

Something's Not Right Here

Poor Working Conditions Persist at Apple Supplier Pegatron

October 22, 2015



This report is a cooperative effort of China Labor Watch and The Future in Our Hands.



China Labor Watch (CLW) is a labor rights watchdog and advocacy organization. CLW increases transparency of supply chains and factory labor conditions, advocates for workers' rights, and supports the Chinese labor movement.

Chinalaborwatch.org



Framtiden i våre hender (The Future in Our Hands - FIOH) is Norway's largest environmental organization with above 25,000 members. FIOH works for a fair distribution of the world's resources, sustainability, and for government and business to facilitate green and ethical choices.

framtiden.no

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EXECUTIVE SUMMARY

In an interview with PBS journalist Charlie Rose in September 2014, Apple CEO Tim Cook was asked what values he considers most important beyond those of Apple.¹ Mr. Cook responded:

Treating people with dignity. Treating people the same. That everyone deserves a basic level of human rights, regardless of their color, regardless of their religion, regardless of their sexual orientation, regardless of their gender. That everyone deserves respect.

Right now, in Shanghai, China, a factory owned by the Taiwanese Pegatron Group is pushing out millions of units of the iPhone 6s for Apple. There, its young production workers toil six days a week in 12-hour shifts. Each day they are paid for 10 and half hours of work, not counting 15 minutes of unpaid meetings. The mandatory overtime shift runs from 5:30 pm until 8:00 pm. Most workers will not eat dinner before doing overtime because the 30-break given for a meal is not enough time.

Before overtime pay, workers making the iPhone earn only the local minimum wage of \$318 per month, or about \$1.85 per hour. This is not a living wage. Even if the factory did not mandate overtime as it does, workers would still depend on their 60-hour workweeks to get by.

After their long shifts, workers take a 30-minute shuttle bus back to their dorms where up to 14 people are crammed into a room. Mold grows pervasively along the walls. Bed bugs have spread throughout the dorm, and many workers are covered in red bug bites.

In his interview, Mr. Cook went on:

One of the best ways you can make sure that things are happening well is if people stand up and say, "Something's happening that's not right here." We've audited so deep in our supply chain. We do it constantly, looking for anything that's wrong, whether it's down to the -- there's a safety exit blocked.

While working undercover at the Pegatron factory in Shanghai, CLW's investigator was never told the locations of emergency exits and never participated in an emergency drill. In fact, at the massive production facility, which employs up to 100,000 people, the investigator never even located an emergency exit.

¹ Full transcript of the interview:
<http://www.businessinsider.com/tim-cook-full-interview-with-charlie-rose-with-transcript-2014-9>

Despite providing only about eight hours of pre-job safety training—where Chinese law requires 24 hours—Pegatron forces each new worker to sign a form that “certifies” that she has undergone 20 hours of safety training. A worker also must sign a trainer’s name on the form. The factory has workers quickly copy answers to the safety information quiz. These falsified forms are the types of documentation that are provided to Apple in their audits.

The production of an iPhone involves a great number of chemicals. Pegatron gives new workers an information sheet that contains a short list of toxic substances, including cadmium, mercury, hexavalent chromium, and arsenic.² Yet no one tells workers anything about the location of these or other substances in the production process or how a person should protect herself from injury.

HSF/HF限用標準 (PPM)			
物質名稱	PEGA	客戶02	ROHS
鉛 (Pb)	800	1000	1000
鎘 (Cd)	75	50	100
汞 (Hg)	800	1000	1000
六價鉻 (Cr6+)	800	500	1000
多溴聯苯 (PPB)	800	1000	1000
多溴聯苯醚 (PBDE)	800	1000	1000
砷 (As)	1000	50	/
無鹵 (HF)	Br, Cl均<900ppm Br+Cl<1500ppm		
PUreGMS管理代表: 李在良, 員工代表: 劉玲 PUreCSR管理代表: 蕭銘楷, 員工代表: 陳清泉 本部門環安窗口: 杜旭芳			
品質目標:			
1. MLB報廢率 ≤ 40ppm			
2. 月人均產出 ≥ 1830PCS			
3. 專案改善 ≥ 3件/季			
4. 工單結案率 (N+5) ≥ 99.00%			
5. 環安衛事故 = 0			
6. 人員離職率: OP ≤ 19%			
PUreGMS/CSR/ESD管理體系稽核無主要缺失(系統面)為0			

Something's Not Right Here

Apple earned about \$40 billion in profit last year. Its final quarter in that year, during which the company pulled in \$18 billion, was the most lucrative quarter in the history of mankind. Apple is on course to earn over \$50 billion in 2015.³

Mr. Cook is right when he encourages people to stand up and say, “Something’s happening that’s not right here.” But Mr. Cook has yet to clearly hear and respond when we say it: Something’s not right about the way Apple is doing business.

A portion of Apple’s historical profits is squeezed out of the low pay and illegally poor working conditions of over a million Chinese workers. In February 2015, a [CLW report](#) suggested that even using the most conservative estimates, Apple would need to invest up to 10 percent of its profits to ensure that workers making its products enjoy

² China RoHS (Restriction of the Hazardous Substances in electrical and electronic equipment) is a set of standards based on previously instituted European Union standards (the latest version of which is 2011/65/EU), which restricts the use of six substances: lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr(VI)), polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs). Pegatron’s requirement of the chemicals in general fall below the RoHS limits, but its RoHS standards only represent chemical contents in final product, not worker exposure during production processes. In addition, Pegatron’s arsenic standard is 1,000 ppm, far above the safety exposure limit recommended by NIOSH in the United States (50 ppm). A more detailed description of these chemicals and the hazards posed to human health can be found on page 25 of this report and in Appendix A.

³ “How Apple could make a \$53 billion profit this year.” CNN Money.
<http://money.cnn.com/2015/07/17/technology/apple-earnings-2015/>

fundamentally improved working conditions. Yet the low pay, long hours, unpaid work, poor workplace safety, and despicable living conditions persist.

Something's not right here.

Half of the workers hired at Pegatron are temp workers, though Chinese law only permits 10 percent of a workforce to be temporary labor. Under short-term contracts, these workers are treated as though they are disposable.

Something's not right here.

CLW's Investigative Results: Two Years with Little Progress

In July 2013, CLW published an in-depth investigative report on working conditions in Shanghai and Suzhou-based factories of Pegatron Group. The report, [Apple's Unkept Promises](#), detailed an array of serious labor rights violations and compared the reality of working conditions in Pegatron plants to the commitments that Apple publicizes in regard to labor rights.

In the two years subsequent to the report, CLW also documented several cases of the sudden deaths of young iPhone workers due to abnormal or unexplained causes at Pegatron Shanghai. One instance was that of a child worker, [Shi Zhaokun](#), who often worked 13 hours a day before his sudden death from pneumonia in October 2013. Another worker, 26-year old [Tian Fulei](#), died in February 2015 of what the hospital deemed "sudden death." Both workers had been employed on Pegatron's iPhone production lines.

In September and October 2015, CLW conducted a new investigation of the working conditions at Pegatron's Changshuo factory in Shanghai, which is currently producing the iPhone 6s. Findings are based on undercover research by a CLW investigator who was hired at Pegatron as a production line worker, as well as the calculation of data from 127 Pegatron worker pay stubs, about two-thirds of which cover working hours and wages from September 2015. During the investigation, CLW conducted dozens of interviews with Pegatron workers.

CLW's newest investigation reveals 23 categories of legal and ethical labor rights violations at Pegatron Shanghai.

Applicants must pay for their mandatory pre-job physical exam. Despite Pegatron forcing workers to sign forms verifying that they have undergone 20 hours of pre-job safety training, workers only participate in eight hours of training. The Chinese statutory minimum is 24 hours. Moreover, the training does not touch upon the specific toxic

chemicals which workers may handle every day. Pegatron even hands out information to new workers that lists a number of hazardous chemicals, including arsenic, hexavalent chromium, mercury, cadmium, and lead. Despite the significant toxicity of these chemicals, factory personnel provided no further information about the way in which these chemicals are used at Pegatron, the possible harm to human health, or how workers can protect themselves. Workers do not always receive protective equipment, and even if they do, a lack of awareness leads many people to use the equipment improperly.

Part of the risk to workers' health is posed from excessive working hours. CLW's investigation shows that in 2015, Pegatron Shanghai workers' median overtime per month was 80 hours (83 hours in the busy season). During their 12-hour shifts, workers are given only 50 minutes for lunch and 30 minutes for dinner; the second meal break is so short that most workers forego dinner until they clock-out after 8 pm. CLW's investigator worked on one iPhone motherboard unit every 3.75 seconds, standing for the entirety of his 10.5 hours of daily work. When the worker next to them takes lunches and dinners, workers must pick up their neighbor's workload. Laboring under this schedule six days per week, during the busy season Pegatron workers earn about 4,000 RMB (\$629) per month, of which approximately 1,750 RMB (\$275) is overtime pay. In addition to this low-wage exploitation, the workers are required to attend unpaid meetings, equating to 15 minutes of unpaid overtime each day (6.5 hours per month).⁴

PEGATRON 和碩聯合科技		和联集团华东营运中心		员工薪资单	
工号: W	姓名:	部门: (昌碩)第三事業群	发薪年月: 201509		
职等: 1	職級:	职称: 作業員	银行帐号:		
薪资/奖金		薪资加项		薪资扣项	
岗位工资	2020	中夜班津贴	198	职税	192.73
综合绩效奖金	100	餐补津贴	261.94	事假	185.75
		双休日加班	1184.14	餐费	498.5
		一般加班	522.41	住宿费	132.9
薪资结算合计:	2120	加项合计:	2166.49	扣项合计:	1009.88
应税所得:	3908.01	个人所得税:	12.24	税后实发:	3264.37
<small>薪资数据可由员工自助平端/ISS系统查询; 薪资疑问: 021-38113768 分機50508 感谢您一个月来的辛劳, 但别忘了薪资保密哦!</small>					

Pegatron tells its employees that it pays for both the employer and employee portions of mandated insurance contributions. Yet workers cannot verify the insurance contributions through their pay stubs, which no longer include any information about workers' insurance. Pegatron's employee service center also does not provide insurance figures. Furthermore, Pegatron does not contribute to workers' housing funds, a mandatory benefit under Chinese law.

⁴ See Appendix C for statistics on the 127 Pegatron worker pay stubs.

The poor conditions do not end in the workshop. Pegatron workers' dorms house up to 14 people per room, where dark mold spreads along the walls and bed bugs are rampant.



Pegatron Shanghai Investigations: 2015 vs 2013

Unfortunately, the awful working and living conditions that Pegatron workers face in 2015 are generally no better than those witnessed in 2013. CLW compared 21 categories of findings from the 2013 and 2015 investigations of Pegatron Shanghai. Only one category revealed fundamental improvement: Whereas in 2013 Pegatron explicitly maintained discriminatory hiring practices against people of Tibetan or Uyghur ethnicity, people with dyed hair, and people over 35, in 2015 CLW did not observe such practices. (We note here that there is an unconfirmed issue of Pegatron's policies toward women who are pregnant or preparing to become pregnant.⁵)

In four other categories CLW found partial improvement. For example, if we compare September (typically a busy season) working hours from Pegatron pay stubs in 2015 and 2014, there has been limited improvement. The average workweek dropped from 63 hours to 60 hours. The percentage of compliance with Apple's 60-hour workweek has risen from 7% in 2014 to 42% in 2015. In September 2014, 50% of workers put in over 90 hours of overtime for the month, but a year later, only 32% had done so. The maximum overtime recorded dropped from 130 hours to 119 hours. Despite these limited changes, 58% of workers continued to have workweeks in excess of Apple's 60-hour workweek standard in September, and if we were to include the 90 minutes of

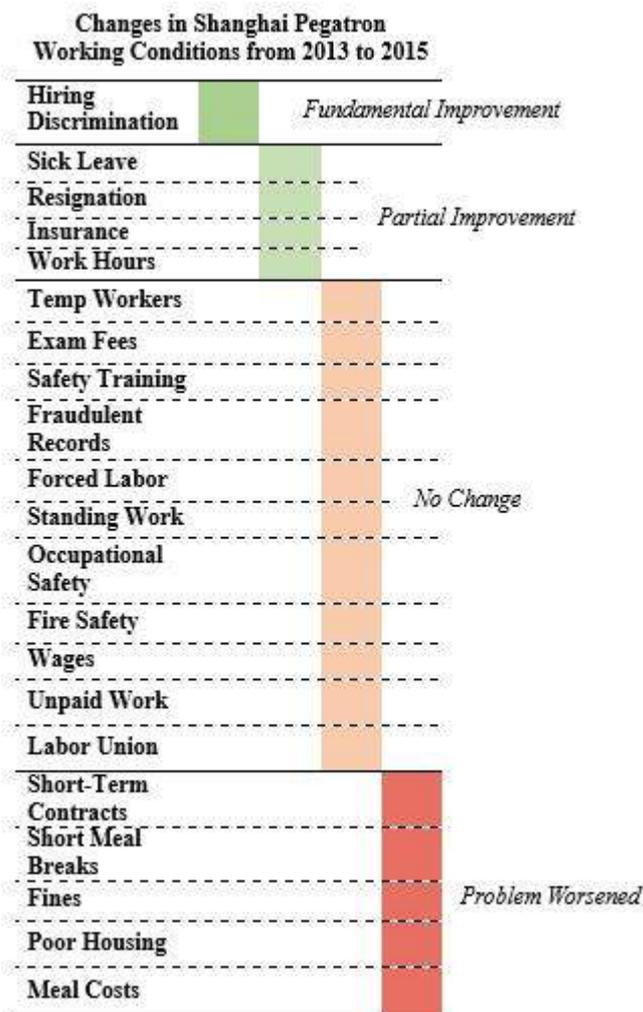
⁵ Women who are pregnant or preparing to become pregnant are told to identify themselves during pre-job physical exams. Pegatron ostensibly wants to prevent unborn children from being affected by radiation produced in x-ray procedures, but there is currently no scientific evidence clarifying that a typical x-ray test poses a risk to a woman's ovum. During the investigation, women who said they planned to become pregnant soon were separated from the investigator's group of applicants, and CLW was unable to confirm whether those women were hired by Pegatron.

unpaid meetings workers must attend per week, then the proportion of workers in excess of 60-hour workweeks would be notably higher. In any case, Apple's 60-hour workweek does not conform to China's overtime hour maximum. A 60-hour workweek equates to approximately 85 hours of overtime per month, but Chinese regulations allow no more than 36 hours.

11 of 21 categories of findings compared between 2013 and 2015 have not seen any meaningful change. For instance, temp workers are still used in proportions high above the legal maximum of 10%, pre-job safety training is still far short of the 24-hour minimum, some documentation related to working conditions continues to be fraudulent, and workers are still unpaid for daily meetings.

Most concerning is that based on CLW's investigative findings, in five of 21 categories, problems have further deteriorated since 2013. Meal times are even more compressed than they were in 2013, now with only 30 minutes for dinner instead of 40 minutes.

CLW did not collect any information about fines on workers in 2013, but in 2015's probe documented fines of 50 RMB (\$7.86) to 300 RMB (\$47) for behaviors like crossing one's legs or forgetting to wear one's work ID. And the already crowded dorms now have a bed bug infestation.



The figure to the left demonstrates the comparison of categories from 2013 to 2015. It is important to note that in 2013, CLW's investigator at Pegatron in Shanghai was hired via dispatch company, whereas in 2015 the investigator was hired directly. This means that additional violations may not have been documented in 2015, such as hiring discrimination against temp workers or dispatch companies failing to pay all wages and insurance for temp workers.

NOTE: Detailed chart in Appendix B

Apple Must Live Up To Its Legal and Social Responsibilities

CLW has [previously detailed](#) how Apple has the greatest control of working conditions among all actors in its supply chain. It is not a question of whether Apple must ensure that workers making its products enjoy fair and safe working conditions. It is only a question of when Apple will make good on its commitments.

CLW believes that if Apple institutes the following measures throughout all of its suppliers, it will have taken a significant step toward improving workers' conditions:

- The specific amount of social insurance paid to workers should be transparent to them, included on their pay stubs and available when workers make inquiries to the company;
- Factories should provide all mandatory insurance in full, including the housing fund;
- Factories should restrict the hiring of temporary (or dispatch) labor at a given factory to no more than 10% of the workforce, in compliance with Chinese law;
- Workers should not be made to work without corresponding pay;
- The base wage rate should be increased significantly above the local minimum wage so that workers do not need to depend on overtime to make a living;
- Worker housing should be hygienic and more spacious;
- Pre-job safety training should last for at least 24 hours, as required by law, and workers should be taught specifically what chemicals and hazards they will encounter in their positions and how to mitigate health risks;
- All workers should receive appropriate protective equipment and be taught how to properly use it before beginning work;
- Industrial processes should be adjusted to allow workers a chance to both stand and sit or lean while they work;
- Factories should ensure that workers have pre-job, on-the-job, and pre-resignation physical exams, as required by law, for which the factory pays for all fees;
- Let workers elect enterprise-level union representatives that can actually represent worker interests.

INVESTIGATIVE REPORT OF PEGATRON (CHANGSHUO) TECHNOLOGY (SHANGHAI)

LIST OF INVESTIGATIVE FINDINGS

1. Hiring fees. Applicants must pay for their own mandatory physical exam.
2. Pre-job safety training is no more than eight hours, three times less than the 24-hour minimum set out by Chinese law.
3. Despite only receiving eight hours of training, Pegatron makes workers sign a document that certifies that they have undergone 20 hours of training. Workers also made to sign the name of a trainer.
4. Workers are directly told answers to copy on the safety training quizzes, which contain a lot of information not even mentioned in training.
5. Workers are not paid for two days of mandatory hiring procedures, including physical exams, hiring forms, and labor contracts.
6. Dispatch workers constitute about half of Pegatron's workforce, in excess of the 10% statutory ceiling.
7. With a median workweek of 60 hours, workers typically accumulate 70 to 90 hours of overtime a month, far in excess of the Chinese statutory limit of 36 hours. One worker even worked 119 overtime hours in September.
8. Overtime is mandatory. A Pegatron staff member said that a worker who simply wants to do an 8-hour, 5-day workweek "does not conform to our hiring practices".
9. Workers are paid the minimum wage (about \$1.83/hour), so they depend on overtime to make a living wage.
10. In addition to their long, mandatory 12-hour shifts, many workers live outside the factory and, arriving back to their dorms around 8:30 pm, they must awake around 6 am in order to catch the bus that will get them to the factory on time.
11. Lunches are rushed, and the break for dinner is so short that most workers forego it.
12. Workers are unpaid for 15 minutes of daily mandatory overtime work.
13. Labor intensity can be high. For example, CLW's investigator worked on one unit every 3.75 seconds, standing for the entirety of his 10.5 hours of daily work. When the worker next to them takes lunches and dinners, workers must pick up their neighbor's workload.
14. While Pegatron ostensibly pays both the employer and employee portions of insurance contributions, the actual amount contributed by the company is not shared on pay stubs with workers, and the employee service center does not provide the information.
15. Pegatron does not provide the housing fund to workers as required by law. The company also does not provide all legally mandated insurances for student workers.
16. Dorms are crowded, with anywhere from 8 to 14 people housed in one room. Facilities are insufficient; in one dormitory, due to too few working toilets, up to 40 people need to share the use of one toilet.
17. Dorms are poor and unhygienic. Mold grows everywhere. Bed bugs have spread throughout some dorms.
18. In pre-job training, nothing is mentioned of the toxic chemicals that workers may come into contact with during the course of their jobs or how to protect themselves.

This is despite hazardous working conditions that may include coming into contact with substances like cadmium, lead, and mercury, and handling heavy industrial equipment.

19. A lack of prioritizing workplace safety leads to many workers not receiving or not properly using protective equipment. Despite a lack of safety education, workers may receive a demerit for carelessness if they are injured on the job.
20. Most workers do not receive the on-the-job physical exam required by law.
21. The production workshop is large, yet no one tells new workers the location of emergency exits, if there are any.
22. Pegatron fines workers for various behaviors, including crossing their legs or not wearing their work ID.
23. There was no apparent labor union observed at Pegatron. Pegatron's trainer did not know the meaning of the words "labor union".

Company Profile



Pegatron factory

Based on an introduction of the company on Baidu, Pegatron (Changshuo) Technology (Shanghai) was established in 2004 in the Kangqiao Industrial Park of Pudong New District. Changshuo is a subsidiary of Pegatron Corporation, based in Taiwan. In Pudong District, Pegatron Corp has three registered companies with combined investment of \$627 million. One of these companies is Changshuo, which primarily manufactures electronic products like laptops and cell phones for companies that include Apple Inc. Changshuo is among the top five producers of laptops in the world.⁶ Hereafter, Changshuo Shanghai will be referred as “Pegatron”.

During the period of investigation, Pegatron used a number of labor dispatch companies to supply workers. Some of these companies include Shanghai Shishuo Labor Dispatch, Shanghai Ruijie Labor Dispatch, Shanghai Fujing Labor Dispatch, Shanghai Haotai Labor Dispatch, and Shanghai Zhuda Labor Dispatch. During the busy season, Pegatron has a workforce of approximately 100,000 people.

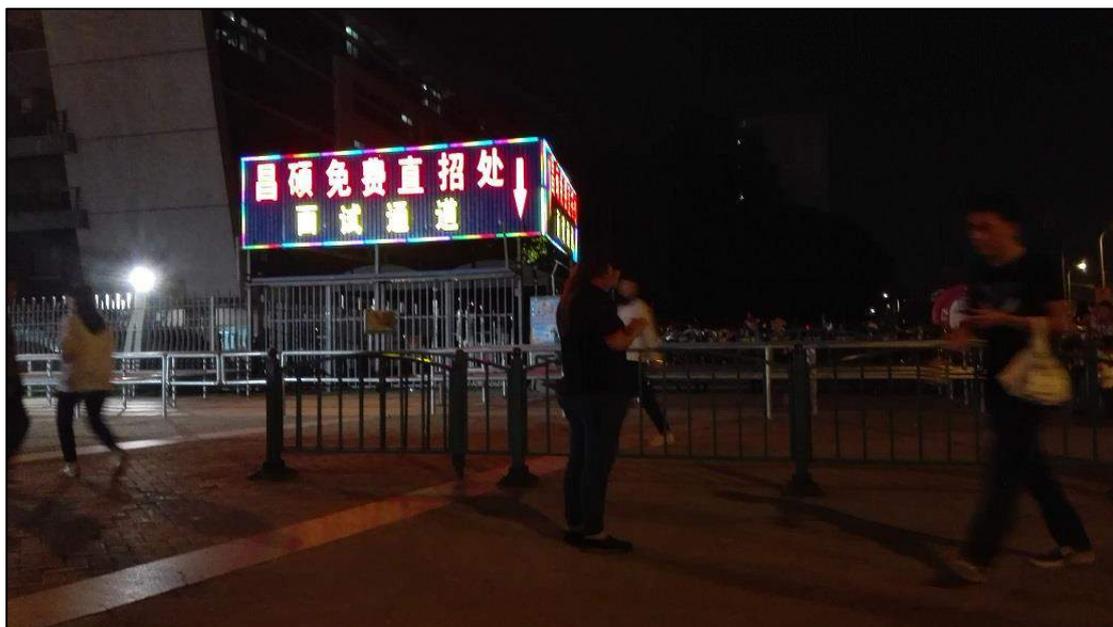
Hiring

Pegatron hires workers via four channels: direct hiring, internal referrals, labor dispatch companies, and online hiring, the former constituting the major routers for hiring. In interviews, workers told CLW that there were also students interns working at Pegatron from Jiangxi College, though the number of student interns was unconfirmed. Workers said that the way in which a person is hired may determine their position. For instance, some positions do not take dispatch workers.

The investigation took place during a busy season at Pegatron, and the factory was hiring a large number of workers, including via direct hire at the front gate. The interview process is simple, only requiring an ID, a check for range of motion, and the ability to

⁶ Information in this introduction is based in part from a company introduction on the Chinese jobs website 51job.com

recognize 26 English letters. After being hired via direct hire and completing the interview, the investigator was taken onto the factory campus to record his ID information and take fingerprints. The next step in the process was a physical exam. In the physical exam area was a sign that read, “X-rays could pose a risk to an unborn child. If you plan to become pregnant in the next three months or are already pregnant, please tell the doctor.” A number of women raised their hands to indicate that they planned to become pregnant. But they were subsequently separated from the others, and the investigator was unable to ascertain if they were hired by Pegatron.⁷ The fee for the exam is 70 RMB (\$11), paid for by the worker. There were about 600 to 700 workers who underwent the physical exam on the same day as the investigator. Among these people, many were males in their 20s or 30s. After the exam, new workers are assigned to the temporary dorm. This marks the end of the first day.



Direct hiring area at Pegatron

On the second day, workers take a photo and receive their work IDs—which is called an identification card at Pegatron—collect facial recognition information, sign labor contracts, and assign people to new dorm rooms. The third day includes training, measles vaccination, work assignment and uniform distribution. CLW’s investigator ended up in ended up in the Business Group 3 MLB (Main Logic Board), where he made motherboards for the iPhone 6. The fourth day includes departmental training and the training test. Workers begin normal work on the fifth day. However, workers are not paid for the first day (fingerprints and physical exam) and the second day (labor contracts).

⁷According to the American Pregnancy Association (<http://americanpregnancy.org/pregnancy-health/x-rays-during-pregnancy/>) and US Food and Drug Administration (<http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/MedicalImaging/MedicalX-Rays/ucm142632.htm>), “x-rays are generally safe during pregnancy” if the examination procedures are “properly done”. Another finding from the Royal Australian and New Zealand College of Radiologists (http://www.insideradiology.com.au/pages/view.php?T_id=96#.ViZuXn6rS1t) show “preconception radiation exposure of either parent’s reproductive organs has not been shown to result in increased cancer or abnormalities of children.” However, CLW’s investigator was unable to observe if any of the women who reported to be planning to get pregnant were ultimately hired by Pegatron. Therefore, we cannot say with certainty that Pegatron’s screening for pregnant or pre-pregnant women constitutes discriminatory hiring.

Pegatron makes each worker sign a document called Personal Record for Three-Level Safety Education (Internal Training Record). As described on the document, the three levels of training include company-level (three hours), department-level (10 hours), and position-level (three hours), for a total of 20 hours. (Chinese law requires 24 hours of pre-job occupational health and safety training.) But in reality, only the company-level training is provided to workers for the time stated on the document. Company-level training content includes cases of accidents, safety regulations, female worker protection, fire emergencies, waste management, corporate social responsibility, treatment of common injuries, and an intro to Shanghai City. About 1,500 people participated in the training in the same room as the investigator (Training Room 3), about half of whom were dispatch workers. (Dispatch workers had to sit while others stood.) The department-level training lasted 4 to 5 hours; content included etiquette for living in the factory, departmental organization structure, important work information, working hours, and items prohibited in the workshop. There was no position-level training, despite the three hours mentioned on the Three-level Safety Education form. Simply put, the form that Pegatron made workers sign to certify safety education was far from the actual training received by workers. Furthermore, the on the form, the name of the trainer is



Workers in pre-job training



Pre-job training on a large scale

also signed by the workers, as directed by Pegatron management.

After department-level training, workers must fill out three exams: New Worker Department-level Environmental and Safety Exam, the HSF Elementary-Level Exam, and the Pegatron Static Electricity Prevention Training. The trainer directly provided the answers to workers to fill in on the exams. Time is not given to workers to read the information. After copying the answers, the answer sheets are handed back. Much of the content on the tests were never mentioned in the trainings. For instance, harmful chemicals used during work, other occupational risks, and prevention of these risks. What's more, the tests were written in traditional Chinese characters, where most workers in China learn to read simplified characters, further impeding the ability of workers to understand the safety information within a very limited amount of time. The consequence of this perfunctory training process is that workers ultimately do not understand the health risks they face in their work.

Each worker received secondhand anti-static uniforms and slippers. Workers must return these things upon resignation, otherwise they need to pay 20-60 RMB (\$3.15-\$9.46).

Labor Contracts

Labor contracts are signed with new workers on the second day. The contracts include information like the effective dates, probation period, work content, work location, working hours, leave, etc. Workers fill out two copies of the contract and keep one copy themselves. Pegatron demands that workers write the following day as the effective starting date of the labor relationship, not the day that workers sign contracts. This is despite the fact that Pegatron requires workers to meet at 7:30 am on the day contracts are signed to begin work ID and contract processes. The procedures on that day took up the entire day and were required for the job, yet workers are not paid for it.

Directly hired and internally referred workers sign two-year contracts with a probation period of two months. Labor dispatch workers sign four-month contracts with their labor dispatch companies. After three months, a dispatch worker may be able to transfer into a formal Pegatron worker position. But due to high turnover, few people actually stay to become formal workers. For example, among the more than ten people who entered the same workshop with the

劳动合同书

甲方(公司)

名称: 昌硕科技(上海)有限公司

法定代表人: 张天宝

地址: 上海市浦东新区秀沿路 3768 号

乙方(员工)

姓名: _____

性别: 男

身份证号码: _____

工号: W

户籍地址: _____

经常居住地: _____

通讯地址: 上海市浦东新区秀沿路 3668 号

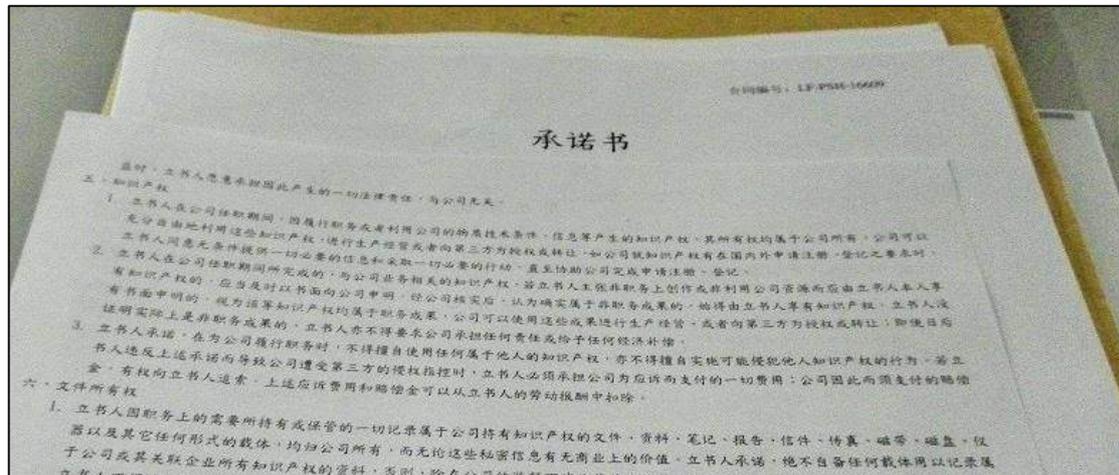
联系电话: _____

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Pegatron labor contract

investigator, two had quit within a few days.

Workers also must sign an information sheet, Letter of Commitment (confirming that the worker is a migrant worker and thus can be paid social insurance rates according to the lower non-Shanghai resident rate), Authorization Agreement (authorizing Pegatron to register a bank card in their name), and hand in copies of their personal ID and photo.



Letter of Commitment

Working Hours

Pegatron maintains a six-day workweek and operates in two shifts: a day shift and a night shift. Workers typically rotate between day and night shifts once a month, though some departments rotate once every two or three months.

There are two working schedules, which differ depending on the department:

Schedule 1 (day shift): 8:00-17:00, a one-hour break (30 minutes of which is unpaid work), begin overtime at 18:00.

Schedule 1 (night shift): 20:00-5:00, begin overtime at 6:00.

The day and night shifts of Schedule 2 are the same as Schedule 1, except everything is pushed back one hour later (e.g., the day shift begins at 9:00 in the morning).

From 10:00 to 10:30 and again from 15:00 to 15:30, workers rest in 10-minute shifts. Workers take 50-minute rotating lunches between 11:20 and 13:40. Within the 50-minute period, a worker needs to line up to leave the workshop, walk to and from the cafeteria, line up to get food, and line up to undergo static electricity dissipation, altogether requiring 15-20 minutes. Therefore, workers really only get 30 to 35 minutes to eat. After accounting for the meal time and breaks, each worker works eight hours of normal work before the overtime period.

As explained above, 50 minutes for a meal is already very limited. The 30 minutes for dinner is even more rushed. Moreover, because the factory cafeteria does not provide food in the evening, workers must go outside the production building to the on-campus

second. In this way, workers must pay for their short breaks each day with a higher work intensity. In addition, workers have about 15 minutes of mandatory unpaid meetings each day, including 10 minutes before the shift begins and five minutes after the shift ends.

September to December is Pegatron's high season. Overtime ranges from 30 minutes to 2.5 hours each day. But overtime will be controlled at no more than 20 hours per week. Typically, there are two overtime schedules: two hours per day from Monday to Friday and 10 hours on Saturday, or 2.5 hours four days per week with 10 hours on Saturday. Based on worker pay stub information, most workers did between 60 and 90 hours of overtime a month. One-fifth of workers did over 90 hours of overtime per month. Workers worked on September 3, which was the National Military Parade in China. For this worker paid weekend overtime rates.



Security gate in Pegatron production facility

According to company rules, if workers do not want to do overtime, they can tell their respective team leaders. But in reality, overtime is mandatory. When the investigator asked the trainer about overtime, the trainer said that taking off from overtime one time is fine, but if a worker only wanted to do 5 days a week, 8 hours per day, “this does not conform to our hiring requirements.”

Most departments implement production quotas. But the quotas are not completely strict. There is no penalty if workers fall short of the quota. Each production line has between 15 and 20 workers. Most people are in the last positions of the production line because the earlier positions are heavily automated. In these more automated positions, a worker may do 16 products at one time. The later positions are inspection, which require the worker to inspect each product one at a time. For example, on the investigator's production line, the hourly quota was 550 motherboards (though actual production during the period of the investigation was between 450-500 per hour). Due to automation, workers cannot really control the speed of production, which is instead determined by the speed of machine processing. The investigator was responsible for scanning the codes of the products, removing them from the trays, and passing them on

to the next worker. In the investigator's position, he would complete processing of 16 products in one minute (or one every 3.75 seconds). The investigator had to stand in his position for the entirety of the shift, which made the work more tiring.

Wages and Benefits

The pay period for wages at Pegatron is the 26th to the 25th, with wages distributed on the 10th day of the following month. Dispatch workers receive a pay stub from Pegatron, but their wages are distributed by the respective dispatch companies.

The base monthly wage at Pegatron is 2,020 RMB (\$318). On top of that, workers earn overtime wages, performance pay, skill subsidies, night shift subsidy, seniority pay, and a meal subsidy. During the busy season (September to December), some workers may receive a special subsidy.

The following is a breakdown of the various wage items. Overtime pay uses the base wage of 2,020 RMB (\$318) as the base for calculating weekday overtime (1.5x), weekend overtime (2x), and holiday overtime (3x). The performance bonus is worth between 50 RMB (\$7.88) and 200 RMB (\$31). The skill subsidy is worth 50 RMB (\$7.88) per skill. After training, workers are certified in one skill. After three months, workers can be certified in a second skill. After six months, a third skill, which is the max number of skills. The night shift subsidy is 9 RMB (\$1.42) per night. The seniority pay begins at 100 RMB (\$16) after the first month, to 200 RMB (\$32) in the second month, and 300 RMB (\$47) after the third month, which is the maximum. The meal subsidy is 280 RMB (\$44) per month. And the special subsidy is 300 RMB (\$47). But the special subsidy is distributed differently based on when the worker began his employment at Pegatron. Those who entered before August receive the subsidy from September to December. Those who entered in August receive the subsidy from October to December. Those who entered in September receive the subsidy for November and December. And those

PEGATRON 和碩聯合科技		和联集团华东营运中心		员工薪资单	
工号: W	姓名:	部门: (昌碩)第三事業群	发薪年月: 201509		
职等: 1	職級:	职称: 作業員	银行帐号:		
薪资/奖金		薪资加项		薪资扣项	
岗位工资 2020	中/夜班津贴 198	绩效工资 261.94	福利 192.73	事假 185.75	
综合绩效奖金 100	餐伙补贴 1184.14	双休日加班 522.41	餐费 498.5	住宿费 132.9	
	一般加班				
薪资结算合计: 2120	加项合计: 2166.49	扣项合计: 1009.88			
应税所得: 3908.01	个人所得税: 12.24	税后实发: 3264.37			

出稅保個人自付部分由公司代為繳納。
薪資細項可至員工自助平臺/ESS系統查詢；薪資疑問：021-38113768轉分機50508

感谢您一个月来的辛劳，但别忘了薪资保密哦！

Pegatron worker's September paystub (gross wages of 4,300 RMB, or \$678)

that began working at Pegatron in October only receive the subsidy for the month of December. No one who entered Pegatron after October receives the special busy season subsidy.

Workers who refer someone internally for hire may also receive a bonus which has a maximum value of 600 RMB (\$95).

Monthly deductions include a housing fee of 160 RMB (\$25) and deductions for unpaid leave. After accounting for all overtime and other wage items, most Pegatron workers can earn monthly gross wages of around 4,000 RMB (\$630) during the busy season months.

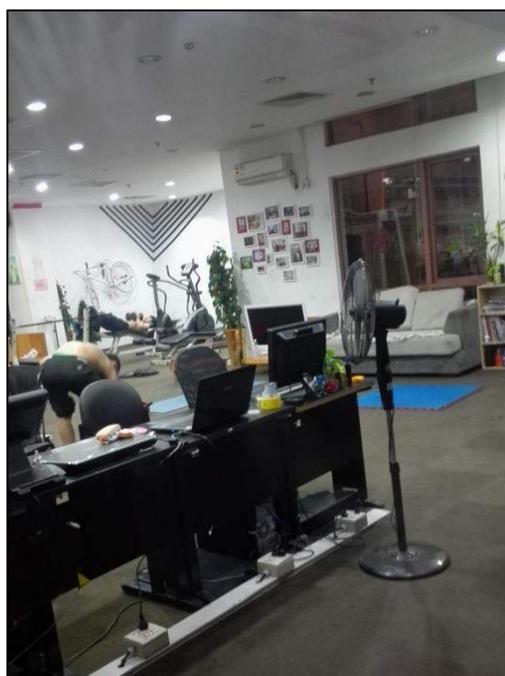


Pegatron clinic

Workers can receive paid sick leave. There is a clinic in the factory. If a worker receives a recommendation to rest from the doctor in the clinic, the worker can take this recommendation to his department. In the case that the worker receives a recommendation from an outside doctor, the worker must take the recommendation first to the Pegatron clinic doctor for verification. Sick leave is paid at 60% of normal wages. Typically if workers get a cold or a fever, they will not take sick leave and instead one worker in the dorm like this.

tough out the shift. The investigator knew of Sometimes a sick worker would rather take a personal unpaid day of leave to recover than a sick day because taking a sick day might require a worker to pay for medicine that is more expensive than the value of sick day pay.

Pegatron purchases social insurance for workers. Pegatron employee service staff said that employees do not need to pay for any social insurance whatsoever. The company covers both the employer and employee portions of the social insurance contribution. However, Pegatron does not provide the housing fund for workers as required by law. Workers said that their pay stubs also do not display any social insurance-related information. The service center also does not provide social insurance information. As a result, employees do not know how much is actually contributed into their insurance



Gym

fund. Social insurance for dispatch workers is handled by their dispatch companies. Outside of a business insurance, student workers at Pegatron do not receive insurance.

The Pegatron factory campus is large. Facilities on the campus are centered around the “Merry Center”, which contains a grocery, fruit store, laundry mat, pharmacy, indoor basketball court, badminton court, gym, internet cafe, billiards, library, and education center. Outside of the Center, there are outdoor basketball courts, a reading room, and outdoor exercise equipment. Some facilities cost money to use, including the gym, internet cafe, and billiard tables. For example, billiards is 15 RMB (\$2.36) per hour, and a computer in the cafe costs 4 RMB (\$0.63) per hour. There is a yard on the campus where a movie is shown in the evenings. Every weekend, one road on the campus has a market with small stands.



Library

A worker may receive 60 RMB (\$9.45) certificate on his birthday which can be used at some places within the factory. (Dispatch workers do not receive this benefit.) On Mid-Autumn Festival, Pegatron gave workers who entered the plant before September 15 a lunch box, water bottle, and a bag.

Living Conditions

The factory’s housing is divided into two categories, on-campus housing and off-campus housing. The housing fee is 160 RMB (\$25) per month.

After undergoing the physical examination, the investigator’s temporary accommodation for the first day was on-campus. After this, the investigator’s official housing was in the off-campus “Kangqiao East Road” facility. The dorm on factory grounds accommodates eight to ten people per room, whereas the difference in off-campus accommodation was greater, rooms fitting anywhere from six to fourteen people.

The on-campus dorm's temporary housing facilities are fairly complete: Each room has a private bathroom with a shower, a balcony, and lockers. But the dorm rooms must fit ten people, and the room area was rather small, with five bunk beds occupying most of the space, so it seemed quite crowded.



Pegatron's on-campus housing is small and crowded

The investigator's official housing was in the "Kangqiao East Road" off-campus dormitory, a four-story building with 43 rooms on each floor and 14 beds to a room. According to the interviews the investigator conducted, this facility has the largest rooms of any of the factory's off-campus housing. This dorm seems to be a converted factory building, as the walls dividing the rooms are not made out of brick, but out of thin plate, and do not insulate sound well. The room in which the investigator lived actually housed nine people, and the other rooms also actually housed approximately ten people. Apart from beds and lockers, the on-campus dorm does not have any other amenities. Although the on-campus dorm has air-conditioning, it is universally controlled by dorm management, and workers have no means of switching it on or off or setting the temperature themselves. So there were some workers who already had caught cold but had no choice but to continue blasting the air conditioning. In addition, the on-campus dorm is very damp; many corners are damp and moldy on account of the moisture. The dorm has a bedbug problem, and many of the workers have red spots all over their bodies due to bug bites. So to avoid getting bitten, some dorms have no choice but to leave the light on while workers sleep. In the later days of the investigation, since the bug problem was fairly serious, dorm management arranged for a woman to come to the dorm to spray insecticide. She said that the insecticide she used was fairly toxic, so under normal circumstances, rooms would need two or three days before they could house people again. But the workers really didn't have any other choice, so after she sprayed the rooms in the morning, they returned to continue sleeping in them that same night.

The Kangqiao dorm does not have private bathrooms or showers. Each floor only has one public bathroom and washroom. As mentioned previously, each floor has 43 rooms, and each room can accommodate 14 people, so each floor can house 602 people at

maximum. But each floor only has 30 toilets, 30 showers and 50 faucets (wash basins), and among these, about half may be malfunctioning at any given time. So, assuming a situation in which half of the restroom could be used, if the dorm was full to capacity, 40 people would need to share one toilet.

According to interviews, with the exception of the dorm closest to the factory, conditions in the other off-campus dorms (in total there were over ten off-campus sites) are generally quite bad, even though fewer people are expected to share a room at those locations (e.g. all bathrooms were public, etc.). Moreover, most of the off-campus dorm sites are fairly remote, without any kind of recreational facilities around, so once workers return to the dorm, there is nowhere else to go to relax.



Kangqiao dorm public bathroom



Kangqiao dorm public bathroom



Mold in the Kangqiao dorm is pervasive



Kangqiao East Road dormitory

From the perspective of workers who live off-campus, another significant problem is that they have much less rest time than workers who live on the factory premises. For example, for workers that begin working at 8:00 am, the trip from the dorm to the factory workshop via shuttle bus takes half an hour, so workers could choose to take the 7:00 or 7:30 am shuttle bus. But because Pegatron requires workers to assemble at the workshop at 7:50, workers who take the 7:30 shuttle are very likely to be late (the trip from each off-campus dorm to the factory premises requires about ten to twenty minutes of travel time), so workers can only choose the 7:00 shuttle. As such, workers have to get



Kangqiao dorm public bathroom



View from the top of Kangqiao dorm

up around 6:30 am to prepare for work. In the evening, if workers do two hours of overtime, they get off work at 19:30 and have to wait until 20:00 for the next shuttle. By the time they get back to the dorm, it's already approaching 20:30, virtually leaving them much less time to rest. As a result, the investigator thinks that Pegatron should give its off-campus workers a greater subsidy to compensate for this.

Pegatron has a cafeteria where it provides meals to its workers. Pegatron provides each worker with a monthly meal subsidy of 280 RMB (\$44). For the first month of employment, this subsidy is transferred directly to new workers' worker ID cards, and workers can swipe their cards at the cafeteria to get food. The cafeteria can be divided into three parts: the factory area, the park area and the night market food stand. The factory area refers to the production area – simply put, where those who need to change their clothes to pass through security arrive. The park area refers to the area with recreational facilities and off-campus housing. The daily limit for the factory area's cafeteria is 8 RMB (\$1.26), and the daily limit for the park area's cafeteria is 12 RMB (\$1.89), but this amount is not sufficient, so workers typically need to use additional cash to buy more.



Pegatron cafeteria

The cafeteria has a fairly broad selection of food, the environment is rather good, and prices are roughly comparable to what one would pay outside for meals. At that price, a worker's normal consumption would cost at least 600 RMB (\$95) or 700 RMB (\$110) per month for meals, including the 280 RMB (\$44) meal subsidy.

Occupational Safety and Labor Protection

The Pegatron factory has implemented a strict security system, and does not allow workers to bring in phones or other equipment, so this time the investigation does not have pictures of the workshop.

HSF/HF限用標準 (PPM)			
物質名稱	PEGA	客戶02	ROHS
鉛 (Pb)	800	1000	1000
鎘 (Cd)	75	50	100
汞 (Hg)	800	1000	1000
六價鉻 (Cr6+)	800	500	1000
多溴聯苯 (PPB)	800	1000	1000
多溴聯苯醚 (PBDE)	800	1000	1000
砷 (As)	1000	50	/
無鹵 (HF)	Br, Cl均<900ppm Br+Cl<1500ppm		
PUreGMS管理代表:李在良, 員工代表:劉玲 PUreCSR管理代表:蕭銘楷, 員工代表:陳清泉 本部門環安窗口:杜旭芳			
品質目標: 1. MLB報廢率 ≤ 40ppm 2. 月人均產出 ≥ 1830PCS 3. 專案改善 ≥ 3件/季 4. 工單結案率 (N+5) ≥ 99.00% 5. 環安衛事故=0 6. 人員離職率: OP ≤ 19%			
PUreGMS/CSR/ESD管理體系稽核無主要缺失(系統面)為0			

Pegatron gives workers a sheet with a list of chemicals and their exposure limits but does not explain anything about the use of the chemicals in production. (See Appendix A.)

kidneys, bone marrow, and nervous system. Lead, cadmium, hexavalent chromium, decaPBDE and arsenic have been identified as carcinogenic.

While Pegatron's listed standards for the chemicals in general fall below the RoHS limits, RoHS only represents the chemical content in final products, with no information revealed about their exposure levels in the production process. In addition, Pegatron's arsenic standard was as high as 1000 ppm, far beyond the safety exposure limit recommended by NIOSH (50 ppm). On the other hand, to prevent occupational health risks, workers exposed to these chemicals at certain levels should follow strict hygiene procedures, wear protective equipment properly during work, and undergo periodic physical examinations. However, Pegatron does not inform the workers whether their positions bring them into contact with these or other substances, what exposure level they face, or what protective measures should be taken.

In addition, the majority of workers at the factory do not undergo yearly physical examinations, and according to the Employee Service Center, there are only a few special

Although new workers receive training after they are hired, they are not told about the possibility of coming into contact with hazardous substances during the production process, and it is only skated over in the examination paper. Pegatron gives new workers an information sheet which contains several chemicals considered poisonous and are restricted in use according to the China RoHS (Restriction of Hazardous Substances) regulations, including lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Cr(VI)), polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs),⁸ as well as Arsenic (As). Most of the chemicals can cause serious harm to human health. For example, under long-term exposure, lead exposure could impair blood, kidneys, and the nervous system; cadmium is harmful to the lungs and kidneys; mercury could harm the central nervous system and reproductive system; hexavalent chromium can damage the eyes and respiratory tract; arsenic is poisonous to the human brain,

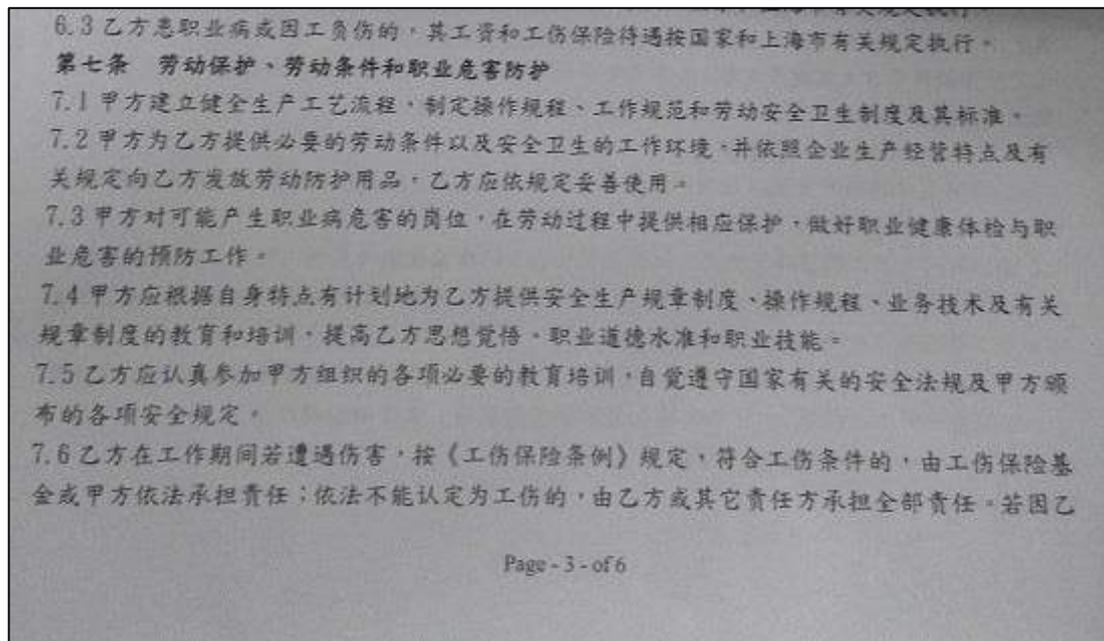
⁸ RoHS standards may be found here (Chinese):

<http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/n14103773.files/n14103084.pdf>

positions that will have physical exams scheduled, but it was not made clear which positions those are. None of the people the investigator interviewed had had a physical exam or knew if they had had one (because they had not worked there long). Pegatron has standing and sitting positions.

The majority of work accidents at the factory are collision or crushing injuries. Because workers need to wear slippers when they enter the workshop, it is fairly easy for their feet to get crushed. Products coming off the assembly line are placed in square iron trays weighing somewhere between 0.5 to 1 kg. The work requires that the products be taken down from the trays, which after being emptied are to be placed onto a shelf; sometimes, workers accidentally drop the trays onto their feet. During the period of investigation, there was a worker who accidentally dropped an iron motherboard on his feet. The worker immediately left the production line. But since the investigator was working and unable to stop to look, it is unclear what happened to the worker. All injured workers can receive remuneration for injury suffered on the job, but before that they will be given demerit points, because the company believes that work-related injuries are due primarily to the worker's carelessness.

The investigator was located in the main production and testing workshop. The workshop facilities are quite perfect, with ventilation equipment. Worker protection gear, such as gloves and masks, is issued to workers according to the requirements of their job. Masks are disposable activated carbon masks. Not many of the workers wear masks and most positions do not give them out. For those positions that do distribute masks, workers can choose to wear them or not wear them as they prefer – the leader of the shift does not care.



Pegatron's labor contract makes a number of commitments to protect worker safety

Fire Protection

The Pegatron factory is quite big. The investigator's workshop was located at on the fourth floor of the F1 factory and it would take approximately four or five minutes to get to the workshop from the entrance of the factory. Due to the confidentiality requirement, workers are required to pass through two security checks in the middle, and each workshop's door is covered by a curtain, such that you can't see what's going on inside the workshop from outside. In the case of overcrowding, in an emergency, these factors would obviously affect the effective evacuation of employees. The investigator did not ever see other emergency exits. Even if there were other doors, after workers entered the workshop, management did not explain emergency protocol or inform workers of escape routes. During the period of investigation, the investigator noticed signs explaining fire drill procedure but never witnessed a fire drill in action.

Rewards and Punishments

Punishments at Pegatron are divided into four categories based on the degree of infraction: warnings, minor offenses, major offenses, and dismissal. Behavior that will merit disciplinary action include failing to wear or to correctly wear one's worker ID, clocking in or out for someone else, failing to comply with security checks, bringing prohibited items into the workshop, theft, revealing confidential proprietary information, and so on. Revealing one's wage information or making inquiries into others' wage information is also considered to be illicit behavior that will merit dismissal after two offenses. Though the majority of rules are reasonable, there are a few that are clearly unreasonable or unduly severe, such as the previously discussed instance in which reporting a work injury was reported as a major offense, or how those observed to be crossing their legs while sitting in the rest area during their break would be given a warning.

The factory area and the park area both have inspectors supervising the workers' behavior; they wear an armband that reads "Inspector." If an inspector notices any worker breaking the rules, he will take down the worker's name and number. Be it a warning or a demerit, the punishment will be accompanied by a fine. Warnings will receive a 0 to 100 RMB fine, minor offenses a fine of 100 RMB, and major offenses a fine of 300 RMB. Fines are denoted on the paystub as a deduction. Once, a worker was fined 50 RMB for not wearing his worker ID in the park region. Other behaviors that can receive fines include not wearing uniforms in accordance with regulations, wearing anti-static footwear outside of the production area, and smoking in undesignated areas.

Pegatron's rewards are divided into three categories: awards, minor achievements, and major achievements. Behaviors that merit awards consist primarily of excellent work performance, high self-initiative at work, returning lost money, putting forward valuable suggestions, reporting other workers' misconduct, and so on. Awards will receive a 0 to 100 reward, minor achievements a reward of 100 RMB, and major achievements a reward of 200 RMB. However, the investigator never came across any worker who had received a reward of any kind.

园区惩处细则				
序号	违规事项	惩处内容		
		第一次	第二次	第三次
1	未经核准携带A类管制物品进入管制区域或将管制物品携出管制区域经查证属实者	警告	小过	大过
2	未经核准携带B类管制物品进入管制区域或将管制物品携出管制区域经查证属实者	小过	大过	违纪 免职
3	未经许可带领无门禁权限人员进入管制区域、恶意试刷各管制区域门禁、未刷卡进入门禁管制区域经查证属实者	小过	大过	违纪 免职
4	非逃生、救援等紧急情况，擅自攀爬阳台、护栏、窗户进出房间或楼栋经查证属实者	大过		

园区奖励细则		
序号	奖励事项	奖励内容
1	拾金不昧(RMB50至RMB200, 或等值之物品), 经查证属实者	嘉奖
2	突出表现有具体成效或非本人职责范围之表现优异者	嘉奖
3	积极参与公司组织的各项活动, 表现突出者	嘉奖
4	主动提供资讯, 协助公司进行日常管理與监督作业	嘉奖
5	提出合理化建议, 被采纳并取得良好效果者	嘉奖
6	拾金不昧(RMB200至RMB2,000或等值之物品), 经查证属实者	小功

List of rewards and punishments (from Pegatron app version of employee information)

Resignation

Resignation at Pegatron is fairly easy: Workers can self-report their desire to resign to the administration and can resign after three days' advance notice. When resigning, workers need to turn in their work uniform and other company articles. However, they cannot receive their paystubs at the time of their resignation and must wait until the next payday to receive them (the 10th day of each month).

Missing work without leave for three days is regarded as the worker quitting (for new workers, for the three days after they sign their contracts, missing one day without leave counts as quitting). For those workers who lose their jobs on account of missing work without leave, if they complete resignation procedures after they quit, they can also receive their paystubs. However, the majority of workers who quit are those who worked for just a few days before deciding to leave, and as such, their wage cards have not yet been distributed. So if they want to collect their wage, they have to personally register a

local Agricultural Bank card to hand in to the factory. As a result, many workers will directly leave without planning to complete resignation procedures, and consequently never receive their wage.

Other Issues

No labor union was observed at Pegatron. During pre-job training, the investigator asked the instructor if there was a labor union, but the instructor said she was not clear as to what the investigator meant by the words “labor union” (though the investigator expressed himself very clearly). The PowerPoint presentation used during training did have some content relating to a union, but the instructor skipped right over that segment. The investigator came across no further mention of or information about a labor union during his later interviews and investigation.

Pegatron’s worker appeal channels primarily consist of the factory’s worker service center, each workshop’s “Happy Helper” service and Pegatron’s WeChat support platform. The factory’s worker service center is chief among these, as it is responsible for answering all kinds of work-related questions and managing the brand’s general affairs. The investigator went to the worker service center and checked out the WeChat support platform to seek counsel, and was able to receive answers through both channels without much trouble.

In the service center, the investigator asked about wage questions, specifically with the calculation of overtime, the special subsidy, and seniority pay. The information provided by the staff member about these questions are reflected in the wage information earlier in this report. The consultation process in the service center requires a worker to take a number based on the category of questions, including problems with the work ID, housing, meals, wages, resignation, and insurance. A digital record of the inquiry and corresponding answer will be saved in the company’s system, and workers can look up the information later.

Regarding the investigator’s queries to the WeChat platform about switching dorms, generally workers are not permitted to switch dorms, unless they suffer from carsickness or have outstanding work performance, in which case they can transfer to the on-campus dorm.

Pegatron has an internal smartphone app called “Grasp Knowledge,” which workers can log into with their worker number. Using this application, workers can look through people in their vicinity to find friends at Pegatron, keep track of company developments, and look through the Pegatron quarterly publication and other content related to daily life, education, and so on.

On the subject of dispatch workers, the investigator saw a one-page company notice in the factory entitled “Concerning the ‘three conditions’”, which said the following in regards to dispatch workers’ “auxiliary” status: “Because the company’s main business is assembling and producing electronic products, all positions with the exception of assembly line jobs are auxiliary positions, including packaging, testing, modules, inspection, materials, processing, research and development, security, etc.” The investigator thought this was clearly expanding the meaning of “auxiliary” to include a seriously loose interpretation, similar to wordplay. Moreover, the investigation revealed

that even assembly positions employed dispatch workers. The number of dispatch workers at Pegatron clearly far exceeds the mandate set forth in “Interim Provisions on Labor Dispatch” that dispatch workers not exceed 10% of the total workforce.



Pegatron's employee service center

APPENDIX A:

DESCRIPTION OF CHEMICALS ON PEGATRON INFORMATION SHEET

China Ministry of Industry and Information Technology (MIIT) published the Administrative Measure on the Control of Pollution Caused by Electronic Information Products⁹ (also called the China RoHS¹⁰), which specifies the density of the following six chemicals:

Lead (Pb): < 1000 ppm

Mercury (Hg): < 100 ppm

Cadmium (Cd): < 100 ppm

Hexavalent Chromium: (Cr VI) < 1000 ppm

Polybrominated Biphenyls (PBB): < 1000 ppm

Polybrominated Diphenyl Ethers (PBDE): < 1000 ppm¹¹

[DETAILED CHART ON THE FOLLOWING PAGE]

⁹<http://www.miit.gov.cn/n11293472/n11293832/n11293907/n11368223/n14103773.files/n14103084.pdf>

¹⁰ The so-called “China RoHS” is not the real name of the official regulation (which should be “Administrative Measure on the Control of Pollution Caused by Electronic Information Products”), which is based on the Restriction of Hazardous Substances Directive (RoHS) issued by the European Commission in 2003. Despite differences in regulatory arena (China RoHS does not allow any technology exemptions unlike EU RoHS 2 Directive), the amount of regulated chemicals remains the same as the European standard.

¹¹ http://www.chemsafetypro.com/Topics/Restriction/China_RoHS_2_vs_EU_RoHS_2.html

CH	EN	Toxicity/ Health effects	Workplace exposure limits	Required Preventive Measures for Occupational Safety
铅 (Pb)	Lead	<p>Absorption via: Inhalation and ingestion.</p> <p>Effects of short-term exposure: Abdominal pain, constipation, tiredness/weakness, headaches, irritability, loss of appetite and memory. ¹²</p> <p>Effects of long-term and repeated exposure: Impairs the blood, bone marrow, the nervous system and kidneys. Results in anemia, encephalopathy, peripheral nerve disease, abdominal cramps, reduced fertility. Substance is carcinogenic. ¹³</p>	<p>NIOSH REL: 0.050 mg/m³(8-hour TWA)</p> <p>OSHA PEL: 0.050 mg/m³(8-hour TWA)¹⁴</p>	<ul style="list-style-type: none"> - NIOSH and OSHA recommended that exposure to lead be minimized through the use of engineering controls and work practices, as well as personal protective equipment (PPE), including respirators. - Airborne lead concentrations and blood lead concentrations should be monitored to determine the effectiveness of controls and PPE. ¹⁵
镉 (Cd)	Cadmium	<p>Absorption via: Inhalation of its fumes and ingestion.</p> <p>Effects of short-term exposure: Inhalation of fumes may cause lung edema and metal fume fever. Effects may be delayed.</p> <p>Effects of long-term and repeated exposure: Impairs the lungs and kidneys. Substance is carcinogenic. ¹⁶</p>	<p>The OSHA standards of cadmium comprise a PEL of 5µg/ m³ and an AL (<i>Action Limit</i>) of 2.5µg/ m³.</p>	<p>Measures required when Cd level is above AL:</p> <ul style="list-style-type: none"> - Exposure monitoring - Education and training of employees regarding cadmium hazards - Medical surveillance for workers - Respirators, if required by employees - Housekeeping and record keeping <p>Measures required when Cd level is above the PEL:</p> <ul style="list-style-type: none"> - Regulated areas be labeled - Respirators - Protective work clothing and equipment

¹²<http://www.cdc.gov/niosh/topics/lead/health.html>

¹³<http://www.cdc.gov/niosh/ipcsneng/neng0052.html>

¹⁴NIOSH = National Institute for Occupational Safety and Health; REL = Recommended Exposure Limits; TWA = Time Weighted Average; OSHA = Occupational Safety and Health Administration; PEL = Permission Exposure Limits; AL = Action Limit.

¹⁵<http://www.cdc.gov/niosh/docs/91-116/>. A detailed instruction for lead-poisoning prevention is provided here:

http://www.lni.wa.gov/Safety/Research/files/lead_protect.pdf

¹⁶<http://www.cdc.gov/niosh/ipcsneng/neng0020.html>

				<ul style="list-style-type: none"> - Clean changing rooms, hygiene facilities and dining facilities - Emergency plan¹⁷
汞 (Hg)	Mercury	<p>Absorption via: Eye contact and skin contact; inhalation; ingestion.</p> <p>Effects of short-term exposure: Irritating to skin. Impairs central nervous system and kidneys. Inhalation of vapor can cause pneumonitis.</p> <p>Effects of long-term exposure: Can cause irritability, emotional instability, tremors, mental and memory disturbances, speech disorders, inflammation and discoloration of the gums. May harm the reproductive system. ¹⁸</p>	<p>NIOSH REL: 0.05 mg/m³ for mercury vapor (10-hour TWA) <u>AND</u> 0.1 mg/m³ for mercury (not to be exceeded any time) ¹⁹</p> <p>OSHA PEL: 0.1 mg/m³ (8-h our TWA)</p>	<ul style="list-style-type: none"> - Label process containers - Provide employees with hazard information and training - Monitor airborne chemical concentrations; use engineering controls if exceeds PEL - Provide hand-wash and eye-wash fountains and emergency showers - Protective clothing should be provided at work and changed after work - General ventilation to lower exposure²⁰
六价铬 Cr(VI)	Hexavalent chromium	<p>Absorption via: Inhalation of airborne hexavalent chromium as particulate matter (PM), fumes, or mist.²¹</p> <p>Effects of short-term exposure: Irritates or damages the nose, throat, and lungs (respiratory system) if inhaled at high levels. Irritates or damages the eyes and skin if contacted in high concentrations.²²</p> <p>Effects of long-term exposure: Cancer (lung, nasopharynx, oropharynx,</p>	<p>NIOSH REL: 0.0002 mg/m³ (8-h our TWA)</p> <p>OSHA PEL: 5.0 µg/m³ TWA; 2.5 µg/m³TWA , action level (AL)²⁴</p>	<ul style="list-style-type: none"> - Monitor exposure according to OSHA PEL standard - Periodic monitoring at least every 6 months previous exposure above AL (2.5 µg/m³) - Personal protective clothing and equipment be provided - Implement good personal hygiene and housekeeping practices - Provide respiratory protection - Medical examinations for employees regularly and at

¹⁷Summarized from http://www.nj.gov/health/surv/documents/cadmium_std.pdf

¹⁸<http://www.cdc.gov/niosh/ipcsneng/neng0056.html>

¹⁹<http://nj.gov/health/eoh/rtkweb/documents/fs/1183.pdf>

²⁰Ibid.

²¹https://www.osha.gov/OshDoc/data_General_Facts/hexavalent_chromium.pdf

²²Ibid.

		nasal passages). Eye irritation and skin sensitization. ²³		the end of employment ²⁵
多溴联苯 (PBBs)	Polybrominated Biphenyls	Absorption via: Inhalation; ingestion of contaminated food and water; contact with contaminated soil. Effects of short-term exposure: Can cause weight loss, skin disorders, effects on the nervous and immune systems, and effects on the liver, kidneys, and the thyroid gland. Effects of long-term exposure: Possibly carcinogenic. ²⁶	ATSDR ²⁷ : a minimal risk level (MRL) of 0.01 mg/kg-day for acute (1 to 14 days) oral exposure to PBBs. ²⁸ No OSHA standards established on PBBs	<ul style="list-style-type: none"> - OSHA has not established regulations regarding PBBs and PBDEs. - Currently no federal guidelines or recommendations, because these two substances were being gradually phased out in North America. - Specific tests can be performed to determine whether PBBs and PBDEs exist in body fat, blood and breast milk.
多溴联苯醚 (PBDEs)	Polybrominated Diphenyl Ethers	Absorption via: Ingestion of contaminated food and water; contact with contaminated soil. Effects of long-term exposure: The EPA has classified decaPBDE as “a possible human carcinogen.” ²⁹	ATSDR: an MRL of 10 mg/kg/day for intermediate (14 to 364 days) oral exposure to decaBDE; No OSHA standards on PBDEs. ³⁰	
砷(As)	Arsenic	Absorption via: Inhalation of its aerosol and by ingestion. Effects of short-term exposure: Can cause nausea,	OSHA PEL: TWA 0.010 mg/m ³	<ul style="list-style-type: none"> - Medical surveillance: periodic medical screening and/or biochemical monitoring - Physical and environmental

²⁴ Ibid.

²³ https://www.osha.gov/dts/chemicalsampling/data/CH_228697.html

²⁵ Ibid.

²⁶ <http://www.atsdr.cdc.gov/toxfaqs/TF.asp?id=528&tid=94>

²⁷ ATSDR = The Agency for Toxic Substances and Disease Registry.

²⁸ <http://nepis.epa.gov/Adobe/PDF/P1000L3S.PDF>

²⁹ <http://nepis.epa.gov/Adobe/PDF/P1000L3S.PDF>

³⁰ <http://nepis.epa.gov/Adobe/PDF/P1000L3S.PDF>

		<p>vomiting, diarrhea, weakness, loss of appetite, cough, chest pain, giddiness, headache and breathing difficulty.³¹</p> <p>Effects of long-term exposure: Affects the mucous membranes, skin, peripheral nervous system, liver and bone marrow, resulting in pigmentation disorders, dermatitis hyperkeratosis, perforation of the nasal septum, neuropathy, liver impairment, and anemia. Carcinogenic to humans.³²</p>	<p>NIOSH REL: Ca C 0.002 mg/m³ 15- minute</p> <p>NIOSH IDLH: Ca 5 mg/m³ (as As)</p>	<p>examination at job transfers and/or termination</p> <ul style="list-style-type: none"> - Ceiling concentration evaluation - Provision of personal protective equipment - Preparation of emergency/first aid plan - Proper sanitation - Respiratory protection - Proper waste removal and disposal³³
无卤 (HF)	Halogen-Free	<p>The halogens are five non-metallic elements found in Group 17 of the periodic table: Fluorine, Chlorine, Bromine, Iodine and Astatine.</p> <p>“Halogen-free” indicates that the product material does not contain (or contains very few) compounds derived from these elements.</p>		

³¹ <http://www.cdc.gov/niosh/docs/81-123/pdfs/0038.pdf>

³² <http://www.cdc.gov/niosh/ipcsneng/neng0013.html>

³³ <http://www.cdc.gov/niosh/docs/81-123/pdfs/0038.pdf>

APPENDIX B:
COMPARISON OF RESULTS OF 2013 AND 2015 CLW
INVESTIGATIONS AT PEGATRON SHANGHAI

Category	Changes in Pegatron Shanghai Working Conditions (2013 vs. 2015)			
	Fundamental Improvement	Partial Improvement	No Changes	Problem Worsened
1. Hiring Discrimination	In 2013, discriminatory policies were observed in Pegatron against the following types of applicants: people with tattoos, dyed hair or unusual hairstyles; Tibetans or Uighurs; pregnant females; people older than 35 or those that did not meet height criteria. In 2015, this type of discrimination was not observed. (One unconfirmed issue involves the company asking women whether they are "pregnant or preparing to become pregnant" to prevent potential harm from X-ray radiation. But the real purpose of this policy remains unconfirmed (for details see page 11).			
2. Sick Leave		Compared to 2013, in 2015 taking sick leave is easier with diagnosis and medical proof at the clinic. However, many sick workers still prefer taking an unpaid leave over paid sick leave due to the costs of medicine.		

<p>3. Resignation</p>		<p>It was more difficult to resign in 2013, and many workers chose to quit without getting paid. In 2015, resignation procedures appeared to be simpler, but workers needed to wait until the 10th of the following month to collect due wages.</p>		
<p>4. Insurance</p>		<p>A majority of workers were dispatch workers and were not provided insurance in 2013. In 2015, Pegatron claims that it has purchased insurance for formal employees (student workers not included), but has not made that information transparent. Mandatory housing fund is also not included.</p>		
<p>5. Working Hours</p>		<p>In 2013, the workweek was 63-66 hrs. Maximum monthly overtime: 110 hrs. In Sep. 2014, the average workweek was 63 hrs (only 7% of workers worked less than 60 hrs); average monthly overtime was 98 hrs; maximum monthly overtime was 130 hours; over 50% workers worked more than 90 hrs of overtime in 2014.</p> <p>In 2015, the median workweek was 60.5 hrs; median monthly overtime was 83 hrs (average is 80 hrs); maximum monthly overtime was 119 hrs; 57% workers work more than 60 hrs overtime in a month and 32% work more than 90 hrs.</p>		

<p>6. Temporary (Dispatch) Workers</p>			<p>Similar to 2013, ratio of dispatch workers is still over 50% in Pegatron's workforce.</p>	
<p>7. Physical Exam Fees</p>			<p>Physical examination fees still paid by workers in 2015.</p>	
<p>8. Safety Training</p>			<p>Pre-job training lasts for 8 hours in 2015, similar to that of 2013.</p>	
<p>9. Fraudulent Records</p>			<p>Fraudulent practices like copying test answers and fabricating overtime schedules already existed in 2013. In 2015, in addition to these issues, workers are further told to sign a form to certify that they have undergone a 20-hour training (only 8 hrs in reality) and fabricate the trainer's signature.</p>	
<p>10. Forced Labor</p>			<p>In 2013, most overtime was mandatory. In 2015, not only is most work mandatory, but a factory staff member even said that a worker who only wants to work five days a week, eight hours a day "this does not conform to our hiring requirements."</p>	
<p>11. Standing Work</p>			<p>Many workers are still required to stand 10.5 to 11 hours during work.</p>	

<p>12. Occupational Safety</p>		<p>Like before, workers are not informed about the specific chemicals used in the production process, nor are they educated about how to use protective equipment properly. Workers may receive a demerit for "carelessness" if they are injured on the job.</p>	
<p>13. Fire Safety</p>		<p>Same as 2013: Few workers have attended a fire drill in 2015, and they are not well-informed of the locations of the emergency exits.</p>	
<p>14. Wages</p>		<p>2013: Base wage was local minimum wage (1,620 RMB). In busy seasons, total monthly wages were about 3,200 RMB (about at the time \$520). 2015: Base wage remains the local minimum (2,020 RMB), and total wage in busy seasons is about 4,673 RMB (\$735), not a major difference when inflation is factored in.</p>	
<p>15. Unpaid Work</p>		<p>At least 20 minutes of unpaid mandatory work per week in 2013. In 2015, this time is 15 minutes.</p>	

<p>16. Labor Union</p>			<p>Workers had heard about the labor union in 2013 but were uninformed of its location. In 2015, still no workers asked could point out real location of the union; even one of Pegatron's trainers claimed not to know the meaning of the words "labor union."</p>	
<p>17. Short-term Contracts</p>				<p>Dispatch workers only sign a 4-month contract in 2015, far shorter than 2-year contract in 2013.</p>
<p>18. Rushed Meal Hours</p>				<p>In 2013, workers had 50 minutes for lunch and 40 minutes for dinner. In 2015, while lunchtime remains the same, dinner time is compressed to 30 minutes - so rushed that many workers opt to skip dinner until after work.</p>

<p>19. Fines</p>			<p>In 2015, fines not previously noted in 2013 were recorded. Fines range from 50 to 300 RMB, for behaviors like crossing legs or not wearing a work ID card.</p>
<p>20. Poor Housing Conditions</p>			<p>Dorms remain crowded in 2015, hosting up to 14 people per room (the comparable number in 2013 is 12). Facilities were undersupplied. Many workers need to take a 40-minute bus ride to the factory. Bed bugs are rampant in addition to existing sanitary problems.</p>

<p>21. Meal Costs</p>			<p>A worker's typical monthly food cost is around 600-700 RMB, considerably higher than in 2013 (400-600 RMB). However, the meal subsidy remains 280 RMB without increasing.</p>
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APPENDIX C:
ANALYSIS OF WAGE DATA FROM
PEGATRON WORKERS' PAYSTUBS

These numbers reflect data from 76 paystubs collected that indicated wage information for September of 2015, typically a busy month for Pegatron Shanghai. Over the course of the investigation, CLW collected 127 paystubs in total. The other paystubs besides these 76 reflect data from various months prior to September 2015.

	September 2015	
	Mean	Median
Total overtime compensation	1651 RMB 260 USD	1743 RMB 275 USD
Gross wage	4781 RMB 753 USD	4674 RMB 736 USD
Net wage	4083 RMB 643 USD	4002 RMB 630 USD
Overtime hours worked	80	83
Total hours worked per week	60	60
Percentage of workers working more than 60 hours per week	58%	
Percentage of workers working more than 90 hours of overtime in the month	32%	
Highest total hours of overtime recorded for the month	119	

Note: Scans of the paystubs can be provided upon request.