



# Working Conditions in Thailand's Hard Disk Drive Industry

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**Albert ten Kate & Esther de Haan**

**Amsterdam, November 2010**

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## Colophon

### **Working Conditions in Thailand's Hard Disk Drive Industry**

November 2010

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## Introduction

Hard disk drives can be found in many products such as personal computers, mobile phones, audio/video, cars, computer networks, etc. Thailand is the world's leading manufacturer of hard disk drives (HDD). The exports of Thailand's HDD industry amounted to around 12 billion USD in both 2008 and 2009.<sup>1</sup> The world's leading HDD companies, Seagate, Western Digital, Hitachi Global Storage and Toshiba, account for the bulk of HDD production in Thailand.<sup>2</sup>

This policy brief focuses on the working conditions in Thailand's hard disk drive industry and is meant for stakeholders that are interested to get to know more about the working conditions in this sector. SOMO published a research report in 2007 on the labour conditions in the Thai electronics sector.<sup>3</sup> This policy brief follows up on this research report. The operations of three companies in this sector in Thailand are reviewed. The first two are Seagate and Western Digital, respectively the largest and second largest HDD manufacturer of the world. Together, the two companies employ more than 50,000 people in Thailand, predominantly women. The two companies outsource parts of the production process within Thailand. An example of this outsourcing is provided by the Donaldson company, which supplies filters for the disk drive industry. For this policy brief, Donaldson was also reviewed.

For the review of the three companies, the Thai Labour Campaign ([www.thailabour.org](http://www.thailabour.org)) provided data by interviewing workers and by having workers respond to a questionnaire. SOMO has drafted factsheets on the three companies, based on the field research of the Thai Labour Campaign and information provided by the companies on their webpages. These factsheets were reviewed by the companies, which information has been added to the factsheets.

SOMO, the Netherlands based Centre for Research on Multinational Corporations, aims to improve social and environmental conditions in the electronics sector. Among other activities, SOMO is involved in the makeITfair and Procure IT Fair projects and hosts the worldwide GoodElectronics network.

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<sup>1</sup> Thailand Board of Investment, "Thailand Investment Review", December 2009, <[http://www.boi.go.th:8080/issue\\_content.php?issueid=59;page=42](http://www.boi.go.th:8080/issue_content.php?issueid=59;page=42)>

Bangkok Post, "Record HDD exports forecast", 31 March 2010, <<http://www.bangkokpost.com/business/marketing/35323/record-hdd-exports-forecast>>

<sup>2</sup> Archanun Kohpaiboon, Thammasat University, "Hard Disk Drive Industry in Thailand: International Production Networks versus Industrial Clusters Faculty of Economics", 2009, <[https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=serc2009&paper\\_id=183](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=serc2009&paper_id=183)>

Isuppli, "Western Digital takes top spot in hard drive shipments", 1 June 2010, <<http://www.isuppli.com/Memory-and-Storage/News/Pages/Western-Digital-Takes-Top-Spot-in-Hard-Drive-Shipments.aspx>>

<sup>3</sup> SOMO, Irene Schipper & Esther de Haan, "Hard (Disk) Labour, Research Report on Labour Conditions in the Thai Electronics Sector", May 2007, <[http://somo.nl/html/paginas/pdf/Hard\\_disk\\_labour\\_NL.pdf](http://somo.nl/html/paginas/pdf/Hard_disk_labour_NL.pdf)>

## Conclusions

### Working 60 hours a week for 200 Euro per month

The usual working week of the workers at Western Digital and Seagate amounts to 60 hours, including twelve to fifteen hours of overtime work. The plants of Western Digital and Seagate in Thailand operate 24 hours a day, seven days a week. This means that the work includes night shifts. The working hours seem to be just in line with the requirements within the Electronic Industry Code of Conduct (EICC), as signed by Western Digital and Seagate. At Donaldson in Thailand, working weeks of 63 hours were reported by workers. This is not in line with the EICC. Donaldson, however, states it adheres to the requirements of the EICC, although it is not a signatory.

Among trade unions and civil society organisations a 48-hour working week is generally considered acceptable and should be sufficient for a normal family to live on. In addition, overtime work should never exceed twelve hours a week and should not occur on a regular basis. The Working Time Directive of the European Union prescribes that the average working time for each seven-day period, including overtime, does not exceed 48 hours in each Member State.<sup>4</sup>

The monthly income for workers at the three companies in 2009 averages around 200 EUR. This calculation is based on the minimum income, on working 60 hours a week, and some allowances. The salary may increase in line with years of service for the companies.

Both Seagate and Western Digital state that working overtime is voluntary, as prescribed by the EICC. Overtime work is, however, incorporated into the shift system in order to operate 24 hours a day. Western Digital has admitted that it is almost impossible to refuse overtime work at night by stopping at 4AM, as it is still dark then and the shuttle bus pick-up only arrives at 7AM.

### Paid time off work

Regarding pregnancy and maternity leave, no inconsistency with Thai labour laws have been found for Western Digital and Seagate. Western Digital even offers the possibility of taking 60 paid days extra, above the 90 days prescribed in the law. Workers have complained that Donaldson forces pregnant employees to do strenuous work, which is not in line with Thai labour laws.

Regarding paid time off work, the only information regarding Western Digital was gathered from workers and the company. Some workers complain that it is impossible to stay with their families for a longer period. Western Digital states that its management may not be able to accommodate the requests of workers when several employees want to take their leave at the same time.

### Lack of transparency

The Special Representative of the United Nations Secretary-General on Business and Human Rights, professor John Ruggie, has been working for three years on a framework to enhance the enforcement of human rights. His recent UN 'Protect, Respect, Remedy' Framework comprises also the responsibility of companies to respect human rights.<sup>5</sup> Ruggie stipulates that companies should

<sup>4</sup> European Union, "Council Directive 93/104/EC, concerning certain aspects of the organization of working time", 23 November 1993, <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31993L0104:EN:HTML>>

<sup>5</sup> United Nations Secretary-General's Special Representative on business and human rights, "Mandate consultation outline", October 2010, <<http://www.reports-and-materials.org/Ruggie-consultations-outline-Oct-2010.pdf>>

exercise due diligence, also in their supply chain. In this respect, due diligence means that companies must become aware of, prevent, and mitigate adverse labour rights impacts. Ruggie states that companies must not only exercise due diligence, but also disclose their due diligence on labour rights ('knowing and showing'). Due diligence should include transparency and accessibility to stakeholders.

With regard to transparency by Seagate and Western Digital, there is massive room for improvement:

1. Seagate and Western Digital both state that they have programmes in place to ensure that their suppliers follow the EICC Code of Conduct, including audits conducted by third parties. However, not a single audit is made public.
2. Seagate and Western Digital both state that they have grievance mechanisms in place, to encourage employees to speak up if they have complaints and/or are aware of an illegal or unethical situation in the workplace. However, neither company publicises the results of the grievance system. It is not publicly known how many workers know about the system, how many times it has been used by employees and what the complaints are about.

Through this lack of transparency, the value of the efforts by the companies with regard to their supply chain and grievance mechanisms could not be assessed during the course of preparing this paper. For Donaldson, no information at all was received about its supply chain activities or grievance mechanism.

### **Freedom of association**

Both Seagate and Western Digital have installed an employee elected Welfare Committee to represent all workers to management. This is, however, not a trade union, which should be established by workers themselves through free elections and able to act without intervention of company management and bargain collectively. Both companies state that their employees are made aware of their right to freedom of association. Interviewees working for Western Digital said that they do not dare to establish a union, fearing the consequences that may result from any form of behaviour deemed objectionable by managers. On Donaldson, no information was received with regard to the companies' position on freedom of association.

### **Health and safety**

Seagate and Western Digital both have extensive programmes with regard to safety and health in the workplace. The health programme includes medical surveillance to manage employee exposures. Figures on accidents and health problems are not published by the companies.

In the process of removing glue residues for slider tips, both companies use the solvents acetone and IPA (isopropyl alcohol). Western Digital also uses NMP (N-Methyl-2-Pyrrolidone). In general, long-term exposure to solvents like NMP, Acetone and IPA can cause permanent effects on the nervous system. The European Union has classified NMP as a possible toxic for reproduction, regarding both effects on fertility and developmental toxicity. Seagate did not respond to questions on how it manages the possible *long-term* health problems of (ex-) workers due to working with chemicals in the plants of Seagate. Western Digital maintains employees' health records for two years after they leave the company. The company states that it would also report an occupational health disease of an ex-employee to the Workmen Compensation Fund officer of the government, who will trace the record and provide a treatment. This may, however, only partly trace *long-term* health problems.

# 1. Western Digital

## 1.1 Corporate Information

Parent company		Western Digital Corporation	
Corporate headquarters	Lake Forest, California, USA		
Website	<a href="http://www.wdc.com">www.wdc.com</a>		
Net sales	Revenue July 2009 - June 2010: 9.9 billion USD (7.8 billion EUR)		
Business	<p>Western Digital is the world's second largest hard disk drive supplier. It manufactures hard disk drives (HDD) for almost every application of HDD:</p> <ul style="list-style-type: none"> <li>▪ personal computers</li> <li>▪ mobile phones</li> <li>▪ audio/video</li> <li>▪ cars</li> <li>▪ network-attached storage</li> <li>▪ external HDDs etc.</li> </ul>		
Stock market listed	New York Stock Exchange, symbol: WDC		
Manufacturing locations	<p>The main manufacturing facilities of Western Digital are in Malaysia and Thailand. The company enjoys long lasting tax holidays in these countries. The main suppliers to the company are also located in Asia.</p> <p>Manufacturing facilities Western Digital:</p> <ul style="list-style-type: none"> <li>▪ California: Fremont</li> <li>▪ Malaysia: Kuala Lumpur, Johor and Penang</li> <li>▪ Thailand: Bangpa-In and Navanakorn</li> </ul>		
Highlighted in this factsheet	Western Digital (Thailand) Company Limited		
Locations WD Thailand	<ul style="list-style-type: none"> <li>▪ Bangpa-in industrial estate</li> <li>▪ Bangpa-in district</li> <li>▪ Ayutthaya province</li> <li>▪ Navanakorn industry estate</li> <li>▪ Klong Luang district,</li> <li>▪ Pathumtani province</li> </ul>		

The Thai Labour Campaign ([www.thailabour.org](http://www.thailabour.org)) provided information on the working conditions of the employees in the sector as of late 2009. On Western Digital their information is based on a two-page questionnaire filled in by sixteen employees, three in-depth interviews with workers, and in-depth interviews with five Human Resources and Safety managers. Additional information was found on the website of Western Digital, among others in the annual report. Before its release, a draft factsheet was sent for review to Western Digital. The company responded by notifying SOMO of some factual misunderstandings and additional information, which have been corrected and incorporated in the factsheet as presented in this document.

## 1.2 Description of Western Digital Thailand

During 2009 Western Digital Thailand (WD Thailand) employed 39,000 workers at two plants: Bangpa-in 29,000 workers; Navanakorn 10,000 workers. About 90 percent of the workers are female.

The facility in Bangpa-in undertakes the following activities: slider fabrication; assembly of hard disk drives; assembly of head gimbals and head stacks; research and development. The main activities of the manufacturing facility in Navanakorn comprise the assembly of hard disk drives and head stacks. The main customers of Western Digital Thailand include companies such as Dell, Hewlett-Packard, Sony and Toshiba. For the six months ending on 1 January, 2010, Dell and Hewlett-Packard each accounted for at least 10% of the consolidated revenue of the Western Digital Corporation.<sup>6</sup> For the entire bookkeeping year 2010, no single customer accounted for 10% or more of its revenue.<sup>7</sup>

### 1.3 Working hours

The plants of WD Thailand operate 24 hours a day, seven days a week. According to the interviews with the workers they usually work five days in a row and take a day off on the sixth day. This converts to working 5.5 days a week and almost 24 days per month. According to the completed questionnaires and the interviews, the total working week of the workers will be around 60 hours. The working hours at Western Digital seem to be just in line with the requirements within the Electronic Industry Code of Conduct (EICC), as signed by Western Digital. The EICC requires that a working week should not exceed 60 hours.

The daily wage workers have two shifts: day shift 7AM-7PM; night shift 7PM-7AM. The shifts include almost eight normal working hours, three hours overtime work, a 50-minute break and a 30-minute break. Each production worker will change shifts every week.

The Electronic Industry Code of Conduct states that employees should be allowed to refuse overtime work. According to Western Digital the daily wage workers have the right to refuse overtime and may leave after eight hours. The company admits, however, that during night shifts almost no one goes home at 4AM, as it is still dark then and the shuttle bus pick-up only arrives at 7AM. This means that in practice it is almost impossible to refuse overtime work at night.

### 1.4 Wages and paid time off work

In 2009, workers received the minimum wage, as established in the Ayutthaya (Bangpa-in plant) and Pathumtani (Navanakorn plant) provinces, during their first year of service for WD Thailand. The minimum wage was 173 respectively 203 Baht a day for eight normal working hours. The wage can be increased in line with years of service, though many workers with 1 to 5 years of service are still paid the minimum wage. In 2010, WD Thailand has standardised its worker's starting rate throughout Thailand, paying a daily wage of 205 Baht in all WD facilities in Thailand. This is the minimum wage in the Pathumtani province, and above the minimum wage in the Ayutthaya province.<sup>8</sup>

In addition to the wage for normal working hours, workers earn money by doing overtime work (at 1.5 times the normal hourly payment) and working on the one fixed day in the week that is designated to be a holiday by law in Thailand. During this so-called holiday workers earn 2 times the normal hourly payment and 3 times the normal hourly payment during overtime hours.

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<sup>6</sup> Western Digital, "Quarterly report", 29 January 2010, page 12, <[http://phx.corporate-ir.net/phoenix.zhtml?c=61500&p=irol-sec&control\\_selectgroup=Quarterly%20Filings](http://phx.corporate-ir.net/phoenix.zhtml?c=61500&p=irol-sec&control_selectgroup=Quarterly%20Filings)>

<sup>7</sup> Western Digital, "2010 Annual Report and Form 10-K", 2010, August 2010, page 66, <[https://materials.proxyvote.com/Approved/958102/20100916/AR\\_67523/images/Western\\_Digital-AR2010.pdf](https://materials.proxyvote.com/Approved/958102/20100916/AR_67523/images/Western_Digital-AR2010.pdf)>

<sup>8</sup> Thailand, Ministry of Labour, "Minimum wage from 10 April 2010 onwards", <[http://www.mol.go.th/en/employee/interesting\\_information/6319](http://www.mol.go.th/en/employee/interesting_information/6319)>

Above the legal requirements, the workers receive a night shift allowance (30 Baht each time), and an attendance allowance (ranging between 400 and 900 Baht per month; depending on actual attendance). The attendance allowance increases to a maximum of 100 Baht per month. In order to get the bonus employees have to be punctual and no unauthorised absence from work is accepted. If workers are even once 5 minutes late, it means that for the following period the attendance allowance will go down to the minimum. The average monthly income for workers over 2009 at the Bangpa-in plant is estimated by SOMO at around 8,400 Baht (177 EUR), for the workers at the Navanakorn plant it is around 9,500 Baht (200 EUR). This calculation is based on the minimum income, on working 60 hours a week, night shift allowance, and the minimum attendance allowance.

Daily workers get paid on 13 public holidays and are eligible to take between six and twelve days of leave each year, depending on the employees' years of service. This is in line with the requirements of the Thai Labour Protection Act. Some workers complain that it is impossible to stay with their families for a longer period. Many workers hail from the North and North-east, so they need a few days to travel. The workers also state that it is often difficult to get annual leave on their preferred days. Western Digital states that its management may not be able to accommodate the requests of workers when several employees want to take their leave at the same time.

## 1.5 Pregnancy and maternity leave

Female workers need to inform the management after three months of pregnancy. Pregnant employees do not work overtime hours and get no attendance allowance, as in line with the Thai labour laws. The policy of WD is to have pregnant daily employees working office times; Monday to Friday from 07.30AM to 5PM. Given 22 working days per month, their wage is around 6,500 Baht per month. This calculation is based on the minimum starting rate. Employees who have been with the company longer may receive more.

WD workers may start maternity leave during the 8<sup>th</sup> month of pregnancy. Under local law, pregnant employees are eligible to take a pregnancy leave of ninety days. During that time, Western Digital pays the employees' wages for 45 days and social security pays wages for the remaining 45 days. The salary is reduced to around 5,400 Baht (for those employees who are earning the starting rate) as they won't get any other allowances during this leave.

Western Digital states that its workers are able to take a total maternity leave of 150 days with pay.<sup>9</sup> This possibility of taking 60 days extra, in addition to the 90 days prescribed by law, is called advance leave. For pregnant employees who take advance leave the monthly earnings are also around 5,400 Baht. Advance leave is on voluntary basis. According to WD, employees who opt to take advance leave do so to return to their home town.

## 1.6 Occupational health and safety

Western Digital provides its employees with training on safety and health aspects. Apart from the training, there are notices in the workplace to highlight correct work practices and to warn about chemical hazards and chemicals' long-term health impacts. With regard to the safety of employees, the company states that: a) it also has operational controls in place; b) it is audited by a certified third

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<sup>9</sup> Western Digital, presentation "Corporate Social Responsibility and Labor Rights", by Gary Meister (CIO, Sr. VP Worldwide Customer Satisfaction), November 2009, <[www.bcsd.org.tw/20091202acer\\_csr/11.WD.pdf](http://www.bcsd.org.tw/20091202acer_csr/11.WD.pdf)>

party auditor twice a year on safety and environmental issues; c) managers are held accountable if there are safety issues at the facilities.

Regarding health consequences for employees, the company states that it provides medical check-ups for employees. Additional health screenings are conducted for employees who work in risk areas such as those areas where there is potential exposure to chemicals. If the employee shows heightened exposure levels, the employee will be transferred to work in a non-risk exposure area, and the Occupational Health doctor will consult the employee and trace further recordings and provide a treatment. Employees' health records are kept and are traceable, including employees who have left the company. These records are maintained for two years. Furthermore, if an employee has an occupational health disease, under Thai law the company is responsible to report this information to the Workmen Compensation Fund officer of the government, who will trace the record and provide a treatment. Western Digital states that this step would be taken regardless of whether or not the employee works for the company at the time the disease is recognised. In general, long-term exposure to solvents like NMP, Acetone and IPA may cause permanent effects on the nervous system.

WD workers in the slider fabrication division use the solvents NMP (N-Methyl-2-Pyrrolidone), acetone and IPA (isopropyl alcohol) in the process of removing glue residues for slider tips. NMP is irritating to the eyes and the skin. Exposure to NMP has been connected to reproductive disorders in tests on animals. The European Union has classified NMP as a possible toxic for reproduction, regarding both effects on fertility and developmental toxicity.<sup>10</sup>

According to the interviewed workers, facemasks protect only against 80 percent of the adverse health effects. Workers characterise the chemicals as follows: "an acrid smell that causes a stinging sensation in the nose and eyes, along with a feeling of giddiness." From the interviews it was learned that some workers choose not to wear the masks. The moisture from exhalation clouds the goggles, obstructs vision and thus makes work impossible. WD does not allow not wearing masks, but some workers complain the company speeds up production so much that they cannot protect themselves as it should be. These things happen also in the night shift, when workers are often sleepy and passive.

## 1.7 Certification of the plants

The plants of Western Digital in Thailand are ISO 14001 certified for their environmental management, ISO 9001 certified for their quality management, and OHSAS 18001 certified for occupational health and safety management.<sup>11</sup> According to WD, every six months an audit is carried out by the British Standard Institute, the third party certified agency, to ensure its ability to maintain the management standards.

## 1.8 Freedom of association

According to WD, a Welfare Committee is elected by employees every two years, representing the employees' interests in Thailand. This is, however, not a trade union, which should be established by

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<sup>10</sup> European Union, Commission Regulation (EC) No 790/2009, 10 August 2009, "Amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures", page 20, <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:235:0001:0439:en:PDF>>.

<sup>11</sup> Western Digital, "Global Citizenship Health and Safety", <<http://www.wdc.com/en/company/globalcitizenship/healthsafety.asp>>

workers themselves through free elections and able to act without intervention of company management and bargain collectively. Interviewees said that they do not dare to establish a union, fearing the consequences that may result from any form of behaviour deemed objectionable by managers. WD states it does recognise the worker's basic right to establish their own labour organisation, and that its employees are made aware about the right to freedom of association during trainings.

## **1.9 Grievance mechanism**

WD states it has a grievance system in place. It encourages its employees to give feedback and/or make complaints directly to their supervisors and/or other members of management. The company also offers various other channels for employees to voice (anonymous) complaints, such as grievance boxes, a Hotline number (a free direct call to an outside company who collects information anonymously and reports that information to senior management at WD Headquarters in the US), and the e-Voice Out programme (which enables employees to file complaints by email that are collected by the HR team who responds to the issue in a public forum).

Western Digital does not publicise the results of the grievance system, for example how many workers know about the system, how many times it is used by employees and what the complaints are about. WD confirms that the hotline is being used by workers in Thailand and that the receivers of the calls are able to speak Thai. Once the hotline operator receives a complaint, a report will be generated with a tracking number on it. This information will be relayed to Western Digital and an investigation will take place. When the investigation is concluded, the Human Resources director will take appropriate action and will report the findings back to the hotline. The employee can call back to the hotline using the tracking number for updates. WD states that complaints have been made by employees in Thailand and Malaysia and that appropriate action has been taken after investigation into these complaints.

## **1.10 Supply Chain Responsibility**

WD has a programme in place to ensure that its suppliers follow the EICC Code of Conduct. To ensure that the Code is being enforced at the supplier level, WD performs EICC audits on its suppliers on a regular basis. The company requests that its key suppliers engage a third party auditor to identify any gaps in compliance with the Code and to provide WD with action plans if necessary. WD states that its first tier suppliers will be responsible for the following tier and WD will get involved immediately to help resolve any issues identified.

## 2. Seagate

### 2.1 Corporate Information

Parent company	Seagate Technology	
Corporate headquarters	Scotts Valley, California, USA	
Website	<a href="http://www.seagate.com">www.seagate.com</a>	
Net sales	Revenue July 2009 - June 2010: 11.4 billion USD (9.1 billion EUR)	
Business segments	<p>Seagate is the world's largest hard disk drive supplier. It manufactures hard disk drives (HDD) for almost every application of HDD:</p> <ul style="list-style-type: none"> <li>▪ personal computers</li> <li>▪ mobile phones</li> <li>▪ audio/video</li> <li>▪ cars</li> <li>▪ network-attached storage</li> <li>▪ external HDD's etc.</li> </ul>	
Stock market listed	NASDAQ, stock symbol: STX	
Manufacturing locations	<p>The main manufacturing facilities of Seagate are in Singapore, Thailand, China and Malaysia. The company enjoys long-lasting tax holidays in these countries. The main manufacturing facilities of suppliers to the company are also in Asia. Manufacturing locations:</p> <ul style="list-style-type: none"> <li>▪ Singapore: Ang Mo Kio (drives and product development), Woodlands (media)</li> <li>▪ Thailand: Korat (drives and drive subassemblies), Teparuk (drive subassemblies)</li> <li>▪ China: Suzhou (drives), Wuxi (drives and drive subassemblies)</li> <li>▪ Malaysia: Penang (drive subassemblies) and Johor (substrates)</li> <li>▪ USA and Northern Ireland: recording heads</li> </ul>	
Highlighted in this factsheet	Seagate Technology (Thailand) Limited	
Thailand locations	<ul style="list-style-type: none"> <li>▪ Korat</li> <li>▪ Sung Noen district</li> <li>▪ Nakhon Ratchasima province (drives and drive subassemblies)</li> <li>▪ Teparuk, Muang district,</li> <li>▪ Samut Prakan province (drive subassemblies)</li> </ul>	

The Thai Labour Campaign ([www.thailabour.org](http://www.thailabour.org)) provided information on the working conditions of employees in the sector as of late 2009. For Seagate Thailand their information is based on a two-page questionnaire filled in by ten employees and five in-depth interviews with workers. Additional information was found on the website of Seagate, among others in the annual report. Before its release, a draft factsheet was sent for comments to Seagate. The company responded by notifying SOMO of some factual misunderstandings and additional information, which have been corrected and incorporated in the factsheet as presented in this document.

## 2.2 Description of Seagate Thailand

The plants of Seagate in Thailand employ more than 13,000 people, predominantly women. The production exceeds 50 million HDDs annually.

Automated machines at the Korat plant have the capacity to produce one HDD every four seconds. However, several steps of repetitive manual production by workers are also involved. The plant in north-eastern Thailand employs 10,000 workers. The Teparuk plant, employing 3,500 workers, produces only sliders or head stacks for other branches of Seagate.

Among the main customers of Seagate Thailand are Hewlett-Packard and Dell. For the fiscal years 2008 through 2010, Hewlett-Packard and Dell accounted for approximately 16% and 11%, respectively, of Seagate's consolidated revenue in each year.<sup>12</sup>

## 2.3 Working hours

According to the completed questionnaires and the interviews, the working week of the workers usually amounts to 60 hours. This is just in line with the prescriptions of the Electronic Industry Code of Conduct (signed by Seagate).

The plants of Seagate operate 24 hours a day, seven days a week. For daily wage workers, there are two shifts: day shift 6AM-6PM; night shift 6PM-6AM. The day shift includes seven normal working hours, a one-hour lunch break, 3.5 hours overtime work and a 30-minute break. Most of the workers work 24 days a month. Usually they include overtime hours in their schedule. Seagate states that working overtime is voluntary.

## 2.4 Wages

In 2009, workers received the minimum daily wage as established in Samut Prakan (203 Baht), respectively Nakhon Ratchasima province (173 Baht), during their first year of service for Seagate Thailand. The minimum wage is calculated for seven normal working hours. The daily wage is increased in line with years of service and an annual performance rating.

Above the wage for normal working hours, workers earn money by doing overtime work (1.5 times the normal hourly payment). In addition, there is one day in the week (which day is to be decided by the employer) considered to be a holiday by law in Thailand. During these days workers earn two times the normal hourly payment and three times the normal hourly payment during overtime hours.

Above the legal requirements, workers receive a day shift allowance (10 Baht each time) and a night shift allowance (30 Baht each time). In contrast to many other contracting manufacturers, Seagate does not have any incentive/attendance allowance. Workers receive an annual wage supplement equivalent to their daily wage rate multiplied by 30 days and an annual variable bonus based on the company's financial performance results.

The average monthly income for workers over 2009 at the Theparak plant in Prakan province is estimated by SOMO at around 9,300 Baht (194 EUR). For the workers at the Korat plant in Nakhon

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<sup>12</sup> Seagate Technology, "Form 10-K, annual report for the period ending 2 July 2010", 20 August 2010, <<http://files.shareholder.com/downloads/SEA/1045408267x0xS1047469-10-7649/1137789/filing.pdf>>

Ratchasima province it is 8,600 Baht (180 EUR). This calculation is based on the minimum income, working 60 hours a week, shift allowance and the annual wage supplement.

## **2.5 Pregnancy and maternity leave**

Seagate does not require a pregnant employee to work between 10PM to 6AM, to work overtime or to work on a holiday. Female workers are asked to inform management upon realising they are pregnant in order to ensure that they can be appropriately accommodated. The monthly income of pregnant women decreases drastically during their pregnancy, as Thailand labour law prohibits them from working overtime or holidays while pregnant. The policy of Seagate is in line with Thai labour laws. Female employees are eligible to take maternity leave for each pregnancy for a period not exceeding 90 days including holidays. Seagate pays maternity leave, consisting of 100% of their base pay, for a period not to exceed 45 days. The remaining 45 days are paid by social security.

## **2.6 Precarious work**

During 2008 and the beginning of 2009, about 2,000 workers at Seagate Thailand were dismissed due to the global economic crisis. Most of them chose voluntary dismissal. After customer demand resumed, Seagate recruited 500 contract workers in both the Teparuk and Korat plant. Priority was given at that time to hire back those workers who previously left the company in 2009. However, the majority of these workers did not return.

Seagate states that agency workers are utilised to maintain flexibility in operations when a significant fluctuation in customer product demand is anticipated. Presently, about 1,000 agency workers are part of the Korat workforce (totalling 10,000 workers) in north-eastern Thailand, according to the company. At present no agency workers are utilised in Teparuk.

Seagate also employs contract workers. These workers have to pass a 119-day internship and to score more than 80 points of working assessment, before they will be employed as regular daily wage workers.

## **2.7 Occupational health and safety**

Seagate provides its employees with training on the health and safety aspects of the EICC Code of Conduct. There is also a range of notices to draw employees' attention to health and safety aspects. There is equipment to enhance the safety and health of the workers, like smoke and dust vacuum machines attached to workers' desks in the Clean Room and electric fans to eliminate dust. Levels of dust and noise are monitored.

Seagate workers in the slider fabrication division of the Korat plant use the solvents acetone and IPA (isopropyl alcohol) in the process of removing glue residues for slider tips. From the questionnaires and interviews with workers it was learned that some employees suffer from eyestrain. Seagate states that each employee undergoes an eye examination yearly as part of the company's annual health evaluation programme, and that there has been no indication of any work tasks associated with eyestrain. According to the company, assessments of all work areas are conducted on a regular basis to identify potential physical and chemical hazards.

Worldwide, Seagate has implemented Standard Operation Procedures (SOPs) which detail requirements related to the identification and management of environmental, health and safety (EHS) related risks at the site, including a medical surveillance programme to manage employee exposures.<sup>13</sup> Seagate claims its internal standards on exposure are much better than acceptable worldwide standards. There is a third party audit programme in place to provide independent validation on site compliance to Seagate's SOPs and local requirements. In August 2009, for the third year running, the Korat plant received an award from Thailand's Ministry of Labour for outstanding safety, health and environmental standards in the workplace.<sup>14</sup>

Seagate Thailand conducts health evaluations for all employees on an annual basis. The examination includes a baseline examination component and, depending on the type of work, additional components are included as relevant for early identification of health issues with potential for association with assigned work. Seagate did not respond to questions on how it manages the possible *long-term* health problems of (ex-) workers due to working with chemicals in the plants of Seagate.

## 2.8 Certification of the plants

The plants of Seagate in Thailand are ISO 14001 certified for their environmental management, ISO 9001 certified for their quality management and OHSAS18001 certified for occupational health and safety management. Third party audits are carried out on a regular basis to ensure Seagate's ability to maintain the management standards. The plants are also certified on labour management and compliance of Thai Labour Standard 8001:2003 (TLS8001:2003). The annual recertification by the third party for 2010 at Korat plant will be done in August 2010.

## 2.9 Freedom of association

Seagate states there is no trade union representing the workers. Some employees are directly elected by their colleagues in a Welfare Committee, to represent all workers to management. This is, however, not a trade union, which should be established by workers themselves through free elections and able to act without intervention of company management and bargain collectively. Seagate states that it explicitly communicates their right to organise in labour unions and engage in collective bargaining to the workers. However, it is not clear to what extent Seagate makes its employees aware about the right to freedom of association and whether trade unions are allowed to recruit among workers.

## 2.10 Grievance mechanisms

Seagate states that it encourages employees to speak up if they are aware of an illegal or unethical situation in the workplace, by talking with a supervisor, a human resources representative, or a site security manager. The Welfare Committee could also be a channel for this. Finally, Seagate provides a 24-hour per day, 7-days per week toll-free Ethics Helpline to report any of the following: violation of the law, including theft or fraud; falsification of documents; insider trading; conflicts of interest; abuse of confidential information, violations of any Seagate policy. The Helpline is staffed by an independent, third-party vendor that has operators who speak a variety of languages. Callers may choose to report

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<sup>13</sup> Seagate, "Management Systems and Audits/Controls", <[http://www.seagate.com/www/en-us/about/global\\_citizenship/health\\_safety/management\\_systems\\_and\\_audits\\_&\\_controls/](http://www.seagate.com/www/en-us/about/global_citizenship/health_safety/management_systems_and_audits_&_controls/)>

<sup>14</sup> Seagate, press release "Seagate Korat Receives Thailand's National Outstanding Safety Factory Award For The Third Consecutive Year", August 2009, <<http://www.seagate.com/www/v/index.jsp?locale=en-US&name=null&vqnextoid=bcfc8207585f2210VgnVCM1000001a48090aRCRD>>

anonymously. Callers are provided with a 'case number' and are invited to call back to the help line, and provide the case number to receive updates on their matter.

Seagate does not publicise the results of the grievance system, for example how many workers know about the system, how many times it is used by employees and what the complaints are about.

## **2.11 Supply Chain Responsibility**

Seagate requires all of its suppliers to sign the EICC code of conduct and abide by the code. New Supplier contracts include EICC provisions. Key suppliers are required to complete an EICC Self Assessment Questionnaire as part of the Seagate Quarterly Business Review (QBR). In the past Seagate has participated in the EICC joint audit. Seagate will conduct a validated third party audit on 25% of any high risk suppliers. Corrective action summary information is also required for all high risk suppliers.

## 3. Donaldson

### 3.1 Corporate Information

Parent company	Donaldson Company, Inc.	
Corporate headquarters	Minneapolis, Minnesota, USA	
Website	<a href="http://www.donaldson.com">www.donaldson.com</a>	
Net sales	1.9 billion USD (1.4 billion EUR) for the year ended 31 July 2010	
Business segments	Donaldson provides air or liquid filtration. Net sales year ended July 31, 2010 in segments: <ul style="list-style-type: none"> <li>▪ Engine products: 1,094 billion USD</li> <li>▪ Industrial filtration solutions: 455 million USD</li> <li>▪ Gas turbine systems: 150 million USD</li> <li>▪ Special applications (mainly filters for hard disk drive and semiconductor industries): 178 million USD</li> </ul>	
Stock market	New York Stock Exchange, symbol: DCI	
Production filters for hard disk drives	<ul style="list-style-type: none"> <li>▪ China (Wuxi)</li> <li>▪ Thailand (Rayong)</li> <li>▪ Japan (Tokyo)</li> </ul>	
Highlighted in this factsheet	Donaldson Thailand Ltd, <a href="http://www.donaldson.co.th/">www.donaldson.co.th/</a>	
Location	7/217 Moo 6, Amata City Industrial Estate, Tambon Mabyangporn, Pluakdang district, Rayong province.	
Business	Filters for hard disk drives	

For this factsheet, the Thai Labour Campaign ([www.thailabour.org](http://www.thailabour.org)) provided information on the working conditions as of late 2009. Their information is based on a seven-page questionnaire filled in by 30 employees and an interview with a group of ten workers. The Thai Labour Campaign also made use of reports written by the president of the ITF labour union.

Additional information was found on the website of Donaldson, e.g. in the annual report. Before its release, a draft factsheet was sent for comments to Donaldson. Donaldson has send back two pages of general information about the company and its Thai subsidiary. The company did not respond to specific questions raised by SOMO nor did it provide a detailed response to the findings in the draft factsheet.

### 3.2 Description of Donaldson Thailand

Donaldson Thailand produces filters for hard disk drives (HDD). Its customers include all the major disk drive manufacturers. At the beginning of 2009, there were around 1,100 workers within Donaldson Thailand. During the economic crisis, Donaldson fired more than 300 workers. December 2009, another 371 workers were dismissed. The workforce is predominantly female. In 2010, the workforce comprises around 1,000 workers.<sup>15</sup>

<sup>15</sup> Donaldson company, Becky Cahn, Corporate Communications Manager, "Company Facts Thailand", response to draft factsheet SOMO, 13 September 2010.

### 3.3 Working hours

The workers of Donaldson Thailand make long hours, seriously risking workers' suffering strain injuries. According to the filled-in questionnaires and interviews with workers, the working week amounted to 63 hours since 2004, of which 48 hours were normal working hours and fifteen hours were compulsory overtime hours.

Working weeks of 63 hours are not in line with the prescriptions of the Electronics Industry Code of Conduct (EICC), which is supported by dozens of large electronics companies throughout the world. The EICC states that 'a workweek should not be more than 60 hours per week, including overtime, except in emergency or unusual situations.'<sup>16</sup> Donaldson, however, states it adheres to the requirements and spirit of the EICC.<sup>17</sup>

Donaldson has not adopted the EICC, in contrast to main customers of the company, like Western Digital, Seagate and Hitachi.<sup>18</sup> In this case the main customers have apparently not applied the code of conduct to their supply chain.

### 3.4 Wages

The worker's wages of Donaldson Thailand are in line with the prescriptions of Thailand's Labour Protection Act. The average monthly income of daily wage workers (normal working hours, overtime, shift payments, and incentive/attendance allowance) was about 10,000 - 11,000 Baht (209 – 230 EUR) in 2009. Above this income workers yearly receive a bonus of 1.6 months (based on normal working hours). After a strike in 2009, a special bonus of 3,000 Baht was given. There are some additional allowances for house rent and food.

### 3.5 Occupational health and safety

Donaldson provides first aid and fire protection training. There is, however, no training on safety on the workplace. According to the Donaldson workers, the use of IPA (isopropyl alcohol; solvent and detergent) causes regular nose irritation. The employees also complain about insufficient protection against high levels of noise from nearby machines, and eye problems caused by telescope use and excessively bright electric lights in the workplace. Pregnant workers find themselves particularly ill treated, receiving no special work area and often forced to do heavy labour. Finally, some safety tools were considered to have a low quality, like facemasks full of fabric dust causing irritation to the face skin. Donaldson states it is in compliance with the comprehensive EICC code of conduct and the Thai Labour laws with regard to safety and wellbeing of workers, and that all personal protective equipment follows government regulations.<sup>19</sup>

### 3.6 Workers' grievances

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<sup>16</sup> Electronics Industry Code of Conduct (EICC), <<http://www.eicc.info/PDF/EICC%20Code%20of%20Conduct%20English.pdf>>

<sup>17</sup> Donaldson company, Becky Cahn, Corporate Communications Manager, "Company Facts Thailand", response to draft factsheet SOMO, 13 September 2010.

<sup>18</sup> Electronic Industry Citizenship Coalition, "membership", <<http://www.eicc.info/MEMBERSHIP.htm>>

<sup>19</sup> Donaldson company, Becky Cahn, Corporate Communications Manager, "Company Facts Thailand", response to draft factsheet SOMO, 13 September 2010.

On 16 November 2009, workers rallied in front of the factory, calling for the management to improve their working conditions and to follow Thailand's Labour Protection Act. A list of thirteen grievances was submitted by 471 workers:

1. Workers that take sick leave for one day have to provide a medical certification of their ailment. Otherwise they do not receive payment for that day off. Thailand's Labour Protection Act prescribes that a medical certification is required in case of sick leave of three days or more.
2. Workers need to provide a medical certification when they are unable to work overtime.
3. Working overtime is compulsory at the factory. Thailand's Labour Protection Act prescribes that an employer shall not require an employee to work overtime, unless the employee's prior consent is obtained on each occasion.
4. If workers do not work overtime, they are called and issued a warning.
5. There is no suitable workplace for pregnant workers.
6. The factory forces pregnant employees to do strenuous work.
7. The company utilises unfair work evaluation systems.
8. If workers take business leave (with no payment), they must show evidence for why this leave is necessary.
9. Some vacation leave days are replaced with stock checking days, although it is the workers' legal right to take vacation leave.
10. The number of workers allowed to use the toilet at a given time is fixed, and workers are only allowed to use these facilities for 10 minutes, no more than twice a day.
11. The managers have the final say over whether employees may take vacation leave.
12. If workers take vacation leave, they must show evidence why this leave is necessary.
13. If workers do not bring their identification cards to the plant, the division leader must confirm their presence on the shop floor. Even with this acknowledgement of their presence, these workers do not receive incentive pay, as the management claims that it is their fault for not having the proper identification.

### **3.7 Company response to the grievances**

In response, the management of Donaldson Thailand denied each request and announced the dismissal of 369 strikers, including those who were pregnant, accusing the disgruntled workers of causing trouble for the company. After many meetings with management, a settlement was reached that offered dismissed workers two choices: they could reapply for their jobs and be paid an additional sum of 1.6 month's bonus and 3,000 Baht extra pay, or they could choose to not return to their old jobs, but be paid the same bonuses. Only 100 out of the 471 employees chose to return to the factory. The remaining workers opted not to accept the poor working conditions. Donaldson Thailand finally recruited 300-400 subcontract workers to replace the striking workers.

Some working conditions were improved after the protests. A medical certificate is now required for sick leave of three days onwards. There is no queue card anymore for going to the toilet. However, the workers who took part in the protest were reportedly still being maltreated by the management.