

Decontaminate the Fukushima decontamination project

“Josen”(the decontamination of radioactive substances) equals to
“Isen”(the relocation of contaminated materials) and to the
“Concession”for the related organizations.

By Teiichi AOYAMA, Emeritus Professor,
Tokyo City University

In November 2011, I gave a lecture at a symposium held by Japan Federation of Bar Associations in Fukushima City focusing on the possible shift away from dependence on nuclear power in Japan. In that presentation, I simplified the problem with a government program to decontaminate areas affected by fallout from the Fukushima Daiichi disaster in this way: *josen* (the decontamination of radioactive substances) means nothing but *isen* (the relocation of contaminated materials) and the granting of concessions (government contracts) to organizations related to the nuclear power industry.



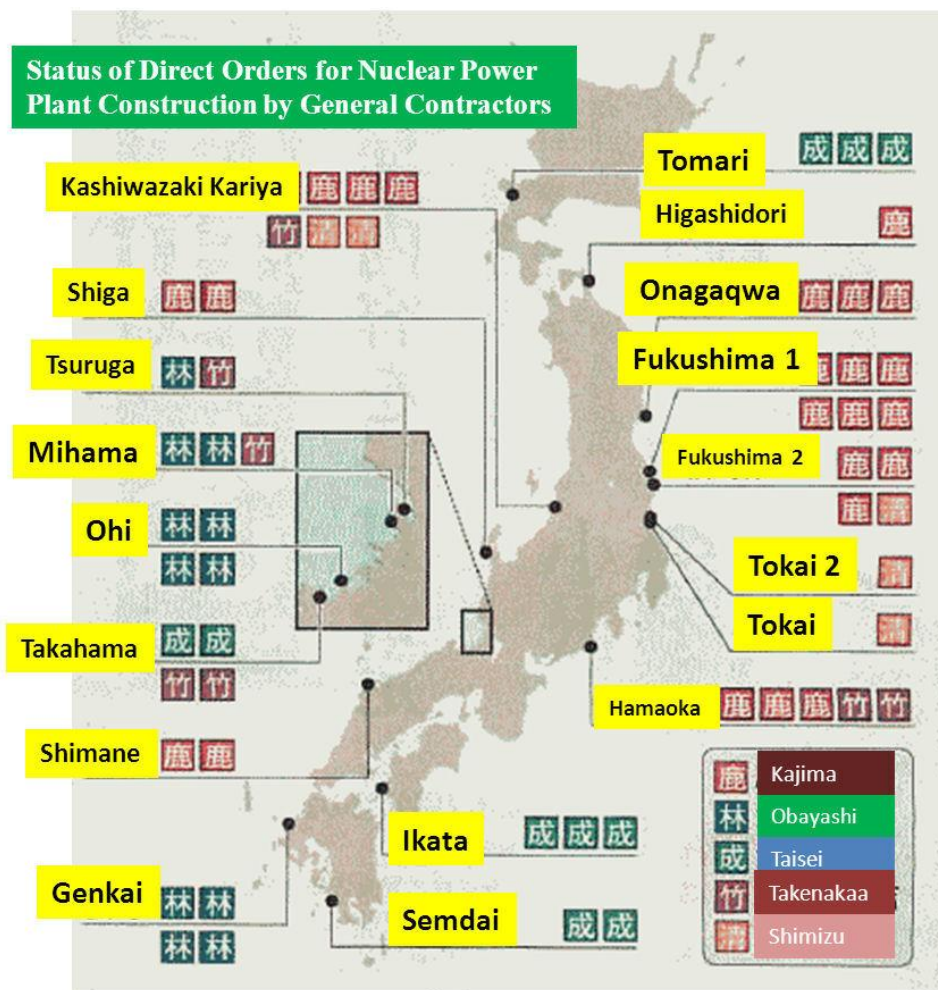
Photo was a lecture at a symposium held
by Japan Federation of Bar Associations in Fukushima City

By saying that, I meant that, if current policies continue to be followed, it is now obvious that the trillions of yens in the decontamination budget will do little but enrich insiders.

Earlier this year, the government began handing out the first contracts from an initial \$13 billion fund earmarked for decontamination of an 8,000-square-mile area affected by fallout from the Fukushima disaster. The decontamination efforts have been criticized on two grounds: Many observers say the clean-up

will be ineffective, in part because the fallout will continue to be washed down from the mountains surrounding cities that are the focus of the decontamination effort. During the November symposium, Yusuke Uchiyama, an associate professor of engineering at Kobe University, insisted that “the decontamination of radioactive substances from the soil and houses of the affected area will simply relocate the radioactive substances to other places, and it only results in the slight change of the spotted distribution of the contaminated areas.” Meanwhile, rain will wash cesium from mountain areas to lower land, recontaminating cities and increasing the radiation level in river basins. Among other things, this means that radioactive substances will accumulate in the sediment of lakes and reservoirs in the Kanto Area, an important drinking water sources for metropolitan Tokyo.

Others have criticized the government for giving the initial contracts in the cleanup to three large construction companies that built the vast majority of Japan’s nuclear plants, including Fukushima Daiichi. As the Tokyo Shimbun reported in December(<http://www.tokyo-np.co.jp/article/tokuho/list/CK2011120802000034.html>), the Japan Nuclear Energy Safety Organization will be the prime contractor of the proposed decontamination project, and three joint venture groups will subcontract the actual work at the affected sites. Further, the article revealed, these three joint ventures are composed of major construction companies that were involved in nuclear power plant construction all over Japan.



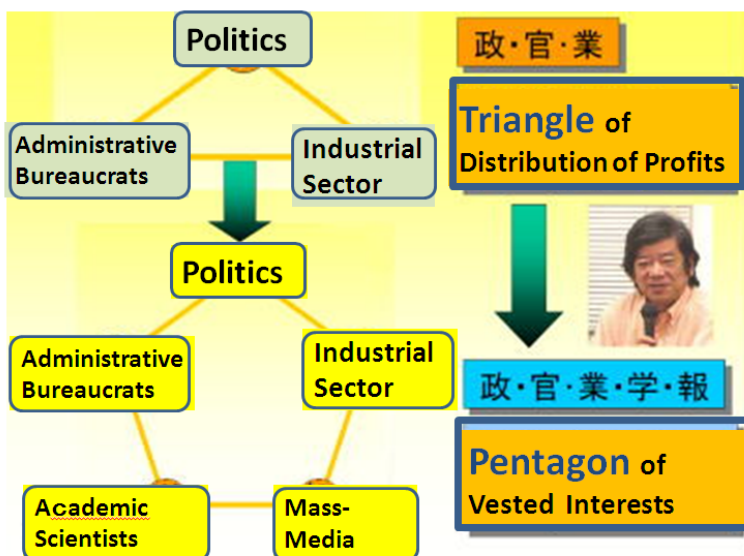
Source: Tokyo News Paper article 8th Dec. 2011 – Earn money by construction of nuclear power plant,

and also makes money by broken power plant through Josen project- This is the Concession of Josen under control of major Gene-cons.

It's clear that the government's program to decontaminate areas affected by fallout from the Fukushima Daiichi disaster is itself a disaster that will do little to solve the radiation problem. The figure below shows the distribution of the powers of general Contractors concerning nuclear power plant construction reception of orders. This map indicates that Kajima Corporation constructed all the buildings and facilities of Fukushima-Daiichi and Fukushima-Daini Nuclear Power plants.

The pentagon of decontamination politics

For many years, I have noted that Japanese public construction projects such as dams, roads, airports and nuclear power plants have often been promoted by strong coalitions that consist of five parties: 1) politicians, 2) administrative bureaucrats, 3) industrial sectors, 4) academic scientists, and 5) the mass media. I call such a coalition the Pentagon of Politics. I call the process by which such coalitions advocate projects from which they all benefit "concession hunting."



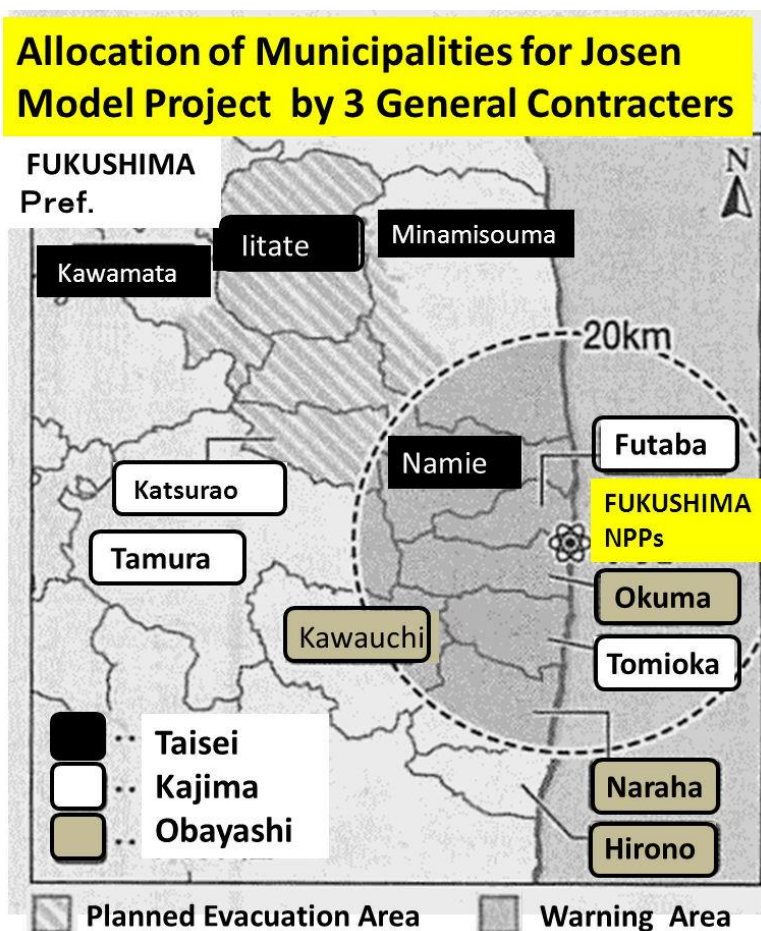
Teiichi AOYAMA interview article on leading public opinion by information manipulation (1) Japanese unique system under Pentagon of Politics, Administrative bureaucrats, Industrial sectors, Academic scientists and Mass-media.

The Fukushima decontamination project is a demonstration project; it also appears to be a model case of concession hunting. The *josen* project was contracted by Japan Atomic Energy Agency (JAEA) as a full, turn-key contract, granted to three major construction companies: Kajima, Taisei and Obayashi. These three companies were chosen through proposal processes. These three general contractors in turn subcontracted the work to their affiliated companies.

The figure below shows the allocation map of municipalities where major construction companies

(JVs of Gene-cons) will accept the Josen business in affected areas.

The total projected cost of this demonstration project paid to JAEA was about 19 billion yen (about 240 million dollars), but the subcontracting fee paid to all the general contractors – that is, the amount was just 7.2 billion yen (about 90 million dollars). The difference between the cost of the project and payments to the firms actually performing work has raised ethical questions about the contract. (The most direct question: Where did the rest of the money go?) So has the choice of joint venture partners. Many observers consider it simply unacceptable that companies involved in building the Fukushima Daiiicha Nuclear Power Plant – companies that some consider at least partly responsible for the accident there – would also be chosen to lead the first decontamination project.



Source: Tokyo News Paper 8th Dec. 2011 Earn money by construction of nuclear power plant, and also makes money by broken power plant through Josen project- This is the Concession of Josen under control of major Gene-cons.

Decontamination that is not decontamination

The construction companies of the Fukushima area are very angry about the government's decision to go with major, insider construction firms in the first phase of the decontamination effort. The local firms had expected substantial decontamination contracts, but will instead get relatively little work, with the general

contractors likely bringing affiliated enterprises from outside the affected areas to do on-the-ground decontamination. These local companies point out that human-wave tactics are the most effective way to decontaminate the area, and that the high technology that the large general contractors bring to the project means very little.

On 1 June 2012, the Tokyo Shimbun newspaper article reported the list of general contractors and contract prices for municipalities' decontamination projects shown in the table below. The bidding system is not open bidding, but tender by nominated or designated companies or Ministry of Environment sought ideas and cost from the public for the decontamination project of the affected areas. As for Minami-Soma City, the price is going up to 40 billion yen for just 1 City, but it is a professor of the University of Tokyo that has done terrible emphasis of the necessity for decontamination in Minami-Soma City.

Table: Decontamination Project Contracted to General Contractors

Municipality	Contract Price	Bidding System	General Contractors
Minami-Soma city	40 billion yen (500 million dollars)	Selective Proposal	Takenaka JV
Date city	14.2 billion yen (178 million dollars)	Selective Proposal	Obayashi, Shimizu, Nishimatsu, etc.
Hirono city	6.4 billion yen (80 million dollars)	Selective Proposal	Shimizu
Fukushima city	2.9 billion yen (36 million dollars)	Open Competitive Bidding	Obayashi JV, Mitsuisumitomo JV, etc.
Fukushima prefecture	0.15 billion yen (1.9 million dollars)	Proposal competition	Taisei
Cabinet Office	8.1 billion yen (101 million dollars)	Public Tender	Taisei JV, Kajima JV, Obayashi JV
Ministry of the Environment	0.6 billion yen (7.5 million dollars)	Public Tender	Taisei

Source: the Tokyo Shimbun newspaper 1 June 2012

General contractors are not the only organization which can conduct decontamination project. The main task for decontamination is only to remove the surface soil by 5cm depth and cover the place with clean soil. The issue is where the contaminated soil can be transported and to be stored safely.

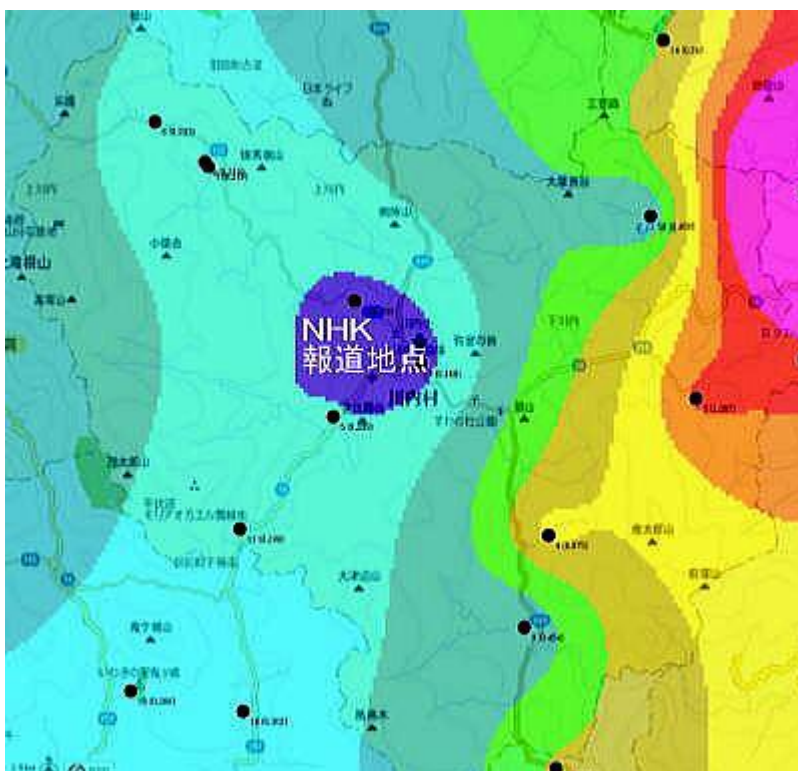
Even small local companies can deal with the projects and it will increase job opportunities which should be the top priority of the affected areas, and will improve their financial status in those areas.

Conclusion

In the past 54 nuclear reactors has been constructed in Japan which has only one 1/25th land area and 1/4 of population size compared to the US. So called "safety myth" has been believed that nuclear reactors

would never cause severe accidents in Japan, however unprecedented nuclear accident occurred on 3.11. As the result of the accident many residents had to evacuated from their home town and lost their job, on the contrary, the general contractors proposed the decontamination projects to the government and affected municipalities and finally obtained the contracts totally hundreds billion yen (billions dollars) by very Japanese bidding system.

The people in the affected areas lost their home, job and even hope, but on the contrary, the general contractors, which constructed nuclear plants' buildings, now gained huge amount of benefit by decontamination projects. How unethical it is? Is there any such unreasonable thing like this? It cannot be convicted. In addition to that how hard they work on the decontamination, soon after that radioactive substance will be carried by rain or wind from field or mountain and eventually residential areas will likely to be contaminated again.



Analysis result of radiation level in Kawauchi village after finishing the decontamination project by using so-called SPLINE compensation method. Blue and green are relatively low radiation level, and yellow, orange and red are relatively high radiation in the air.
Source: Teiichi Aoyama

If the decontamination is effective even to some extent, government should build a scheme that local small scale companies and local people who lost their job by the accident can earn financial benefit by working on the projects. The government has to stop using infamous “selective bidding system” and proposal system in which applicant for the contract can freely select the contractors, because they are not considered fair.