

FUKUSHIMA



NUCLEAR CATASTROPHE: A 9.0 earthquake and 15-meter high tsunami waves on March 11, 2011 triggered multiple meltdowns at the Fukushima Daiichi plant. **REUTERS/ISSEI KATO**

Jobs at Japan's crippled nuclear plant offer low pay, high risks of radiation. And your boss could be a member of the yakuza.

Down and out in Fukushima

BY ANTONI SLODKOWSKI AND MARI SAITO

IWAKI, JAPAN, OCTOBER 25, 2013

NUCLEAR WORKERS DOWN AND OUT IN FUKUSHIMA

Tetsuya Hayashi went to Fukushima to take a job at ground zero of the worst nuclear disaster since Chernobyl. He lasted less than two weeks.

Hayashi, 41, says he was recruited for a job monitoring the radiation exposure of workers leaving the plant in the summer of 2012. Instead, when he turned up for work, he was handed off through a web of contractors and assigned, to his surprise, to one of Fukushima's hottest radiation zones.

He was told he would have to wear an oxygen tank and a double-layer protective suit. Even then, his handlers told him, the radiation would be so high it could burn through his annual exposure limit in just under an hour.

"I felt cheated and entrapped," Hayashi said. "I had not agreed to any of this."

When Hayashi took his grievances to a firm on the next rung up the ladder of Fukushima contractors, he says he was fired. He filed a complaint but has not received any response from labour regulators for more than a year. All the eight companies involved, including embattled plant operator Tokyo Electric Power Co, declined to comment or could not be reached for comment on his case.

Out of work, Hayashi found a second job at Fukushima, this time building a concrete base for tanks to hold spent fuel rods. His new employer skimmed almost a third of his wages – about \$1,500 a month – and paid him the rest in cash in brown paper envelopes, he says. Reuters reviewed documents related to Hayashi's complaint, including pay envelopes and bank statements.

Hayashi's hard times are not unusual in the estimated \$150-billion effort to dismantle the Fukushima reactors and clean up the neighbouring areas, a Reuters examination found.

In reviewing Fukushima working conditions, Reuters interviewed more than 80 workers, employers and officials involved in the unprecedented nuclear clean-up. A common complaint: the project's



UNHAPPY SURPRISE: Tetsuya Hayashi didn't realize he'd be assigned to one of Fukushima's highest radiation zones. His Tepco ID card (below) is pictured atop a copy of his resume, which he says his employer forged. **REUTERS/TORU HANAI**



“I felt cheated and entrapped. I had not agreed to any of this.

Tetsuya Hayashi

dependence on a sprawling and little scrutinised network of subcontractors – many of them inexperienced with nuclear work and some of them, police say, have ties to organised crime.

Tepco sits atop a pyramid of subcontractors that can run to seven or more layers and includes construction giants such as Kajima Corp and Obayashi Corp in the first tier. The embattled utility remains in charge of the work to dismantle the damaged Fukushima reactors, a government-subsidized job expected to take 30 years or more.

Outside the plant, Japan's "Big Four" construction companies – Kajima,

Obayashi, Shimizu Corp and Taisei Corp – oversee hundreds of small firms working on government-funded contracts to remove radioactive dirt and debris from nearby villages and farms so evacuees can return home.

Tokyo Electric, widely known as Tepco, says it has been unable to monitor subcontractors fully but has taken steps to limit worker abuses and curb the involvement of organised crime.

"We sign contracts with companies based on the cost needed to carry out a task," Masayuki Ono, a general manager for nuclear power at Tepco, told Reuters.

NUCLEAR WORKERS DOWN AND OUT IN FUKUSHIMA



DECONTAMINATION: Thousands of workers are picking up radioactive debris in towns and villages around Fukushima prefecture and storing them in huge blue bags, which for now are piling up along roadsides. **REUTERS/SOPHIE KNIGHT**

“The companies then hire their own employees taking into account our contract. It’s very difficult for us to go in and check their contracts.”

The unprecedented Fukushima nuclear clean-up both inside and outside the plant faces a deepening shortage of workers. There are about 25 percent more openings than applicants for jobs in Fukushima prefecture, according to government data.

Raising wages could draw more workers but that has not happened, the data shows. Tepco is under pressure to post a profit in the year to March 2014 under a turnaround plan Japan’s top banks recently financed with \$5.9 billion in new loans and refinancing. In 2011, in the wake of the disaster, Tepco cut pay for its own workers by 20 percent.

With wages flat and workers scarce, labour brokers have stepped into the gap, recruiting people whose lives have reached a dead end or who have trouble finding a job outside the disaster zone.

The result has been a proliferation of small firms – many unregistered. Some 800 companies are active inside the Fukushima plant and hundreds more are working in the decontamination effort outside its gates, according to Tepco and documents reviewed by Reuters.

“It’s very difficult for us to go in and check their contracts.”

Masayuki Ono

general manager for nuclear power, Tepco

Tepco, Asia’s largest listed power utility, had long enjoyed close ties to regulators and lax government oversight. That came under harsh scrutiny after a 9.0 magnitude earthquake and a massive tsunami hit the plant on March 11, 2011. The disaster triggered three reactor meltdowns, a series of explosions and a radiation leak that forced 150,000 people to flee nearby villages.

Tepco’s hapless efforts since to stabilise the situation have been like someone playing “whack-a-mole”, Minister of Economy, Trade and Industry Toshimitsu Motegi has said.

‘NUCLEAR GYPSIES’

Hayashi is one of an estimated 50,000 workers who have been hired so far to shut down the nuclear plant and decontaminate the towns and villages nearby. Thousands more will have to follow. Some of the workers will be needed to maintain the system that cools damaged fuel rods in the reactors with thousands of tonnes of water every day. The contaminated runoff is

then transferred to more than 1,000 tanks, enough to fill more than 130 Olympic-sized swimming pools.

Dismantling the Fukushima Daiichi plant will require maintaining a job pool of at least 12,000 workers just through 2015, according to Tepco’s blueprint. That compares to just over 8,000 registered workers now. In recent months, some 6,000 have been working inside the plant.

The Tepco hiring estimate does not include the manpower required for the government’s new \$330 million plan to build a massive ice wall around the plant to keep radiated water from leaking into the sea.

“I think we should really ask whether they are able to do this while ensuring the safety of the workers,” said Shinichi Nakayama, deputy director of safety research at the Japan Atomic Energy Agency.

Japan’s nuclear industry has relied on cheap labour since the first plants, including Fukushima, opened in the 1970s. For years, the industry has rounded up itinerant workers known as “nuclear gypsies” from the Sanya neighbourhood of Tokyo and Kamagasaki in Osaka, areas known for large numbers of homeless men.

“Working conditions in the nuclear industry have always been bad,” said Saburo Murata, deputy director of Osaka’s Hannan

Chuo Hospital. “Problems with money, outsourced recruitment, lack of proper health insurance – these have existed for decades.”

The Fukushima project has magnified those problems. When Japan’s parliament approved a bill to fund decontamination work in August 2011, the law did not apply existing rules regulating the construction industry. As a result, contractors working on decontamination have not been required to disclose information on management or undergo any screening.

That meant anyone could become a nuclear contractor overnight. Many small companies without experience rushed to bid for contracts and then often turned to brokers to round up the manpower, accord-

12,000

The number of workers that will be needed until 2015 to decommission the Fukushima Daiichi nuclear power plant.

Source: Tepco

ing to employers and workers.

The resulting influx of workers has turned the town of Iwaki, some 50 kilometres (30 miles) from the plant, into a bustling labour hub at the front line of the massive public works project.

In extreme cases, brokers have been known to “buy” workers by paying off their debts. The workers are then forced to work until they pay off their new bosses for sharply reduced wages and under conditions that make it hard for them to speak out against abuses, labour activists and workers in Fukushima said.

Lake Barrett, a former U.S. nuclear regulator and an advisor to Tepco, says

Text continues on page 6

TETSUYA HAYASHI

I felt cheated and entrapped

I went to work in the Fukushima Daiichi nuclear power plant in June last year. I was recruited to work as a surveyor checking radiation exposure of workers leaving the plant. When I arrived in Iwaki, a town close to the crippled nuclear plant, I was picked up by RH Kogyo, a contractor I had never heard of before.

It was one of the many firms that handled me inside the plant. In one of the first meetings, a mid-tier subcontractor, Suzushi Kogyo, asked me to write on my application that I had three years of experience working for a construction company in Fukushima. They somehow obtained my resume and added that information to it. They also asked me to sign the form with a falsified “hanko” - stamp used in Japan to sign documents.

Only after I had signed the papers I was told by ABL - a subcontractor higher up the chain - that we would be working in a highly radioactive environment. I would have to wear a full face mask, double-layered protective suit and an oxygen tank.

I felt cheated and entrapped. I did not agree to any of this and I was worried about radioactive exposure that will not allow me to work as long as I had planned. One of the bosses handling us said: “It doesn’t build up in you. Once you wait a week, the amount of radiation goes down by half.”

Soon after that, I got fired for asking questions about their responsibility and for taking my grievances to subcontractors closer to Tepco in the hierarchy.

When I received my nuclear worker’s passbook after my stint, it said that I used to be an employee of Suzushi and ABL Co. Ltd. But I had never signed any contract with either of the two companies. I suspect they forged my handbook to hide the fact that they outsourced my employment to smaller firms.

I went back and confronted my former employers about everything. They took me to Suzushi’s office and yelled at me. They also called my mother to tell her that I was in trouble. I refused to

“I got fired for asking questions about their responsibility.”

sign a pledge that I wouldn’t cause them any more problems, so they asked her to come to Fukushima and do it on my behalf.

I told my mother not to worry and that I was fine. I wanted them to explain why they weren’t telling the truth about my pay, about the kind of job I was supposed to be doing, about radiation at the work site and why they falsified my documents, including my own resume.

I didn’t get a satisfactory answer, so I filed a complaint to Tepco and with the Fukushima labour standards office. I gave the regulators evidence to support my claims, but they have not decided on anything for over a year.

Hiring Hayashi

Seven subcontractors were involved in hiring and assigning work for Tetsuya Hayashi at Japan's crippled Fukushima Daiichi nuclear power plant. The main five firms include:

Tepco

Operator of Fukushima Daiichi nuclear plant

Tokyo Energy and Systems

Major subcontractor

Specializes in planning, design and construction of plants. Briefs workers on their assignments.

ABL

Nuclear contractor

Specializes in plant construction and maintenance. Briefs workers on their assignments.

Suzushi Kogyo

Subcontractor

Specializes in construction and engineering work. Organizes workers' paperwork and supplies them to larger contractors.

RH Kogyo

Broker

Collects and houses workers near the plant. Instructs them before meeting contractors higher up the chain.

Full Mark

Broker

Recruits workers to nuclear power plant via online advertisements.

Hayashi's story

Full Mark offers Hayashi job as surveyor at the plant.

RH Kogyo signs one year contract with Hayashi.

Suzushi Kogyo and another handling company tell him to sign resume with false information.

ABL tells him he will work in highly radioactive area.

Tokyo Energy & Systems tells him he will only be able to work 5 to 10 minutes at a time due to radioactivity.

President of Suzushi Kogyo yells at him and fires him.

Hayashi complains to ABL he was pushed into something he did not agree to.

the system is so ingrained it will take time to change.

“There’s been a century of tradition of big Japanese companies using contractors, and that’s just the way it is in Japan,” he told Reuters. “You’re not going to change that overnight just because you have a new job here, so I think you have to adapt.”

A Tepco survey from 2012 showed nearly half of the workers at Fukushima were employed by one contractor but managed by another. Japanese law prohibits such arrangements, in order to prevent brokers from skimming workers’ wages.

Tepco said the survey represents one of the steps it has taken to crack down on abuses. “We take issues related to inappropriate subcontractors very seriously,” the utility said in a statement to Reuters.

Tepco said it warns its contractors to respect labour regulations. The company said it has established a hotline for workers, and has organised lectures for subcontractors to raise awareness on labour regulations. In June, it introduced compulsory training for new workers on what constitutes illegal employment practices.

Tepco does not publish average hourly wages in the plant. Workers interviewed by Reuters said wages could be as low as around \$6 an hour, but usually average around \$12 an hour – about a third lower than the average in Japan’s construction industry.

Workers for subcontractors in the most-contaminated area outside the plant are supposed to be paid an additional government-funded hazard allowance of about \$100 per day, although many report it has not been paid.

The work in the plant can also be dangerous. Six workers in October were exposed to radioactive water when one of them detached a pipe connected to a treatment system. In August, 12 workers were irradiated when removing rubble from around one of the reactors. The accidents prompted Japan’s nuclear regulator to question whether Tepco has been delegating too much.



RADIATION RISKS: Workers are constantly screened for radiation as they work to permanently shut down the crippled Fukushima Daiichi nuclear power plant. **REUTERS/ISSEI KATO**

“In contracts with our subcontractors, we have clauses on not cooperating with organized crime..

Obayashi Corp spokesman

“Proper oversight is important in preventing careless mistakes. Right now Tepco may be leaving it all up to the subcontractors,” said the head of Japan’s Nuclear Regulation Authority, Shunichi Tanaka in response to the recent accidents.

Tepco said it will take measures to ensure that such accidents are not repeated. The utility said it monitors safety with spot inspections and checks on safeguards for workers when projects are divided between subcontractors.

The NRA, which is primarily charged with reactor safety, is only one of several agencies dealing with the Fukushima project: the ministries of labour, environment, trade and economy are also responsible for managing the clean-up and enforcing

regulations, along with local authorities and police.

Yousuke Minaguchi, a lawyer who has represented Fukushima workers, says Japan’s government has turned a blind eye to the problem of worker exploitation. “On the surface, they say it is illegal. But in reality they don’t want to do anything. By not punishing anyone, they can keep using a lot of workers cheaply.”

Economy Minister Motegi, who is responsible for Japan’s energy policy and decommissioning of the plant, instructed Tepco to improve housing for workers. He has said more needs to be done to ensure workers are being treated well.

“To get work done, it’s necessary to cooperate with a large number of companies,” he told Reuters. “Making sure that those relations are proper, and that work is moving forward is something we need to keep working on daily.”

FALSIFIED PASSBOOK

Hayashi offers a number of reasons for his decision to head to Fukushima from his

home in Nagano, an area in central Japan famous for its ski slopes, where in his youth Hayashi honed his snowboarding skills.

He says he was sceptical of the government's early claim that the Fukushima plant was under control and wanted to see it for himself. He had worked in construction, knew how to weld and felt he could contribute.

Like many other workers, Hayashi was initially recruited by a broker. He was placed with RH Kogyo, a subcontractor six levels removed from Tepco.

When he arrived in Fukushima, Hayashi received instructions from five other firms in addition to the labour broker and RH Kogyo. It was the sixth contractor up the ladder, ABL Co. Ltd that told him he would be working in a highly radioactive area. ABL Co reported to Tokyo Energy & Systems Inc, which in Fukushima manages some 200 workers as a first-tier contractor under Tepco.

Hayashi says he kept copies of his work records and took pictures and videos inside the plant, encouraged by a TV journalist he had met before beginning his assignment. At one point, his boss from RH Kogyo told him not to worry because any radiation he was exposed to would not "build up".

"Once you wait a week, the amount of radiation goes down by half," the man is seen telling him in one of the recordings. The former supervisor declined to comment.

The statement represents a mistaken account of radiation safety standards applied in Fukushima, which are based on the view that there is no such thing as a safe dose. Workers are limited to 100 millisieverts of radiation exposure over five years. The

RYO GOSHIMA

They told me never to return home

I was an affiliate of a gang tied to Yamaguchi-gumi, Japan's most powerful yakuza syndicate, from the age of 14 until I quit at age 20. My main duties were collecting debts and staying at the yakuza office overnight as a guard. When you're with them, you have no freedom. I wanted to stay with my girlfriend and be free to do whatever I wanted to do. So I quit.

After that, I was beaten up and was forced to pay about \$2,000 a month for several months. I borrowed cash from loan sharks and paid them over \$13,000. I had to leave the city, because they wouldn't leave me alone. My parents didn't want any problems with the gang, so they told me never to return home.

I started looking for a well-paid job as far away from home as possible. That's how I found my way to Fukushima. In the summer of last year, a labour broker offered me a job. His pinky finger was missing and he was covered in tattoos. He did not hide the fact he was a former yakuza member.

He said he would pay me about \$160 a day, and in September 2012 I started work in the decontamination of Tamura, a township close to the Fukushima plant. Each month, the broker would hand over pay in a brown envelope, but I ended up getting paid \$90 a day. I also didn't receive the government-funded dangerous work allowance of \$100 a day.

The work was quite mundane. I had to collect fallen leaves and cut grass and



CONTAMINATED?: Goshima said he was forced to eat mushrooms and bee larvae gathered from the highly radioactive evacuation zone around Fukushima.

REUTERS/ISSEI KATO

weeds from rice paddies. Some people didn't bother and just threw the leaves in the river. After hours, my team leader used to invite us to "parties" in his room. We were forced to eat fish, mushrooms and fried bee larvae that he picked next to our work site. I was worried because mushrooms are known to suck up radioactive cesium.

He and other workers would poke fun at me for being scared to eat these things. He also started charging us about \$20-30 per meal. The parties took place two-three times a week. That was a lot of money for radioactive food.

When I was asked to leave, they paid me \$3,000 in unpaid wages and I also received a payout of around \$6,000 as my final salary. After I quit, I moved to Tokyo to start a full-time job.

My dream is that one day I will have enough money to bring my girlfriend from Nagano over here.

International Atomic Energy Agency says exposure over that threshold measurably raises the risk of later cancers.

After Hayashi's first two-week stint at the plant ended, he discovered his nuclear passbook – a record of radiation exposure – had been falsified to show he had been an employee of larger firms higher up the ladder of contractors, not RH Kogyo.

Reuters reviewed the passbook and documents related to Hayashi's employment. The nuclear passbook shows that Hayashi was employed by Suzushi Kogyo from May to June 2012. It says Take One employed Hayashi for ten days in June 2012. Hayashi says that is false because he had a one-year contract with RH Kogyo.

"My suspicion is that they falsified the records to hide the fact that they had outsourced my employment," Hayashi said.

ABL Co. said Hayashi had worked with the firm but declined to comment on his claims. Tepco, Tokyo Energy & Systems, Suzushi Kogyo and RH Kogyo also declined to comment. Take One could not be reached for comment.

In September 2012, Hayashi found another job with a subcontractor for Kajima, one of Japan's largest construction companies. He didn't want to go back home empty-handed and says he thought he might have been just unlucky with his first bad experience at the plant.

Instead, his problems continued. This time a broker who recruited several workers for the subcontractor insisted on access to his bank account and then took almost a third of the roughly \$160 Hayashi was supposed to be earning each day, Hayashi says.

The broker, according to Hayashi, identified himself as a former member of a local gang from Hayashi's native Nagano.

Ryo Goshima, 23, said the same broker from Nagano placed him in a crew doing decontamination work and then skimmed almost half of what he had been promised. Goshima and Hayashi became friends in Fukushima when they wound up working for the same firm.

Goshima said he was fired in December after complaining about the skimming practice. Tech, the contractor that had

employed him, said it had fired another employee who was found to have skimmed Goshima's wages. Tech said Goshima left for personal reasons. The firm paid Goshima back wages, both sides say. The total payment was \$9,000, according to Goshima.

Kajima spokesman Atsushi Fujino said the company was not in a position to comment on either of the cases since it did not have a contract with Hayashi or Goshima.

"We pay the companies who work for us and instruct those companies to pay the hazard allowance," the Kajima spokesman said in a statement.

THE YAKUZA CONNECTION

The complexity of Fukushima contracts and the shortage of workers have played into the hands of the yakuza, Japan's organised crime syndicates, which have run labour rackets for generations.

Nearly 50 gangs with 1,050 members operate in Fukushima prefecture dominated by three major syndicates – Yamaguchi-gumi, Sumiyoshi-kai and Inagawa-kai, police say.

A \$183 billion clean-up

Costs associated with the clean-up at and around the Fukushima Daiichi nuclear power plant.

1 DECONTAMINATION

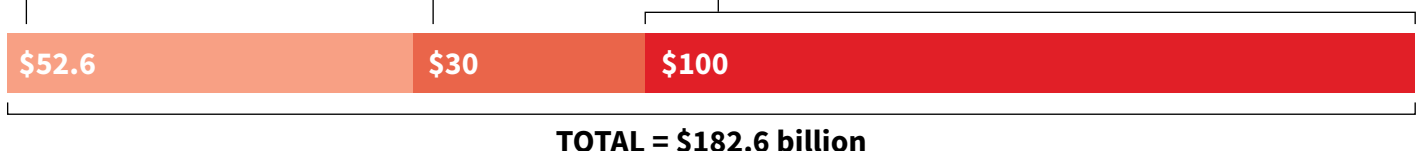
Japan's National Institute of Advanced Industrial Science and Technology estimates that the overall cost of decontamination would be as much as \$52.6 billion (5.1 trillion yen).

2 COMPENSATION

Tepco says it has paid out \$30 billion (2.93 trillion yen) in compensation as of October 4.

3 DECOMMISSIONING REACTORS 1 TO 4*

Predicting the costs of decommissioning of the four damaged reactors — an extremely complex process expected to take at least thirty years — is very difficult, scientists say. Several nuclear experts interviewed by Reuters estimated that the operation would cost at least \$100 billion.



*Tepco has so far set aside \$9.9 billion (960 billion yen) to decommission the four reactors. The Japanese government has ordered the utility to allocate an additional \$10.3 billion (1 trillion yen) to the task.

Sources: National Institute of Advanced Industrial Science and Technology; Tokyo Electric Power Corp.; Reuters.



GHOST TOWNS: More than 150,000 people fled Fukushima prefecture after the March 2011 tsunami and nuclear disaster. Many refugees have not been allowed back due to radioactive contamination from the devastated nuclear power plant, creating empty towns such as Tomioka. **REUTERS/STRINGER**

Ministries, the companies involved in the decontamination and decommissioning work, and police have set up a task force to eradicate organised crime from the nuclear clean-up project. Police investigators say they cannot crack down on the gang members they track without receiving a complaint. They also rely on major contractors for information.

In a rare prosecution involving a yakuza executive, Yoshinori Arai, a boss in a gang affiliated with the Sumiyoshi-kai, was convicted of labour law violations. Arai admitted pocketing around \$60,000 over two years by skimming a third of wages paid to workers in the disaster zone. In March a judge gave him an eight-month suspended sentence because Arai said he had resigned

from the gang and regretted his actions.

Arai was convicted of supplying workers to a site managed by Obayashi, one of Japan's leading contractors, in Date, a town northwest of the Fukushima plant. Date was in the path of the most concentrated plume of radiation after the disaster.

A police official with knowledge of the investigation said Arai's case was just "the tip of the iceberg" in terms of organised crime involvement in the clean-up.

A spokesman for Obayashi said the company "did not notice" that one of its subcontractors was getting workers from a gangster.

"In contracts with our subcontractors we have clauses on not cooperating with organised crime," the spokesman said, adding the company was working with the police

and its subcontractors to ensure this sort of violation does not happen again.

In April, the Ministry of Health, Labour and Welfare sanctioned three companies for illegally dispatching workers to Fukushima. One of those, a Nagasaki-based company called Yamato Engineering, sent 510 workers to lay pipe at the nuclear plant in violation of labour laws banning brokers. All three companies were ordered by labour regulators to improve business practices, records show.

In 2009, Yamato Engineering was banned from public works projects because of a police determination that it was "effectively under the control of organised crime," according to a public notice by the Nagasaki-branch of the land and transport

ministry. Yamato Engineering had no immediate comment.

Goshima said he himself had been working for the local chapter of Yamaguchigumi since the age of 14, extorting money and collecting debts. He quit at age 20 after spending some time in jail. He had to borrow money from a loan shark to pay off his gang, which demanded about \$2,000 a month for several months to let him go.

"My parents didn't want any problems from the gang, so they told me to leave and never return," Goshima said. He went to Fukushima looking for a well-paying job to pay down the debt – and ended up working for a yakuza member from his home district.

“In hindsight, this is not something an amateur should have gotten involved in.

Denko Keibi executive

DECONTAMINATION COMPLAINTS

In towns and villages around the plant in Fukushima, thousands of workers wielding industrial hoses, operating mechanical diggers and wearing dosimeters to measure radiation have been deployed to scrub houses and roads, dig up topsoil and strip trees of leaves in an effort to reduce background radiation so that refugees can return home.

Hundreds of small companies have been given contracts for this decontamination work. Nearly 70 percent of those surveyed in the first half of 2013 had broken labour regulations, according to a labour ministry report in July. The ministry's Fukushima office had received 567 complaints related to working conditions in the decontamination effort in the year to March. It issued 10 warnings. No firm was penalized.

One of the firms that has faced complaints is Denko Keibi, which before the

ANONYMOUS WORKER, 55

You can't see radiation

It was almost midnight by the time I arrived. The room smelled of auto grease and was littered with tools and dirty rags.

I could barely see the single mattress squeezed into the corner of the storage container. My new employer handed me a sleeping bag and said: "You can stay here until we find a more permanent place for you."

I left home, got in the car and drove from Kyushu in southern Japan to Fukushima for several days. It was November and below freezing in Fukushima. I had less than 50 cents left in my bank account.

My life had unravelled one loan at a time. My teenage sons borrowed from a black market lender who called with daily death threats until I paid up.

As a result I lost my salaried job. I also got divorced spending the next seven years working at a bread factory in southern Japan. Last autumn after a breakdown in a relationship with my girlfriend I decided I had to do something to start afresh. The online ad I answered said I would clear rubble in the area around the plant. It promised up to \$300 a day.

But after I arrived in Fukushima I had no job, no money and nowhere else to go. After weeks of waiting, I was told I was going to work in "1F". I didn't know

what that was until I later realized they meant the devastated Fukushima No. 1 nuclear plant.

No one had told me I would be doing dangerous work in a contaminated plant. It's not like there's any colour or smell to radiation. You can't see it, so you are not afraid of it.

They say you might die from it in 30 years but I know I'm not going to live that long. I was first assigned to check damage inside one of the crippled reactor buildings – I had to wear several protective layers. Sometimes my dosimeter would go off only after several minutes because the radiation was high. At the end of January I was told my contract had expired. I wanted to escape but I thought they might hurt me if I tried. I only had 30,000 yen and a car with an out-of-town number plate. It'd be easy for them to find me.

So I stayed for a few more months before running away to work for a guy who treated me really well. I had my own room and he gave me food even on days I didn't work.

I felt bad at first eating at the table with everyone else, but he said, "Don't feel bad, you've been through a lot. You can eat with the others." I feel like a human being again.

disaster used to supply security guards for construction sites.

Denko Keibi managed 35 workers in Tamura, a village near the plant. At an arbitration session in May that Reuters attended, the workers complained they had

been packed five to a room in small cabins. Dinner was typically a bowl of rice and half a pepper or a sardine, they said. When a driver transporting workers flipped their van on an icy road in December, supervisors ordered workers to take off their uniforms



EXPLOITED: Nearly half the workers at Fukushima are hired by one firm but work for another in violation of Japanese law. **REUTERS/ISSEI KATO**

and scatter to distant hospitals, the workers said. Denko Keibi had no insurance for workplace accidents and wanted to avoid reporting the crash, they said.

"We were asked to come in and go to work quickly," an executive of Denko Keibi said, apologising to the workers, who later won compensation of about \$6,000 each for unpaid wages. "In hindsight, this is not something an amateur should have gotten involved in."

In the arbitration session Reuters attended, Denko Keibi said there had been problems with working conditions but said it was still examining what happened in the December accident.

The Denko Keibi case is unusual because of the large number of workers involved, the labour union that won the settlement said. Many workers are afraid to speak out,

often because they have to keep paying back loans to their employers.

"The workers are scared to sue because they're afraid they will be blacklisted," said Mitsuo Nakamura, a former day labourer who runs a group set up to protect Fukushima workers. "You have to remember these people often can't get any other job."

Hayashi's experiences at the plant turned him into an activist. He was reassigned to a construction site outside Tokyo by his second employer after he posted an online video about his first experiences in the plant in late 2012. After a tabloid magazine published a story about Hayashi, his managers asked him to leave. He has since moved to Tokyo and filed a complaint with the labour standards office. He volunteered in the successful parliamentary campaign of former actor turned

anti-nuclear activist, Taro Yamamoto.

"Major contractors that run this system think that workers will always be afraid to talk because they are scared to lose their jobs," said Hayashi. "But Japan can't continue to ignore this problem forever."

Additional reporting by Kevin Krollicki, Sophie Knight and Chris Meyers in Tokyo and Yoshiyuki Osada in Osaka; Editing By Bill Tarrant

FOR MORE INFORMATION

Mari Saito, Japan energy correspondent

mari.saito@thomsonreuters.com

Antoni Slodkowski, Japan correspondent

antoni.slodkowski@thomsonreuters.com

Bill Tarrant, Enterprise Editor

william.tarrant@thomsonreuters.com

Michael Williams, Global Enterprise Editor

michael.j.williams@thomsonreuters.com