



NATIONAL

Contamination: Kadena Air Base's dirty secret

For the first time, documents released under the U.S. Freedom of Information Act reveal extensive pollution on an active American base in Japan.

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Located in the center of Okinawa island, Kadena Air Base is the largest U.S. Air Force installation in Asia.

Equipped with two 3.7-kilometer runways and thousands of hangars, homes and workshops, the base and its adjoining arsenal sprawl across 46 square kilometers. More than 20,000 American service members, contractors and their families live or work on the base alongside 3,000 Japanese employees.

Kadena Air Base hosts the biggest combat wing in the U.S. Air Force — the 18th Wing — and, during the past seven decades, the installation has served as an important launchpad for wars in Korea, Vietnam and Iraq.

Given the long history of Kadena Air Base and its city-sized scale, it is easy to understand why the U.S. Air Force calls it the “keystone of the Pacific.”

But until now, nobody has realized the damage the base is inflicting on the environment and those who live in its vicinity. Documents obtained under the U.S. Freedom of Information Act reveal how years of accidents and neglect have been polluting local land and water with hazardous chemicals, including arsenic, lead, polychlorinated biphenyls (PCBs), asbestos and dioxin. Military authorities have often hidden this contamination, putting at risk the health of their own service members and the 184,000 civilians living in neighboring communities.

This week, we examine the pollution of local water resources and the exposure of on- and off-base residents to lead and asbestos. The accompanying article explains the flaws in current guidelines that allow the U.S. military in Japan to conceal such contamination.

Next week, we will investigate the installation’s ongoing struggles to manage contamination from PCBs, its coverup of the discovery of hazardous waste near two on-base schools and the human impact of this pollution.

In January, the U.S. Air Force released 8,725 pages of accident reports, environmental investigations and emails related to contamination at Kadena Air Base. Dated from the mid-1990s to August 2015, the documents are believed to be the first time such recent information detailing pollution on an active U.S. base in Japan has been made public.

The documents catalog approximately 415 environmental incidents between 1998 and 2015; 245 of these occurred since 2010. Incidents range from small leaks that stayed within the confines of the base to large spills discharging tens of thousands of liters of fuel and raw sewage into local rivers.

During the 1998-2015 period, total leaks included almost 40,000 liters of jet fuel, 13,000 liters of diesel and 480,000 liters of sewage. Of the 206 incidents noted between 2010 and 2014, 51 were blamed on accidents or human error; only 23 were reported to the Japanese authorities.

The year 2014 saw the highest number of accidents — 59, only two of which were reported to Tokyo.

Large parts of the documents have been redacted and reports for the years from 2004 to 2007 are missing. These omissions almost certainly mean that the actual statistics are much higher.

Due to its location, Kadena Air Base plays an integral role in the supply of the island's drinking water. There are 23 wells within the installation, some of which contribute to on-base potable water. More than 300,000 meters of drains carry the installation's storm water into local rivers, including the Hija River, which supplies drinking water for six municipalities and Okinawa's capital, Naha.

Documents suggest that mistakes and negligence on the base have contaminated this water supply.

In August 2011, for example, 760 liters of diesel spilled into the Hija River when an operator abandoned a generator tank prior to the arrival of a typhoon. In December 2011, 1,400 liters of diesel leaked from U.S. Air Force housing on Camp McTureous after officials ignored a warning light; the fuel contaminated the Tengan River.

Other reports suggest that miscommunication exacerbated spill incidents. In June 2012, an engineer took an hour and 20 minutes to respond to a 190-liter fuel spill because he was at a food court on the base and could not hear his telephone ringing. More recently, in February 2015, environmental teams failed to respond to two incidents — the first involving 170 liters of fuel and the second 23 liters of hydraulic fluid — despite being alerted by emergency crews.

As well as fuel leaks, the base mistakenly released at least 23,000 liters of fire suppressant foam between 2001 and 2015. In August 2012, a Japanese firefighter set off a fire system in an accident that leaked 1,140 liters. Then in May 2015, a drunk U.S. marine, released 1,510 liters in an act of vandalism. Such foams can contain carcinogens, chemicals known to cause reproductive and neurological disorders, and perfluorooctane sulfonate (PFOS).

PFOS, categorized by the Environmental Protection Agency as an emerging contaminant, has recently become the focus of concerns both on Okinawa and in the United States.

In January, Okinawa Prefecture announced that waterways around Kadena Air Base were currently contaminated with PFOS; in 2008, levels in an on-base well had measured as high as 1,870 nanograms per liter. The EPA's provisional health advisory limit for drinking water is 200 nanograms per liter. Last month, the U.S. Air Force promised to conduct tests for PFOS contamination on 664 bases in the United States.

At the time of publication, a spokesperson for U.S. Forces Japan was unable to confirm whether similar tests would be conducted on Okinawa or elsewhere in the country.

Komichi Ikeda, an adviser at Environmental Research Institute Inc., Tokyo, says "current research suggests (PFOS) may cause cancer, reproductive disorders and damage the next generation."

"Pregnant women and young children ought to be especially careful to avoid consuming water contaminated with PFOS," Ikeda says.

Since 2008, Kadena Air Base has also spilled at least 1,670 liters of hydraulic fluid, a known source of PFOS; meanwhile, drains from the base's fire-training area, where foams are routinely sprayed, feed into local waterways.

Another threat to Okinawa's water supply comes from leaks of raw sewage, which the base apparently only started recording in 2010. In November 2010, a 57,000-liter spill contaminated the Shirahi River and the sea with sewage measuring 36,000 fecal coliform colonies/100 milliliters — 90 times the Environmental Protection Agency's maximum limit for swimming waters.

More recently, in June 2013, an overflowing manhole leaked 208,000 liters of sewage into the Hija River. The base took 27 hours to notify local authorities but its subsequent press release stated, "The health and safety of our service members and our friends in local community is our top priority." Follow-up emails exchanged among U.S. Air Force officials include the comments: "We received little media coverage. So that's good news."

Furthermore, the documents highlight the dangers of operating a busy airport in the midst of civilian communities. Numerous in-flight emergencies cause pilots to abort their missions — two occurring in a one-week period in January 2015. Also, in August 2011, an in-flight emergency caused an F-15 to dump 150 liters of fuel from low altitude. The summary concluded, "There was no impact to the local community."

Back on the ground, the documents released under the Freedom of Information Act point to the exposure of U.S. and Japanese nationals to dangerous levels of lead and asbestos.

For many decades, a furnace within the installation burned ammunition and "other exotic pyrotechnics" without any emission controls.

In 1993, investigators discovered this incineration had contaminated nearby land with lead at 13,813 milligrams/kilogram and more distant jungle with 6,000 milligrams/kilogram. There were "small farms and vegetable plots" in the area and the site was near a waterway.

Another burn pit, cited in an April 1994 report, was blamed for lead concentrations in soil exceeding 500 milligrams/kilogram with fields again apparently in the close vicinity.

The Japanese government's cleanup standard for lead contamination in soil is 150 milligrams/kilogram. Japan has no standard for agricultural land but in Germany the maximum level permitted is 100 milligrams/kilogram.

"People working in the area need to worry about intellectual disabilities and damage to their nervous systems," Ikeda says. "Also if they inhaled this lead and other substances over a long period, it may have caused reproductive damage and harmed blood and organs such as kidneys. Because the levels are so high, there is the very strong chance that the land remains contaminated today."

Ikedo also criticizes the reports for their lack of data on other heavy metals likely discharged during the incineration of ammunition, including depleted uranium, which the U.S. Air Force used widely in the 1990s.

Moreover, surveys from 2000 to 2001 revealed serious contamination from asbestos in many buildings such as dormitories, mess halls and boiler rooms. Inspectors found large chunks of deteriorating asbestos materials scattered onto nearby lawns. One of the locations was an abandoned hospital that had been used for “readiness training” prior to 2000. Investigators noted how military personnel had used axes and chainsaws to breach asbestos-packed doors, resulting in the spread of “friable” (easy to crumble) material across an area of 460 square meters.

The World Health Organization estimates that asbestos is responsible for one-third of occupational cancer fatalities worldwide. In recent years, Japanese base employees have struggled to win compensation from Tokyo for illnesses attributed to their work in asbestos-contaminated environments. Many were instructed to work without proper safety equipment. In 2014, the Japanese government agreed to pay compensation to 28 victims but experts estimate the number of sick is likely in the hundreds.

Former base worker Susumu Tamura witnessed firsthand the dangers of asbestos. Employed on U.S. bases for 43 years until the 1990s, his testimony helped to win compensation for the family of a colleague killed by asbestos-related lung disease.

In a recent interview with The Japan Times, Tamura recalls the dilemma faced by many Okinawans employed by the U.S. military. “Even if we thought what we were ordered to do was wrong, we didn’t refuse,” Tamura says. “We were worried that we’d be fired.”

During his time on the bases, Tamura regularly witnessed lax environmental standards, including the illicit dumping of waste and shoddy cleanup work.

“Nowadays, safety conditions may have improved,” Tamura says. “In the past, however, the only way to describe them was *yaritai hodai* — the U.S. military did whatever it wanted.”

The first installment of a two-part series on contamination at Okinawa’s Kadena Air Base. The second installment will be published on April 17.

Freedom of Information Act lifts lid on secret history of contamination at Kadena Air Base

One hundred and thirty U.S. bases are in operation in Japan — 32 of which are located in Okinawa Prefecture — but the Americans who serve upon them and local residents know nothing of the dangers these installations pose to human health or the environment.

At the root of the problem lies the Japan-U.S. Status of Forces Agreement (SOFA), which makes no allowances for Japanese officials to conduct pollution checks within U.S. bases — nor does it hold the military responsible for cleaning up land that is returned for civilian use.

In 2015, Washington and Tokyo pegged a supplementary agreement onto SOFA giving local authorities the right to request a base inspection following a spill. To date, however, the Pentagon has failed to green-light any such checks.

With both SOFA and the new agreement failing to protect the country's environment, it comes down to Japan Environmental Governing Standards. The guidelines specify when U.S. forces need to report spills to the Japanese government, for example, after they surpass a certain volume or contain a substance listed as hazardous. However, they do not assign punishment to bases breaching environmental policies or hold the military responsible for contamination outside its bases.

Documents recently released under the Freedom of Information Act reveal instances of U.S. Air Force officials conspiring to hide environmental incidents from the public. In July 2014, for example, the discovery of a buried barrel of chemicals within Kadena Air Base sparked emails urging responders to keep a “low profile please. Don't want this release (sic) to press.”

This combination of flawed regulations and lack of transparency creates obstacles for researchers trying to ascertain pollution within U.S. bases in Japan. Scientists can only check land that has already been returned for civilian use — by which time it is too late to prevent contamination — or conduct tests on wildlife captured near active bases in the hope their tissues will reveal traces of any toxins.

Given these constraints, one of the most effective ways to lift the lid on locked-tight bases is the FOIA.

“This release of documents about Kadena Air Base is a great example of the power of the FOIA. Because the U.S. government has a hand in many global activities, the international community has many questions for it,” says Beryl Lipton, a member of MuckRock, the organization that helped to secure the release of the documents.

“The FOIA gives great power to the people,” Lipton says. “Official press releases and statements are no longer the final say on a matter — you can check what public officials say. The FOIA can hold the U.S. government to their own words by their own law.”

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