

# **Toxic Contamination of the U.S. Military Bases in Japan**

(draft)

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Presented at :

**1996 International Forum on  
"U.S. Military Toxics and Bases Clean-up"**

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**Manila, Philippines**

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I'm very pleased to participate in this forum, where we can discuss the timely topics, toxic contamination and environmental damage at U.S. military bases overseas. I highly respect the organizers of this conference from the Nuclear-Free Philippines Coalition for their insights and thank them for their endeavors to bring about it.

Considering the situation in Japan, the environmental pollution of the U.S. military bases is becoming more and more serious problem. In particular, such problems to be found on the U.S. military bases that would be returned to landowners in Okinawa is worrying. Therefore, it is important for us to compare and examine the realities of the Philippines and similar situations of other countries.

Peace Resources Cooperative, which I am working with, is a non-governmental organization to support peace movements through research, information and educational activities. It works in close cooperation with the International Office of PCDS (Pacific Campaign for Disarmament and Security), of which NFPC is also a member.

### (1) Outline of the U.S. Forces Japan

First of all, I'd like to explain the outline of the U.S. Forces Japan. It is often said that about 47,000 U.S. military troops are stationed now in Japan. But this is wrong. Actually, there are 59,000, including 12,000 Navy personnel of the 7th Fleet home-ported in Japan. This number of troops is larger than that of the Republic of Korea, which has high military tension, and the largest in the

Asia-Pacific region. As it is said that the U.S. deploys 100,000 troops in Asia-Pacific, it turns out 60% of them are stationed in Japan.

When U.S. Forces attacked Iraq last September, the USS Hewitt whose homeport is Yokosuka, Japan, launched Tomahawk cruise missiles, the F16 fighter jets from Misawa Air Base joined the attack on Iraqi aircraft, and the KC135 tankers from Kadena Air Base Okinawa refueled at the South China Sea B52 bombers which shot air-launched cruise missiles. Thus U.S. Forces Japan have been deployed as far as the Persian Gulf, thus carrying out the U.S.'s global strategy.

The largest of the U.S. Forces Japan is the Marine Corps, most of which is stationed in Okinawa. The second largest are the Navy and the Air Force, both having about the same size. The lynchpin of the U.S. Navy Japan is the 7th Fleet, which has its headquarters in Yokosuka. The major U.S. Air Force units in Japan are fighter units in Kadena and Misawa, and the airlift unit in Yokota. The U.S. Army Japan is the smallest, and all are rear support units, except for one battalion of Green Berets in Okinawa.

## (2) Outline of the U.S. Military Bases in Japan

U.S. Forces Japan maintains 135 Facilities in Japan as of March 31st 1995. Their total land area is approximately 98,000 ha. According to the Status of Forces Agreement (SOFA), based on the Japan - U.S. Security Treaty, there are roughly two categories of U.S. bases. One is the 94 bases which are controlled solely by the U.S. Forces, and the other is the 41 bases which are controlled by the Japan Self Defense Forces or other Japanese administrations and used under certain conditions by the U.S. Forces. Forty of the first category are located in Okinawa. Many of them are large-scale bases and the total area adds up to about 24,000 ha. Thus, as much as 75% of the U.S. controlled bases are concentrated in Okinawa. In addition to these land bases, the U.S. Forces have vast sea areas and airspace for training.

All the agreements in relation to the practical use of the bases by the U.S. Forces are regulated by the SOFA. The Article III of the SOFA stipulates "Within the facilities and areas, the United States may take all the measures necessary for their establishment, operation, safeguarding and control", and the U.S. Forces have a very strong right for the management of the bases under the agreement. However, details are discussed and solved at the Japan-U.S. Joint Committee. The representative of the committee from Japan is the chief of the North America Bureau, Ministry of Foreign Affairs,

and that from the U.S. is the Chief of Staff, U.S. Forces Japan. This Committee generally meets every two weeks. But its minutes are never publicized, and the Committee is criticized as an organization which just endorses the U.S. Forces' activities after the fact. The situation of this committee should be rectified.

### (3) General Situation of Toxic Contamination at the U.S. bases in Japan

Environmental damages at the U.S. military bases in Japan began to be revealed owing largely to the great efforts of the activities of citizens groups. In 1992, Peace Resources Cooperative revealed a report of the U.S. Congress in cooperation with PCDS. This was the report of the research by the "Environment Restoration Panel", a joint panel chaired by Richard Ray, on the environmental activities at the U.S. military installations in the Asia-Pacific region. In the "Ray report", there was a clear description of a PCB contaminated site at Kadena Air Base and it estimated the cost for clean up to be \$200,000. Photo 1 shows the front page headline of an Okinawan local newspaper "Ryukyu Shinpoh", reporting our revelation of the PCB contamination at Kadena.

The map of Fig. 1 shows major issues regarding the environmental contamination at the U.S. bases in Japan. Later, I'll talk about the PCB contamination etc, of Onna communication Site and Yokosuka Naval Base, but there are many other cases. At Yokota Air Base, 68 kl of jet fuel leaked from a recovery valve deep into the ground in 1993, and the groundwater was contaminated. In addition, more major oil spill accidents in the past were discovered in the process of investigation. At the Kadena Air Base, three accidents in which more than 40 gallons of PCB-containing oil spilled out were reported. Photo 2 and Photo 3 show how the contaminated sites are cleaned up. In the U.S. Army Sagami General Depot, pollution by cadmium metal was discovered once and other contaminations are suspected by the Defense Reutilization and Marketing Office, which is the Department of Defense (DoD) organization to collect, maintain and manage various wastes produced by DoD activities in mainland Japan. Off the coast of Misawa, a U.S. fighter jettisoned two live bombs into the sea because of an electric trouble. These bombs are still on the seabed. At Sasebo, U.S. ships are suspected to be responsible, at least partially, for PCB contamination of the sludge at the bottom of Sasebo Bay. And the most serious thing is an accident where a hydrogen bomb was dropped into the sea, with an attack aircraft and its pilot in 1965 near Okinawa. It still remains on the seabed. As you see on the map, the U.S. military has caused many contamination problems in Japan.

The "Ray report" says the U.S. military was quite careless to manage hazardous waste, and this remark was supported by U.S. General Accounting Office (GAO) reports in 1986 and 1992. Photo 4 and Photo 5 were taken at Futenma Air Base Okinawa by a citizen group, and shows that drums filled with hazardous waste are improperly placed near the fence of the base.

#### (4) PCB Contamination / Onna Communication Site

PCB contamination problems at Onna Communication Site should be seen as the first case in which the toxics left by the U.S. Forces prevent the returned land from reutilization. You can say this case is the symbol of the problems Okinawa will face in the future.

Onna Communication Site was a Marine Corps base. In spite of the name of "communication site", it was a multi-purpose base for various uses. It is on the middle of Okinawa's main island, facing the East China Sea, and the area is about 62 ha. Its location is shown in Fig. 2. Most of the area, 53 ha is privately owned land and there are 427 landowners of the land. The rest of it is owned by the Okinawa prefecture and the Onna village government. From 1953 through 1982, it was used by the reconnaissance battalion of Marines, but was left unused after that. In 1990, Japan and the U.S. government started negotiation for the restoration of the base at the Japan-U.S. Joint Committee, and on November 30th 1995, it was restored to the owners.

Tanks of the waste water treatment facility were left unremoved on the vacant lot, and the landowners etc. demanded the deposit accumulated in them as a fertilizer. Naha Defense Facilities Administration Bureau (DFAB) asked a commercial testing company for measurement. After inspecting from February to March, 11 kinds of toxics, including cadmium, mercury, PCB, cyanogen were detected by means of composition analysis. As shown in Table 1, 14.9 mg cadmium was measured in 1 kg deposit, which is about 3 times higher than the Japanese standard 5 mg, 5.84 mg of mercury, almost 3 times higher than the standard 2 mg, 110 mg of lead, 2.84 mg of PCB, 7.2 mg of arsenic etc. This table also shows the standard applied to the disposal to the ocean. A small amount of PCB and cadmium were also detected from the ditch near the outlet of the tank.

Soon after DFAB's announcement, the Okinawa Prefectural Government tried its own inspection. It was conducted by elution analysis this time. The result was that 0.0196 mg/l of mercury was detected in the deposit, which is almost 4 times higher than the regulatory standard of 0.005 mg/l.

DFAB tried an inspection again to measure the deposit, waste water and the soil around the tank. DFAB announced the results on 2nd October, which showed that PCB and mercury over the standards were detected in the deposit. The inspection was conducted by elution analysis. Maximum value of PCB reached 0.041 mg/l, which is about 14 times higher than the standard 0.003 mg/l. That of mercury was 0.0131 mg/l, almost 3 times higher than the standard 0.005 mg/l. No toxics were reportedly detected from the waste water or the soil. But where the sampling points were was not disclosed, so suspicion hasn't been cleared yet.

> The reason why toxics flowed into the tank is not clear, either. First of all, what kind of activities the U.S. Forces were doing there should be clarified, but even this hasn't been known yet. DFAB referred it to the U.S. Forces, but there hasn't been a response yet. We are also requesting documents about it in accordance with the Freedom of Information Act.

On 22nd March, the Onna Village Assembly adopted unanimously an appeal which requires the federal government and DFAB to remove all toxic contamination in and around the tanks. The Okinawa government also asked DFAB to restore the land to the original condition.

> Naha DFAB announced very recently on 15th November that the Japanese Government would begin to remove the deposit into drums within this year. The drums will be stored at Kadena Ammunition Storage Area. But it is still not known how much will cost for the work and what will be the final measure to dispose of the PCB contaminated deposit. It is also the problematic that Japanese taxes are used to restore the U.S. Force's environmental damages.

Onna Communication Site has been given notice because it is the first case to apply to the "Law for Special Measures to Restore the Land Used by the Military Forces Stationed in Okinawa", enforced last year, which provides that the federal government should pay benefits to landowners who lost rent income and have no profit from their land, in order to help them until they can make use of the land and get income from it. The amount of a benefit is up to ten million yen (about \$88,000) a year and the duration is a maximum of three years, which was criticized by many Okinawans for not being of sufficient duration. In this case, almost one year has passed since Onna Communication Site came under this law. Many people wonder if the toxics will be entirely disposed of during the next two years when they can receive benefits, and it makes landowners anxious.

Thus, environmental pollution which the U.S. military base left, has become a great difficulty for peaceful utilization of a vacant lot.

## (5) PCB and Heavy Metal Contamination at the Yokosuka Naval Base

It was the U.S. weekly magazine "U.S. News and World Report" dated 30th November, 1992 that identified the soil contamination on Yokosuka Naval Base, though it had been expected by the description in the congressional "Ray Report". Also, there was an incident which the hazardous waste, including asbestos produced by the Naval base, was illegally disposed of on the road in Yokohama City. The "U.S. News and World Report" article reads:

"At Japan's Yokosuka naval complex, soil excavated for coastal reclamation was so contaminated with PCBs and heavy metals that it couldn't legally be disposed of in a landfill. The project had to be canceled and the dirt dumped back in the original hole."

On 16th April, 1993, the headquarters of the U.S. Navy Japan admitted the facts. According to the U.S. Navy, in October 1988, they began excavating in an area adjacent to Berth 12, located on the west side of the Base, in order to install a kingpost. But water mixed with oil was discovered in the soil at the excavation site. The U.S. Navy asked a Japanese contractor to analyze this water in December 1988, and the result showed PCB and heavy metal contamination. In the meantime, Peace Resource Cooperative has obtained through the U.S. Freedom of Information Act the documents that describe the development of the incident, from the discovery to the cancellation of the construction. They also made it clear that the U.S. Forces had suddenly stopped construction because of the contamination by PCB, etc. Especially, the U.S. Forces had a great concern about the PCB contamination, but the exact results of chemical analyses done at that time haven't been disclosed yet. A citizen's group based at Yokosuka called "NEPA Coalition" continues to pursue the analyses documents energetically.

The kingpost project was canceled in 1989 because it would be impossible to dispose of the contaminated soil if the excavation was continued. The excavated soil was returned to its original hole, and the area was repaved. The excess soil which did not fit back into the original hole was spread over Tomariura-Wan (Briggs Bay), which is located on the northeast side of the base. The bay had been used as the sludge disposal site at that time. Fig. 3 shows the locations of Tomariura-Wan and Berth 12 which was found to be contaminated. The U.S. Forces explained that the soil was returned to the original hole because it wasn't considered contaminated by Japanese environmental standards. If this was so, they could have continued the construction. In fact, they stopped excavation because they expected to find heavier contamination at the site.

Environmental investigations around Berth 12 were conducted by the U.S. Forces in 1993 and 1994, and the NEPA Coalition recently obtained these reports from the Yokosuka City administration. The analyses revealed the new fact that a maximum lead concentration of 2.5 mg/l was detected from the groundwater, which is 250 times higher than the Japanese groundwater pollution standard of 0.01 mg/l. In short, the report confirmed that serious soil and groundwater contamination by heavy metals is spread over the base. Monitoring of the groundwater is still going on.

The cause of this contamination is still not clear. The view of the NEPA Coalition is that it is the multiple contamination accumulated during a long term base activities. The coalition is taking action to find out the cause of the contamination, to remove it and to impose tighter regulations on the U.S. Forces' activities.

Concerning this problem, the Japan Environment Agency (JEA) has negotiated with the U.S. Navy at the Environmental Section Meeting of the Japan-U.S. Joint Committee. The NEPA Coalition is negotiating not only with the Yokosuka City administration, but also directly with JEA, demanding the investigation by JEA itself. At this moment, however, JEA is not willing to do its own investigation.

#### (6) NEPA Court Struggle

I'd like to report on a struggle which brought environmental problems at the U.S. military bases before the U.S. Federal court, although it is not related directly to the contamination issue of the bases. It is called "NEPA court struggle" in Japan.

"NEPA" is an abbreviation of the "National Environmental Policy Act" of the United States. It mandates Federal agencies to prepare an Environmental Impact Statement (EIS) before they take any major Federal actions. NEPA Coalition claims that an environmental assessment should be made of the U.S. Forces' activities overseas which might cause any serious environmental problems in compliance with NEPA. But no EIS has been made prior to activities such as night landing practices at the Atsugi Naval Air Base or homeporting of the aircraft carrier and other U.S. ships at the Yokosuka Naval Base. Therefore, in June 1991, Yokosuka citizens organized the NEPA Coalition and filed a lawsuit in the Federal District Court of Washington D.C., demanding that the U.S. Navy prepare EIS's for their activities in compliance with NEPA.



However, in November 1993, the NEPA Coalition lost their suit. The most substantial point of dispute was the extraterritorial applicability of NEPA, which means can NEPA be applied beyond the U.S. territory. In the U.S. there is a rule called "the presumption against the extraterritorial applicability of U.S. law", which is a precedent of the Supreme Court, saying that U. S. laws are not applicable unless there is a clear statement in the text of those laws. Meanwhile, a case rule was established in 1993 at the Federal High Court of Washington D.C. that NEPA should be applied to the construction of a waste disposal facility in Antarctica by the National Science Foundation (NSF). The NEPA Coalition case was judicially disputed under such circumstances. As a result, the priority U.S. foreign policy needs was respected by the court, over the voices of people who are suffering from intolerable environmental damages such as the noise caused by NLPs, and the NEPA Coalition lost the suit. The NEPA Coalition considers it is worth challenging the narrow interpretation of the extraterritorial applicability of NEPA in relation to the U.S. Forces activities overseas.

#### (7) Problems to Be Solved

The fundamental problems of the environmental pollution of U.S. military bases overseas, not limited to the cases in Japan, come from two facts: that the U.S. Forces are awarded a privileged legal status similar to extraterritorial rights on the foreign soils; and, that there is a tight barrier to information, which makes a military secrecy sacred. More specifically, the following problems should be pointed out from the realities in Japan.

##### (A) Need of the Right for On-site Inspection

In many cases, it is difficult to know the real situation of the environmental damage within the bases. A double layer of barriers, by the U.S. Forces and by the Japanese government, prevents citizens from getting reliable information. Local governments in Japan should have the right to investigate U.S. military bases, just as they have to investigate general industrial factories. If we want to understand the total situation of the fuel oil spill at Yokota Air Base, or to investigate the cause of the groundwater contamination at Yokosuka Naval Base, it is clear that we need on-site inspection. Conversely, in the case of Onna Communication Site, the contamination was found because on-site inspection became possible by the restoration of the land.

##### (B) Obligation of the U.S. Forces to Disclose Related Information

An agreement is necessary that the U.S. is obliged to honestly disclose related information in order to identify the source when any environmental damage is found. Such information includes details of the operation which might cause the contamination and past operational records. In the case of Onna Communication Site, the lack of information on past operations of the units that used the base makes it impossible not only to find out the cause of the PCB and heavy metals contamination, but also to identify the area to be covered for collecting and testing samples.

#### (C) Environmental Standard with Legal Binding Force

Article III -3 of the of SOFA says "Operations in the facilities and areas in use by the United States armed forces shall be carried on with due regard for the public safety". This ambiguous statement is the only provision obliging the U.S. Forces to provide environmental protection. In 1992, the U.S. Department of Defense published its "Basic Guideline Statement for Environment Abroad". But it doesn't state any clear legal positions such as "DoD follows the most stringent of the host nation or the U.S. environmental standards". The document states that DoD takes into consideration both the U.S. and the host nation regulations, but it provides no more than a guideline which DoD determined by itself, and naturally without any penalty provision. It is necessary to amend the SOFA and set up a legally binding system on environmental protection.

#### (D) Obligation for Restoration to the Original State and/or Compensation

When any environmental damage at the U.S. military bases is found, the U.S. Forces should be obliged to remove the contamination, restore the land to its original condition and compensate for loss caused by the damage. This obligatory regulation would have a significant meaning, especially to the peaceful reuse of the returned land. Nevertheless, the Article IV-1 of SOFA reads "The United States is not obliged, when it returns facilities and areas to Japan on the expiration of this Agreement or at an earlier date, to restore the facilities and areas to the condition in which they were at the time they became available to the United States armed forces, or to compensate Japan in lieu of such restoration". The U.S. doesn't have to take any responsibility when going home, whatever damages it may have left behind. This is an amazingly shameful one-sided provision for Japanese people, far from any agreed to by an independent state. The case of the Onna Communication Site will be the test case where this provision will impose an enormous economical loss on the Japanese people. Naturally this article should be amended as soon as possible, but in spite of this provision, we need to demand that the U.S. clean up the land as a matter of moral

obligation.

Finally, when I put the points at issue in order, I think it would be quite effective if citizens from each country that has suffered from similar problems would present their unified demands to the U.S. Forces.

I truly hope that this forum will be an invaluable springboard in that direction. Lastly, we would like to express our thanks to Carol Jahnkow, director, Peace Resource Center of San Diego, for her kind advices to this report.

Thank you very much for listening.

# Major Toxic Contamination at U.S. Military Bases in Japan

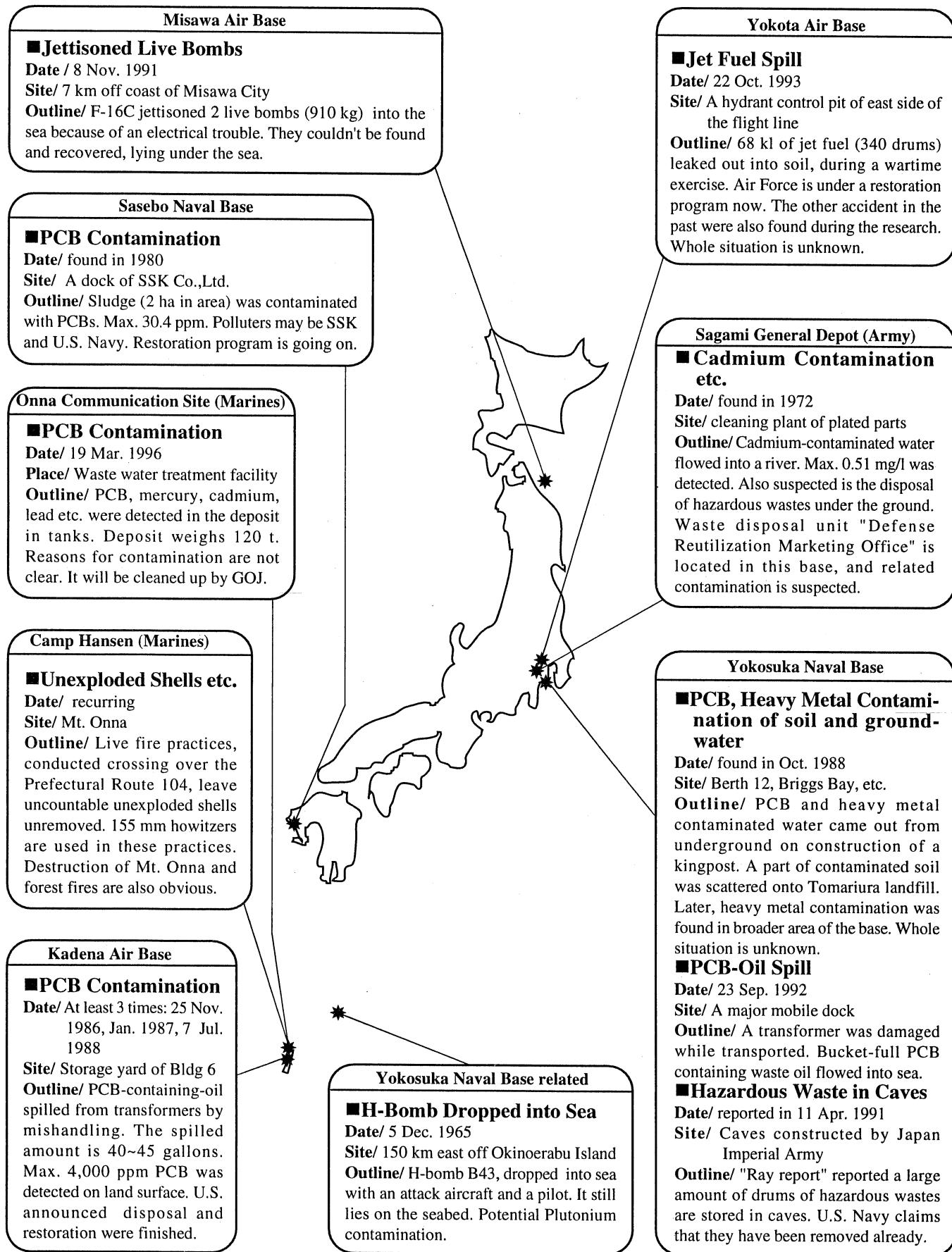


Fig. 1

# Okinawa Main Island

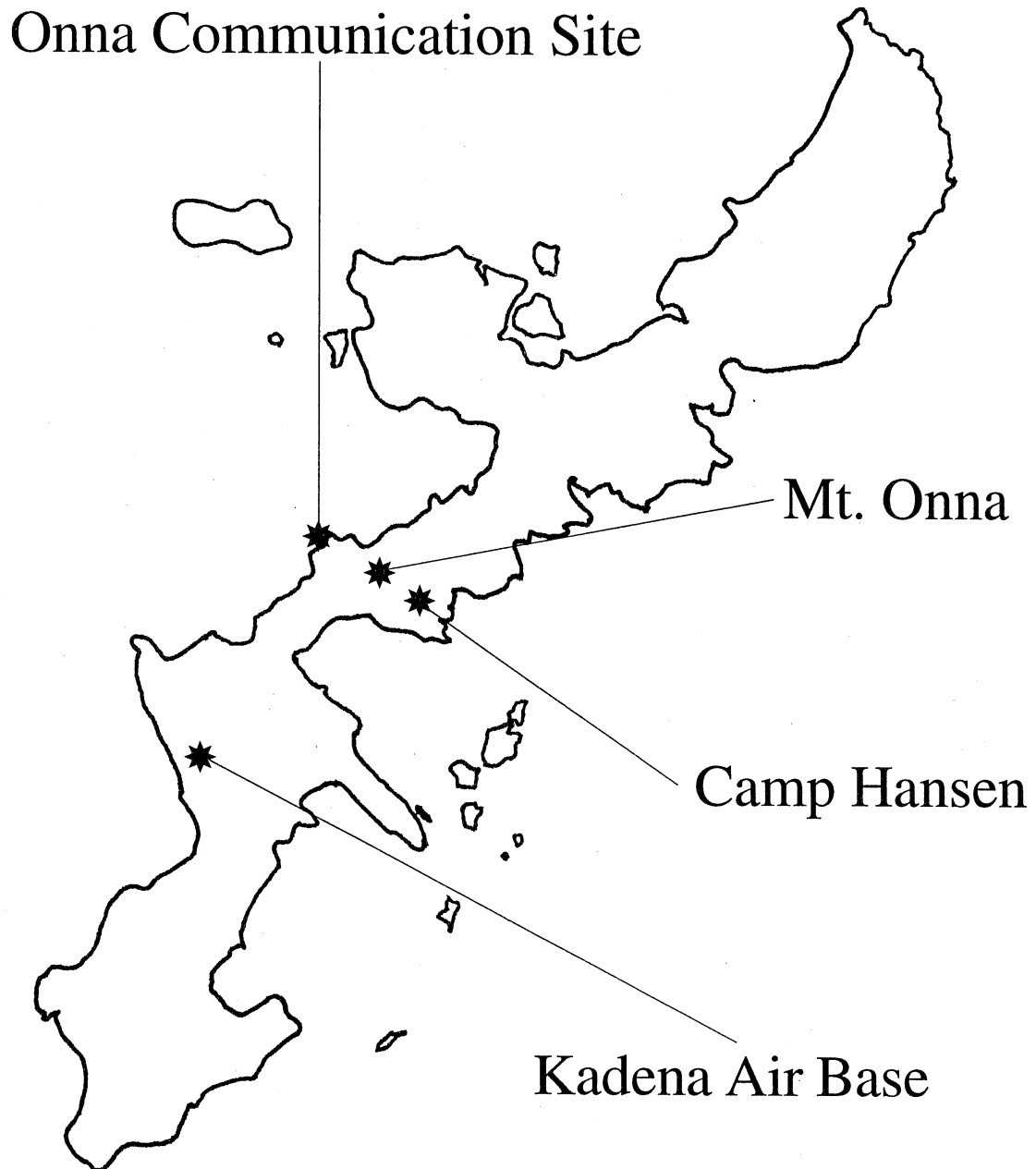


Fig. 2

# Yokosuka Naval Base

Dry Dock 6

Tomariura-Wan  
(Briggs Bay)

Berth 12

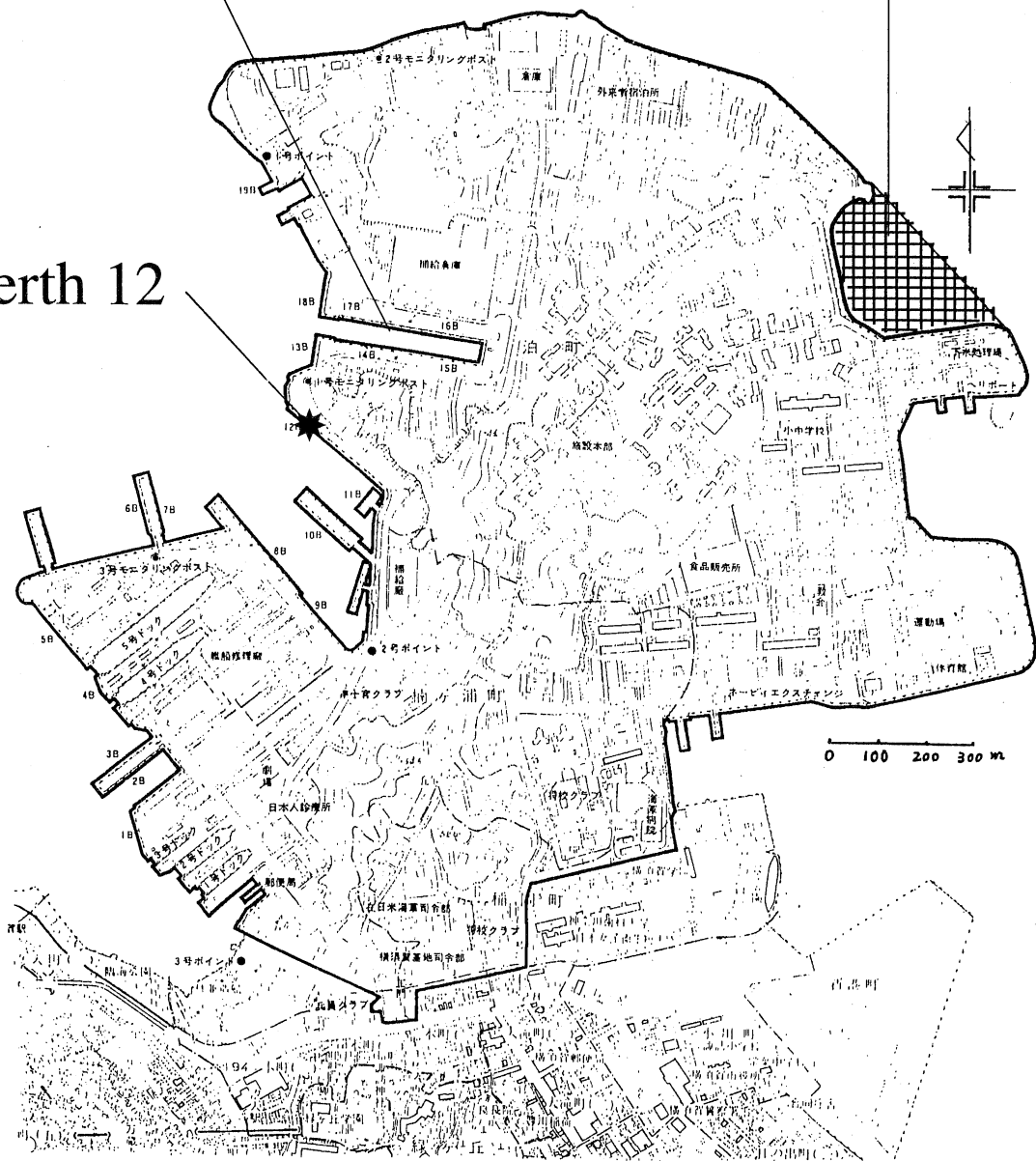


Fig. 3

# Chemical Analysis of Deposit at the Former Water Treatment Facility, Onnna Communication Site

(Content Analysis)

(unit: mg/kg)

item	maximum value detected	standard*
Cadmium	14.9	less than 5.0
Mercury	5.84	less than 2.0
Lead	110.0	less than 50.0
PCB	2.84	less than 0.15

(Defense Facilities Administration Agency, cited in "Okinawa Times")

(Elution Analysis)

(unit: mg/l)

item	maximum value detected	standard*
PCB	0.041	less than 0.003
Mercury	0.0131	less than 0.005
Cadmium	0.039	less than 0.3
Lead	0.122	less than 0.3
Arsenic	0.014	less than 0.3

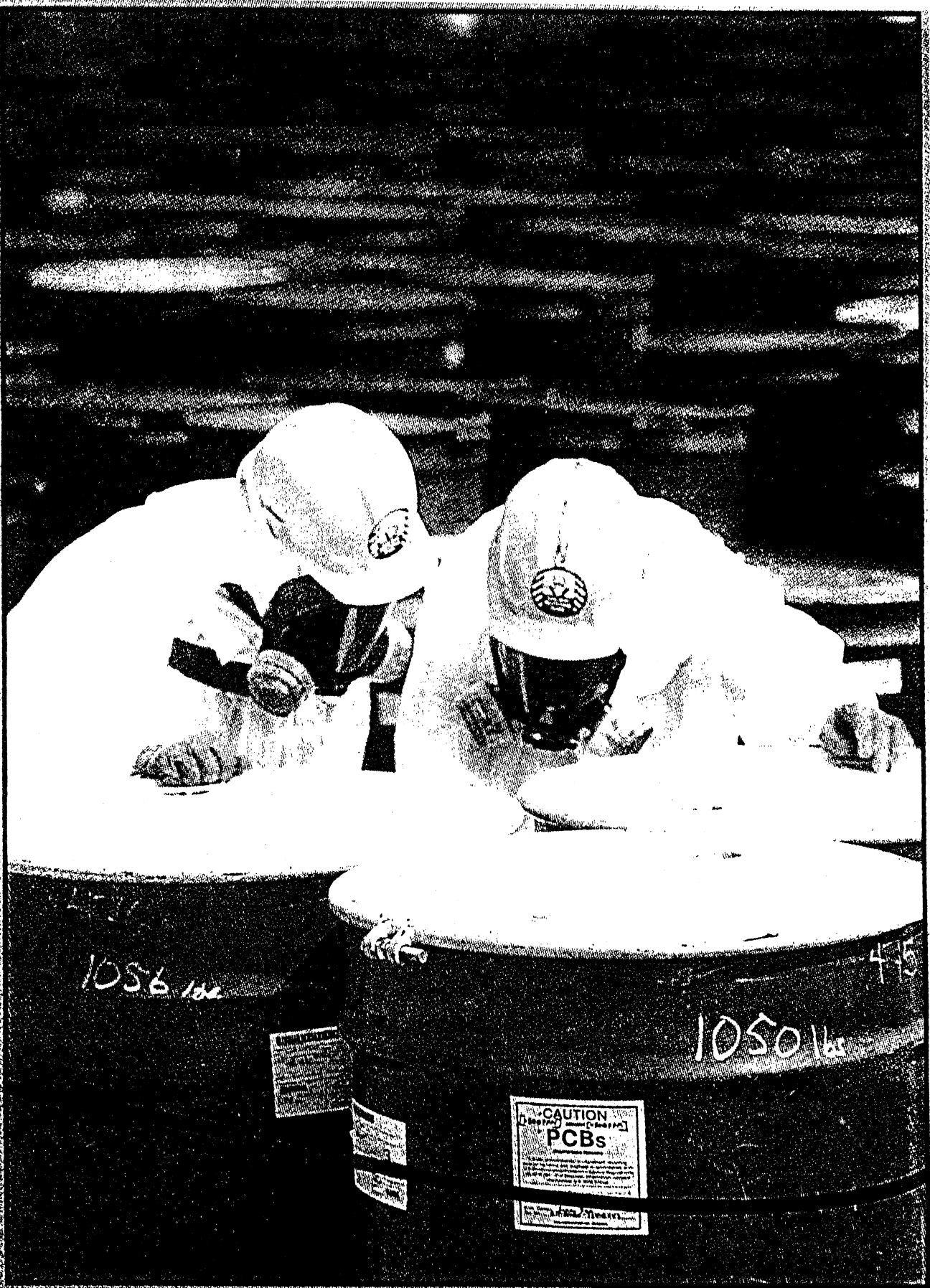
(Defense Facilities Administration Agency)

※ JEA standard applied to hazardous wastes disposal to ocean

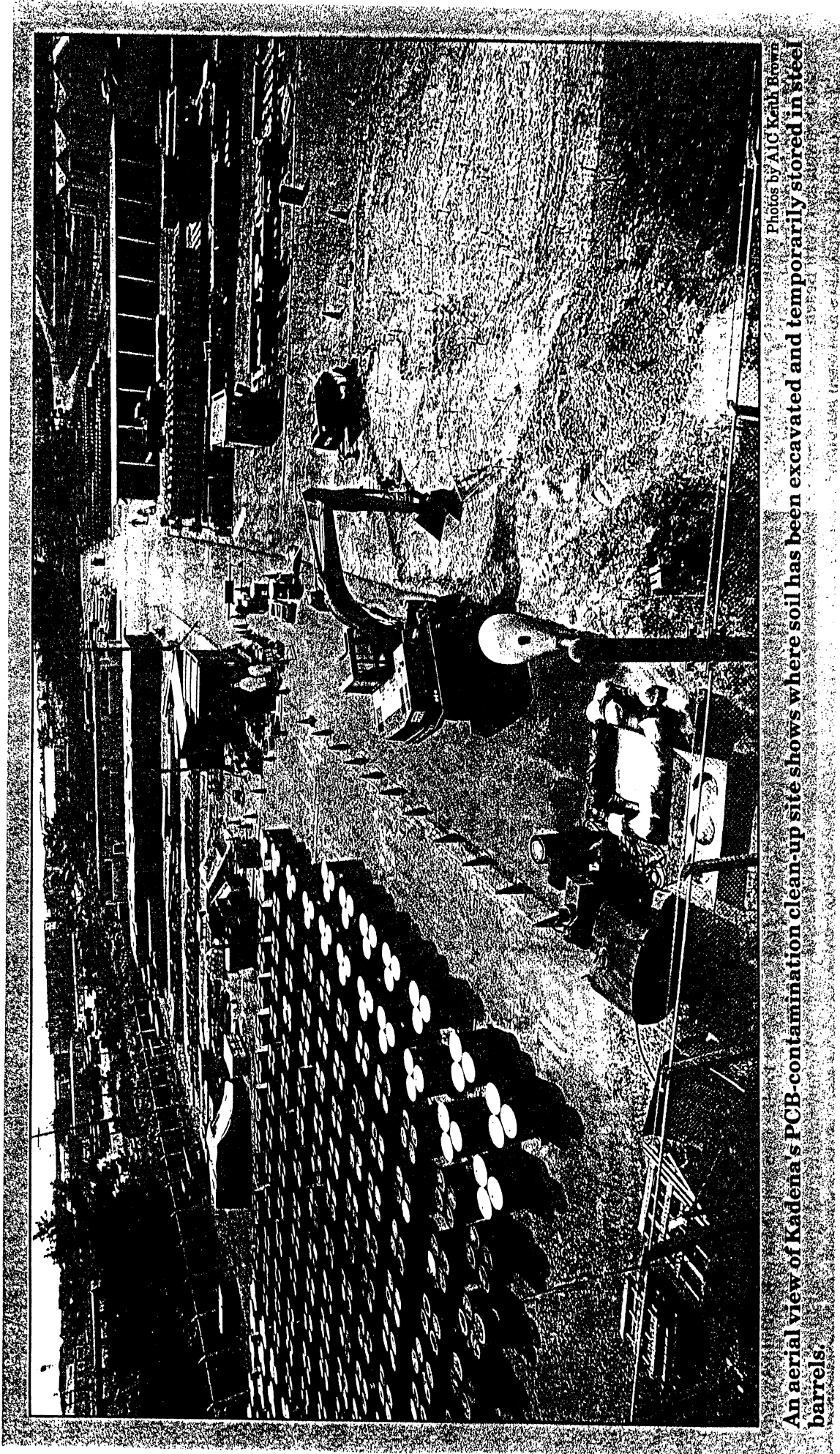
Table 1







**Workers inspect barrels containing PCB-contaminated soil.**



Photos by AIG Keith Brown

An aerial view of Kadena's PCB-contamination clean-up site shows where soil has been excavated and temporarily stored in steel barrels.

Photo 3

Photo 4

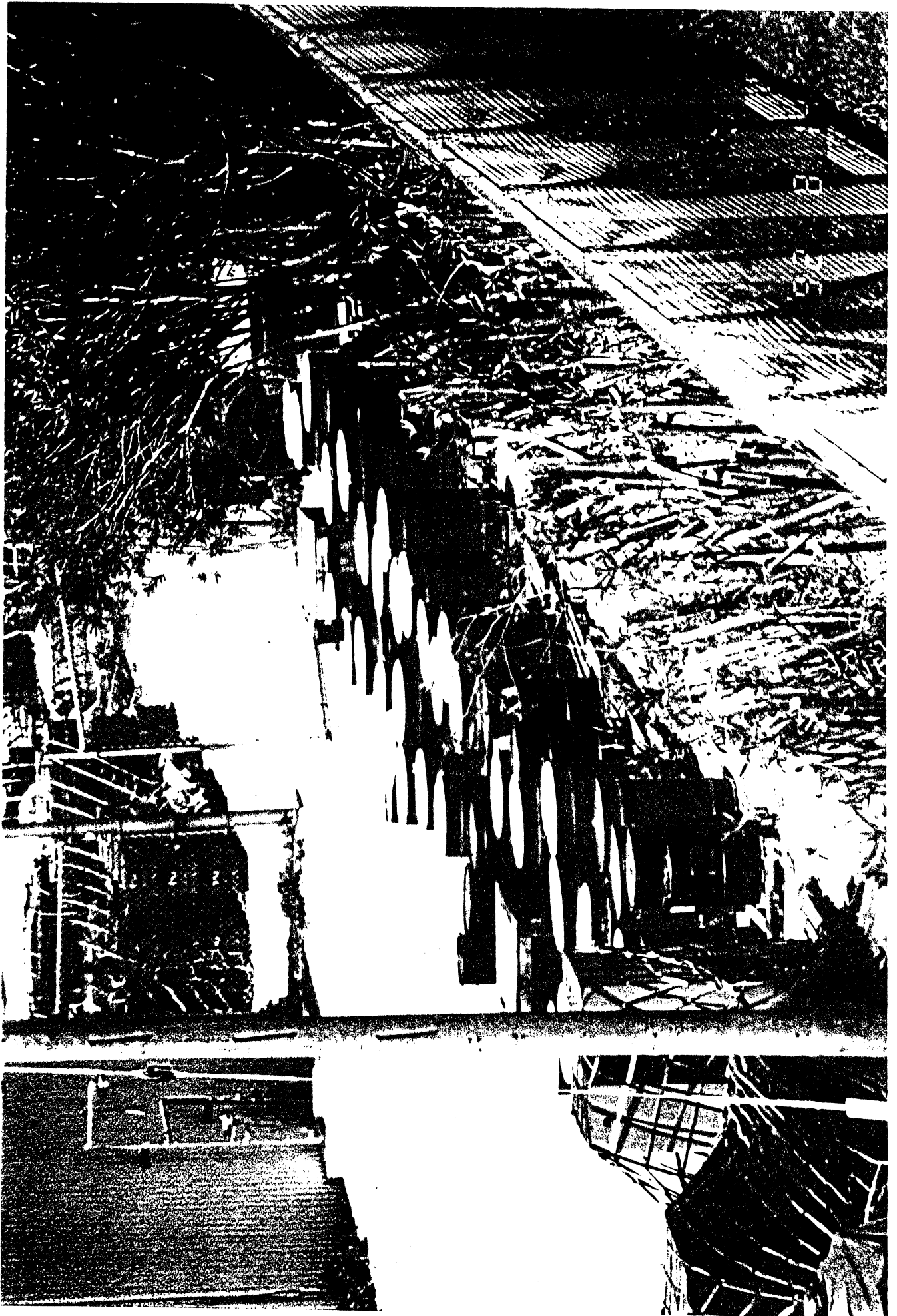


Photo 5

