

At *Innovex* workers point out that health problems include: Fatigued eyes, backaches, sore legs for workers who are forced to stand. For workers using magnifying lenses all day long, some suffer from fatigued eyes and migraine headaches; some have soreness in the eyes leading to headache. One worker said that workers "have swollen red eyes that look like they have stung by wasps and the have to stop working for a week to recover." There is sufficient fire equipment at the factory but to conserve electricity the lights close to the fire exit are largely dimmed. There are not sufficient toilets and workers must wait in line, and workers complain about the canteen. Some workers suffer from bladder diseases because they are forced to hold their urine. Some workers suffer from abdominal pains or swollen legs and don't know what is causing the pains. Apart from these concerns, workers are also worried about inhaling toxic fumes, because they don't know what chemicals they are inhaling and what the effects will be. During yearly health check-ups, they have told that their health is normal. Finally, workers report they are exposed to certain chemicals (including Borik Acid) because of limited or protective gear. Due to the bad working conditions work injuries happen regularly. Safety officers do come to inspect them but do not seem to write reports or undertake any action.

Comment Innovex: Low concentrations of Boric acid are used in the gold plate process and all industry standard safety standards are adhered to. Innovex provides personal protective equipment for every employees working with chemicals. We conduct regular internal audits and, as noted, were recently audited by BVQI (ISO certification agency) and certified for OHSAS 18001. Employee health conditions are monitored regularly. Innovex recognizes the potential hazards

associated with microscope work and has complied with or exceeded all safety standards. Innovex has 109 toilets which are more than required by Ministry of Labor. All areas that have chemicals or possible fumes have the accepted standard safety monitors and controls.

The testimonies of the workers about the H&S situation at Innovex are in contrast with the comments of Innovex management.

At *Mektec* health and safety conditions seem up to standard. There is a problem with aluminium dust but good protection equipment is provided for free. Every year there is an extensive medical check up: including blood test, urine tests, x-rays of the lungs. The more dangerous the work the more medical check ups. Nonetheless, workers report an accident with a machine. A worker warned the management that the machine was defect but she still had to work with this machine and hurt herself badly. The management paid the medical costs and her sick leave. The worker returned to work although her hand never healed completely.

At *Paragon* there are problems with dust. Before workers used protection masks but recently the company abolished them because it wants to save money (!) In addition, similar to *Innovex*, workers who use magnifying glasses extensively, experience trouble with their eyesight.

Also at *Murata* working conditions are up to standard. There is a health centre for which workers do not have to pay. There are also few accidents and if any they are taken seriously. Further, workers point out that there is sufficient protection for working with chemical products, a clean canteen and sufficient toilets. In general workers are satisfied with the working conditions. Nevertheless, some still report problems with their eyesight and backaches because of heavy lifting.

At *Western Digital* the main health and safety problems mentioned are aluminium dust and noise. The aluminium dust is in the "kitting out" room where electronics parts are being put together before going to the clean room. Some electronics parts first have to go to the washing room, before going to the "kitting out" and the clean room. The noise problem is in the washing room, where the work is very hard (male workers). The workers do wear big ear covers. In the clean room the main problem is the low temperature (17celsius) in the factory necessary for the production process and the chemicals they have to work with. Most clean room workers have problems with their skin (itching). It is likely that this occurs because they have to mix chemicals at the end of their shift before going home. All production workers of the clean room have to mix these chemicals, and one shift in the clean room contains about 1000 workers. When mixing the chemicals they still wear all their protective clothing. After the mixing the factory takes their protective clothes and washes them. The interviewed worker does not know what kind of chemicals they have to mix. But she thinks it's not healthy, because a lot of workers have problems with their facial skins.

#### 5.4.8 Awareness of Code of Conduct and Audits

Nome of the interviewed workers had any knowledge about codes of conduct and never seen any.

Several production sites (*LTEC*, *MMI*, *Innovex*, *Western Digital*, *Fujitsu* and *Murata*) have been visited by representatives of buyer companies but none of them has spoken with workers. It is also not clear what was the purpose of the visit: labour inspections or business.

Some buyers have audited *Western Digital*. According to the management social standards are not a requirement of the buyers. They only require occupational health and safety. Furthermore, *Western Digital* only asks its suppliers for ISO certificates, whether they are lead free or not and they do random checks on what kind of metals are used. The company does not check its suppliers on social standards.

Comment HP: HP is scheduled to audit Western Digital Thailand in 2007 and has completed the Malaysia audit. HP is working to influence our first tier suppliers to implement more rigorous supplier SER programs with their own suppliers and lack of a supplier management program is a common non-conformance found during HP audits.

Comment LTEC: LTEC distributed the Code of Conduct booklet to all employees. Employees had a meeting to learn about the Code of Conduct. LTEC undergoes several factory inspections per year by many customers for trouble shooting, periodically quality audits and environmental audits. Comment Seagate: Seagate has sent the Electronics Industry Code of Conduct (EICC) to their suppliers.

Comment MMI: Workers are briefed on Company Policy and Work Rules during orientation and via monthly communication meetings. MMIT policy and work rules are based on current Thai Labour Law B.E. 2541. MMIT is TS16949/ISO 9002 certified.

Comment Innovex: Innovex has a written policy and a reminder was sent by email to all employees from the COO reminding them of the policy as recently as November 2006. Several customers require information regarding workers conditions. Typically, customers cannot speak with the workers because very few of the production workers speak English.

#### 5.4.9 Summary of Violations

Table 6: Summary of EICC Violations in the Thai HDD Supply Chain

	LTEC	MMI	Innovex	Mektec	Paragon	Murata	Westerm Digital	Fujitsu
Labour							_	
Freely chosen labour								
Child labour avoidance								
Working hours more than 60 hours	Х	Х		Х	Х	Х	Х	Х
Working hours: forced overtime	Х	Х		Х	Х	Х	Х	Х
No minimum wage paid/ overtime not paid/ unreasonable wage deductions					х		Х	
Workers indicate it is not a living wage	Х		Х			Х	Х	Х
(in)Humane treatment				Х	Х			
Non discrimination	Х	Х				Х	Х	Х
Freedom of association	see note 1	х	see note 1	see note 2	Х	see note 2	see note 3.	Х
Health and safety								
Occupational safety		Х	Х		Х		Х	
Emergency preparedness								
Occupational injury and illness								
Industrial hygiene							Χ	Х
Physically demanding work		Х	Х					
Machine safeguarding								
Dormitory and canteen	Х	Х	Х					

Note 1 The Northern region of Thailand is really tough to unionise. Companies are reallocating their factories from other parts of Thailand to the Northern region because wages are lower, government incentives are higher and there are no unions there. According to interviewed labour groups the local police man play the role of hit man. They told the story of an organizer, trying to organise workers, who was shot for doing this but fortunately not killed. This happened between 1 and 2 years ago. More recently a researcher on workers rights was threatened and decided to go back to Bangkok. The workers in this region are not familiar with unions.

Note 2: in a few cases a welfare committee or workers committee are set up instead of (or to prevent) a union. But these committees do not represent the workers rights as unions can do. In some cases the main tasks of these committees are birthday parties, library services, and organising karaoke etc.

## 5.5 Apple's Hard Disk Drive Supply Chain in the Philippines

Figure depicts Apple's Hard Disk Drive (HDD) supply chain in the Philippines. Below, information on working conditions for six suppliers (including two second-tier supplier) of HDD manufacturers is reported.<sup>28</sup> Similar to the Thai HDD supply chain most suppliers produce equipment for more than one HDD manufacturer (indicated by the arrows).

#### Astec Power Phil. Inc.

Astec Power Phil. Inc. (hereafter Astec Power), in Cavite Philippines, established its manufacturing in 1994. It is 99.99% British, 0.003% Filipino and 0.001% American owned company. The parent company of Astec Power is a wholly owned subsidiary of Emerson which is headquartered in Carlsbad, California, USA and listed on the New York Stock Exchange. On April 28, 2006, Emerson acquired Artesyn Technologies and merged it with Astec Power (the parent company), creating the single largest power conversion supply manufacturer in the world. With over 25,000 employees, Astec/Artesyn is now the undisputed industry Leader. Astec Power has a total workforce of 4,000 employees in 275k sq ft. Its mission is for ACDC modules, servers, medium or high power custom and standard products. The company manufactures printed circuit boards of computer motherboards, magnetic coils for HDD, wiring coils, power supply for computers and machines, and DVD-EI. Customers of Astec are Sony, HP, Nokia, Fujitsu, IBM, LG, Compact and Certek Laguna. Products are exported to Japan, China, Europe and Panasonic. Local subcontracting companies of the company are APC,MEC, Maxxon, Petronics, DKP, Ultimate, P. Imes, Radix Philippines and Dae duck.

#### San Technology Inc.

San Technology Inc., (hereafter San Technology), a Japanese owned company, was established in Cavite, Philippines in November 8, 1988, to expand production of magnetic head cores for computers for its parent company Sumitomo Special Metals Corporation. In May 2003, the parent company decided to join the Hitachi Group: Hitachi Metals Special Metals decide to form a strategic business alliance; Hitachi metals acquired 32.9 % of the voting rights of Sumitomo special Metals from Sumitomo Metals Industries. In 2004, with effect from April 1, Sumitomo special metals Co, Ltd. And Hitachi Metals, LTD. merged their permanent magnet operations, with the view to expanding them under the new company name of NEOMAX CO. Therefore, since April 2004, San Technology is a subsidiary of Neomax Co.

The company has about 2000 employees; most of them were female workers. The youngest workers in the factory are 20 years old and there is no temporal employment because of the nohiring policy implemented by Hitachi since the merger in 2003. Products manufactured are chips inductors, printed circuit boards for computers and magnets for Hard disk drives. Apart from Toshiba, San Technology produces for Hitachi (Laguna), Samsung, Hanstar, Fujitsu, IBM, Main Aike and P.IMES & Hayakawa (CEPZ)<sup>29</sup>. Products are exported to Japan, Singapore, Korea, Malaysia, Taiwan, China and Indonesia.

#### **Mechanical Keyparts Philippines Incorporation**

Mechanical Keyparts Philippines (MKP) Incorporation (hereafter MKP) is a 99.99% Japanese and 0.01% Filipino owned company that was established on September 26, 2000 at Cavite Economic

<sup>&</sup>lt;sup>28</sup> Working conditions at Hitachi Global Storage are already discussed above and are therefore not addressed in this section.

<sup>&</sup>lt;sup>29</sup> Seagate/Maxtor indicated that San Technology is not one of their suppliers.

Zone. The company was designed for the assembly of carriage spacers for the hard disk drives. It has a labour force of about 1500 of which 25% are regular or fixed employees and 75% are agency hired or Labor-Only Contracting (LOC) workers, also known as Sunpiro. Apart from for Toshiba, MKP makes products for Nidec Subic, Nidec Laguna, Nissin Precision (Laguna), TRC and Kapco manufacturing and exports to Singapore, Japan, Malaysia and Thailand.

#### Micro-device Technology

Micro-device Technology (hereafter MD-Tech), separated from San Technology Inc. and established its own manufacturing production on January 1, 2005. It is fully owned by Sumitomo Metal Micro-Devices, Inc. In 2004 the company had a labour force of about 1,000 employees of which 70% were fixed and 30% were probationary employees. On 2006, after the company separated from San Tech, employment was lowered to 900, all fixed workers; 90-95% are females and 5%-10% are males. Its main products are printed circuit boards, flat screen TVs, hard disks, TV slides, DW rewind for computers, plasma displays which are produced for TMD, Samsung, Nanox, PIT, Toshiba, Nokia, SMDR, Panasonic, Hayakawa, and P. Imes.

#### **Tsukuba Die-casting Corporation**

Tsukuba Die-casting Corporation (hereafter Tsukuba), a 100% Japanese-owned company was established in the Cavite economic Zone (CEPZ) on April 9, 1996. The company has a total workforce of 1,000 of which 30% are regular and 70% are temporal workers. Among the latter, 30% are agency hired. Workers identified Toshiba as one of the clients of Tsukuba. Local subcontractors of the company are Kapco, P-ton and CAM Laguna. The company is a supplier of aluminium base for HDDs. It has a unique position of having two other small Japanese firms located with it in the same compound: KAPCO for coating of aluminium die-cast and P-TON for plastic injection. Thus, advantage of reducing production time, providing close communication, and interaction among the three firms, and reducing cost for the customer who has deal with only one firm with regard to product specifications. On the other hand, while having received instructions for specifications directly from Toshiba for the base and cover supplies, it must closely interact with Kapco for surface treatment and with P-Ton fro plastic injection parts. Such agglomeration economies originating from co-location of suppliers is exemplified by the fact that lower-tier suppliers Kapco and P-ton are located in the same compound as higher-tier supplier Tsukuba Diecasting.

#### Kent Adhesive Products Co.

Kent Adhesive Products Co. (hereafter Kapco), a 99.99% Japanese and .0025% Filipino was established on May 9, 1996 in Cavite Philippines. It is a manufacturer of surface coated hard disc frames and other coated products and electronic parts if similar feature. The identified products produced by the workers in the production were HDD 2.5-1.8, HDD base, SH cover, top cover and HDD plating for Fujitsu, MKP, EMECEM-Subic, PTON, Tsukuba and Bridgestone and exported to Japan and China. Around 500 workers are employed at Kapco. Most of the workers are agency hired by Sunpiro manpower agency. Kapco uses the following sub-contracting companies: MKP, Tsukuba, Dayap and Emecem.

#### Hitachi Global Storage Technologies Philippines Corporation

Hitachi GST was formed as a result of the strategic combination of IBMs and Hitachi's storage technology businesses. Hitachi Global Storage Technologies Philippines investments are focused on the manufacture of Hard disk drive (HDD) and HDD component parts such as head gimbal assembly or magnetic heads, slider and headstack assembly for, among others, IBM, Apple and Dell.. Subcontractors of Hitachi GST are the San Technology, Micro Device Technology (MD Tech)

and Luzon Magnetics. The company was established on May 11, 1994, is located in Laguna Technopark Inc. and employs about 7000 employees.

#### **Fujitsu Computer Products Corporation of the Philippines**

Fujitsu Computer Products Corporation of the Philippines is 100% Japanese and fully owned subsidiary of Fujitsu Limited in Japan. It was established in February 1, 1995 at Carmelry Industrial Park I-SEZ Canlubang, Laguna Philippines. Its line of business is for the manufacture of Magneto Optical Disk (MOD) Drives, Magnetic Hard Disk drives (HDD's), semi-finished computers, components parts and accessories. It was considered by PEZA as a Pioneering activity, FCPP expanded rapidly in its first 5 years of operation exporting its products to the United States, Europe, Japan and Southeast Asian countries. The HDD production started on April 1996. The company has a 6,158 total number of employee as April30, 2006 wherein; 5,443 (88%) are the operators which composed by 96% female and 4% male with 715 (11%) engineers, staff and technicians in which 65% are male and 35% are female. The products of the company are mainly supplied to its mother company which is the Fujitsu limited in Japan and also provided to Sun Micro/SAE and the products are exported to USA and China.

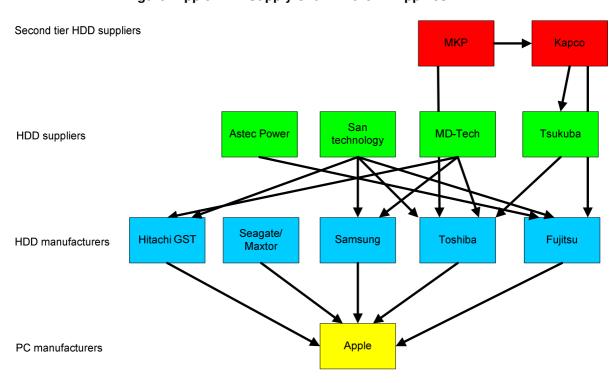


Figure: Apple HDD Supply Chain in the Philippines

## 5.6 Working Conditions in the Philippine HDD Supply Chain

#### 5.6.1 Employment is Freely Chosen

No evidence was found on forced or bonded labour.

#### 5.6.2 Discrimination

Most of the workers in the electronics factories were direct hired (not agency hired) Labor-Only contracting or the manpower agencies already existed in the zone in which there are factories that are supplied with workers by the agencies like in the case of *MKP*, *Kapco and Tsukuba*. It is beneficial for the companies hiring employees from LOC's since there will be no regularization of employment and no benefits / incentives will be spend on the workers.

*Astec* is practicing the hiring of apprentice employees where they will only give 75% of the minimum wage for the apprentices as legal regulations.

A number of unequal treatment or discrimination cases were found, mainly relating to discrimination of contract workers. In some factories contract workers were denied holiday (*Astec Power, Kapco*) and paid sick leave (*Kapco*). In the latter company the majority of workers work on a contract basis. Workers pointed out that the management of *Kapco* also discriminates on sexual orientation as it does not want to hire gay or lesbian workers.

At *Astec* the salaries of regular employees are paid on a monthly basis. The highest paid workers are those who have stayed in the factory for more than five years. They receive an average of PhP350 to PhP400 daily including benefits and incentives based on their monthly wage rate. On the other hand, contract workers receive only PhP254.00 on daily rate while apprentices receive 75% of the minimum wage computed at a daily rate.

At Fujitsu opportunity on training and promotion is not equal according to the interviewees, the one who were promoted and sent for training to other countries are those who were closely related or favorites of higher-positioned employees.

#### 5.6.3 Child Labour

At Fujitsu the youngest workers in the factory are aging 15 to 18 years old which are recommended or had been supplied by a identified community orphanage known for offering under aged workers. The company required parent consent signed by parents or guardians of the applicants.<sup>30</sup>.

### 5.6.4 Freedom of Association and the Right to Collective Bargaining

Explanation: Previous documentation and research by WAC revealed that the Sisters of Mary is an institution that gather teenagers from the rural and depressed areas, house them in a convent and provide their high school education under a scholarship program which is financed by philantrophic entities including Korean and Japanese investors. After graduation, the teenagers are assisted by the Sisters of Mary in seeking and applying for a job and provide their boarding houses until such time that they have gained a relatively stable job. In some cases, the Sisters of Mary are either sought out or have an agreement with certain companies where the teenagers would be brought after graduation. While in school, the students are trained with technical and homeroom skills and with obedient attitudes inside the convent where they stayed. Basically, the institution supply young, cheap and meek or docile labor to companies. Since teenagers graduate from high school usually at the age of 16 and are thus underaged or minors under Philippine labor laws, the company requires a parental or guardian consent to avoid prosecution with a violation of the Philippine Labor laws

In several factories violations of the freedom of association and the right to collective bargaining were reported. Company management is strictly prohibiting the workers on the memberships on unions and threatened them that the company will be closed or relocated whenever there were unions to be organized.

Workers at *MKP*, *Kapco* and *MD-Tech* pointed out that at these factories unions are strictly prohibited by the management.

At *San Technology*, it was mentioned that the workers had planned to organize a union back in 2003 but this was detected early on by the management. To bust the union, the company management immediately transferred some of the workers involved to different departments in order to make it difficult for them to meet and discuss their organizing plans. While some have been promoted to higher positions, specifically to sub-leader or to line leaders, none of the workers obtained higher supervisory or managerial positions. The explanation behind the promotions is that under Philippine labour law workers or employees who have supervisory or managerial functions cannot become members of a union of workers. If the union accepts members who have supervisory functions, their union registration will be revoked by the Department of Labour and Employment.

At *Tsukuba* there is no union in the company but there was a report that there was a plan to organize one last January 2006. However, when the management found out, they ordered the transfer of 10 workers into separate areas to prevent union formation.

#### 5.6.5 Wages and Overtime Payment

Workers at *Astec Power* and *Fujitsu* said their wage is not sufficient to cover living expenditures. At *Astec Power* they complained that they even have to pay for drinking water. At *Fujitsu* the wage rate is based on the hours of work of the workers with a daily target quota. Workers at *San Technology* and *MD*-Tech indicated they are satisfied with their wage. Workers at *MKP* and *Tsukuba* pointed out that the wage is sufficient for single workers but no enough to support a family of multiple persons.

At the time of the research the minimum wage was PhP254.00. The new wage order for a new minimum wage is PhP272.00 in the region where the companies are located. Apprentice workers receive 75% of that as provided for by the Philippine labour laws.

#### 5.6.6 Excessive Working Hours and Intensive Production Rhythms

Table 3 presents the regular working hours and overtime per factory for which information was found. In all the factories except *MD-Tech*, a few hours overtime per day is standard practice and in most cases the number of hours by far exceeds the ILO (48+12) maximum number of working hours. Moreover, in many factories overtime is compulsory, meaning that workers are forced to do overtime, and production rhythms are inhumane.

At *Astec Power*, *San Technology*, *MKP* and *Tsukuba* four hours per day overtime is normal and compulsory. Except for *Astec Power*, overtime on Sunday is mostly voluntary (although 'voluntary' at *MKP* means that workers need to have a good reason to refuse) but obligatory during peak production.

At Fujitsu working days of the workers depends on the production in which when the production is low, they are required to work for 8 hours a day, 6 days a week with 3 hours overtime while when the production is high, they should work for 4 hours daily, 8 hours Sunday overtime and the engineers for 5 hours overtime a day.

At *Hitachi Global Storage* regular working hours are 8 hours, six days per week for the first two weeks and 8 hours, 5 days a week for the last two weeks of the month. The workers render 8 hours regular work plus 3 hours of mandatory overtime daily. Sunday 8-hour overtime is not normal and happens only when the demand for production is high. There is no evidence that overtime is compulsory. Like in other factories, peak production has no regularity and depends on the volume of order of the customer.

In the Philippines, as may be deduced from the information gathered from the different factories it is normal and standard for a worker to render 12 hours (8 hours regular and 4 hours mandatory overtime) of work daily for 6 days with mandatory Sunday or rest day overtime when production is high.

Table 7: Regular working hours and overtime per factory

Factory	Regular working hours	Regular Overtime	Comment
Astec Power	8 hours, 6 days per week	4 hours per day and on Sunday during peak production	Compulsory on Sunday. 72-84 hours per week
San Technology	8 hours, 6 days per week	4 hours per day and on Sunday during peak production	Compulsory overtime. 72-84 hours per week.
MKP	8 hours, 6 days per week	4 hours per day and on Sunday	Overtime on Sunday is voluntary but workers need to ask permission not to work. During peak production overtime on Sunday is compulsory. 72-84 hours per week.
MD-tech	8 hours, 6 days per week	No regular overtime except during peak production.	Compulsory on Sunday during peak production. 48 hours per week.
Tsukuba	8 hours, 6 days per week	4 hours per day and on Sunday	Compulsory overtime. 72-84 hours per week.
Kapco	8 hours, 6 days per week	4 hours per day	Compulsory overtime. 72 hours per week.
Fujitsu	8 hours, 6 days per week	3 hours per in low season, 4 hours peak season and engineers 5 hours per day and on Sunday in peak season.	Compulsory overtime.66-91 per week.
Hitachi GST	8 hours, 6 days per week	3 hours per day. On Sunday during peak season	About 66 hours per week.

Note: With regular overtime is meant overwork performed on a day-to-day basis.

### 5.6.7 Health and Safety Conditions

The safety and health conditions vary significantly across factories. General complaints include: (1) bad working conditions in terms of temperature (Fujitsu), smell or dust (*Astec Power* and, *Tsukuba*), frequent small accidents such as cuts (*Astec Power*).

At *Kapco* workers pointed out that the production area is not fully ventilated. There are various reports of diseases (bronchitis, dizziness, sinusitis) and cough because of bad chemical odour and the lack of sufficient protective clothing. Workers also said there have not been improvements in working conditions since they started complaining.

Mentioned chemicals workers of *San Technology* work with are: Isopropyl alcohol, adhesives, UV-transparent, acetone, flux, lead, ammonia, silicon, nitric acid, and sodium hydroxide.

At *P.IMES* the chemicals or substances they were usually using were alcohol, acetone, soldering materials and paints.

At *Astec* chemicals or substances used in the production were IPA, flux, soldering materials, solvent, lead, araldite, residue, thinner, sunning bar, adhesives and thermal.

At *Kapco* chemicals that present in the production area were nitric acid, chromium, nickel and IPA. At *Tsukuba-die casting* chemicals or substances used in the production were molding materials, metal or iron, and cleaning chemicals.

In all factories protection materials are supplied.

Finally, for *Hitachi Global Storage* workers indicated that working conditions were in general very good. In particular workers praised the strong environmental commitment of *Hitachi Global Storage*, which aims to reduce the usage of harmful chemical substances.

#### 5.6.8 Awareness of Code of Conduct and Audits

Most of the interviewed workers did not known what a code of conducts is and for whom they are made. Some clients of a particular company visited the factory not to look at the condition of the workers but to inspect the production process because many of the products delivered to them were rejected. When speaking about the Corporate Social Responsibility (CSR) policy, workers told about the company policies, rules and regulations in the production for the customers' satisfaction and also for the environment management. Labour issues were not given too much attention by the company to be part of their CSR policy.

## 5.6.9 Summary of Violations

Table 8: Summary of EICC Violations in the Philippine HDD Supply Chain

	Astec Power	Hitatchi Global Storage	Fujitsu	San Technology	MKP	MD- Tech	Tsukuba	Карсо
Labour								
Freely chosen labour								
Child labour avoidance			Х					
Working hours more than 60 hours	Х	Х	Х	Х	Х		Х	Х
Working hours: forced overtime	Х		X	Х	Х	Х	Х	Х
no minimum wage paid/overtime not paid/unreasonable wage deductions	Х							
Workers indicate it is not a living wage	Х		Х		Х		Х	
(in)Humane treatment								
Non discrimination	Χ							Х
Freedom of association				Х	Х	Х	Х	Х
Health and safety								
Occupational safety	Χ						Х	Х
Emergency preparedness								
Occupational injury and illness								
Industrial hygiene								_
Physically demanding work								
Machine safeguarding								
Dormitory and canteen	Х							