



Thank you for inviting me to speak today.

I am Danius Barzdukas from the Office of Japan, Korea and Taiwan at the Department of Commerce.

I cover the energy and environmental industries sectors for our office.

I worked with the Departments of Energy and State to help organize a trip by U.S. firms to Tokyo and Fukushima in June of this year.

It is more difficult to track what is going on in Japan from Washington than from Tokyo. Our Department of Energy Attache at the U.S. Embassy is the real expert on this issue, and unfortunately he was unable to be here today.

But I will do the best I can.

U.S. Government Assistance to Japan in Response to Fukushima

- I. Status of Clean-Up
- II. U.S. Government Assistance
- III. Problems and Challenges

I want to do three things today.

Provide a general outline of how the clean-up of Fukushima prefecture is progressing. I will be relying on information provided by the Ministry of Environment for this. The information is slightly dated, but I was unable to arrange meetings with anyone to get updates on this when I was in Tokyo recently.

I will then provide a brief update of what the United States is doing to assist with decontamination efforts and what plans we have.

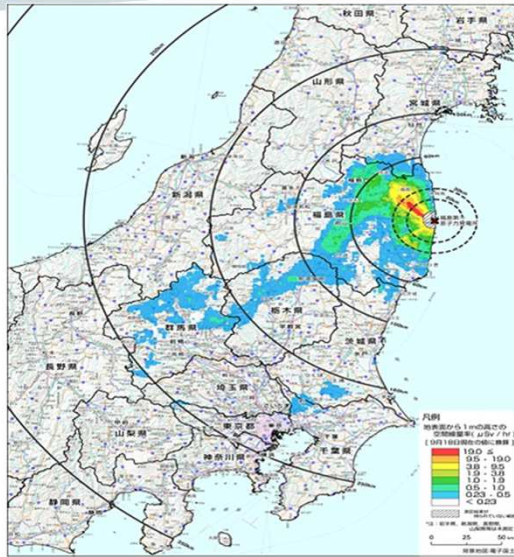
Finally, I will give you the Department of Commerce's perspective on the problems and challenges with working in Japan. I hope not to discourage any of you from providing any possible assistance.

Part I.- Status of Clean-Up



We'll start with the status of the clean up.

I. Status of Cleanup



Source:
Progress on Offsite Cleanup
Efforts in Japan,
Takeshi SEKIYA, Ministry of
the Environment, Japan
Senior Regulators' Meeting at
56th IAEA General Conference,
Sep 20, 2012

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4

For those of you not familiar with it, here is a map of the area affected by the accident at Fukushima Dai-ichi nuclear plant.

Here is also the source I will be using for this information- a presentation made by Takeshi Sekiya on September 20.

I will cover his information very briefly. I am not a technical expert on these issues.

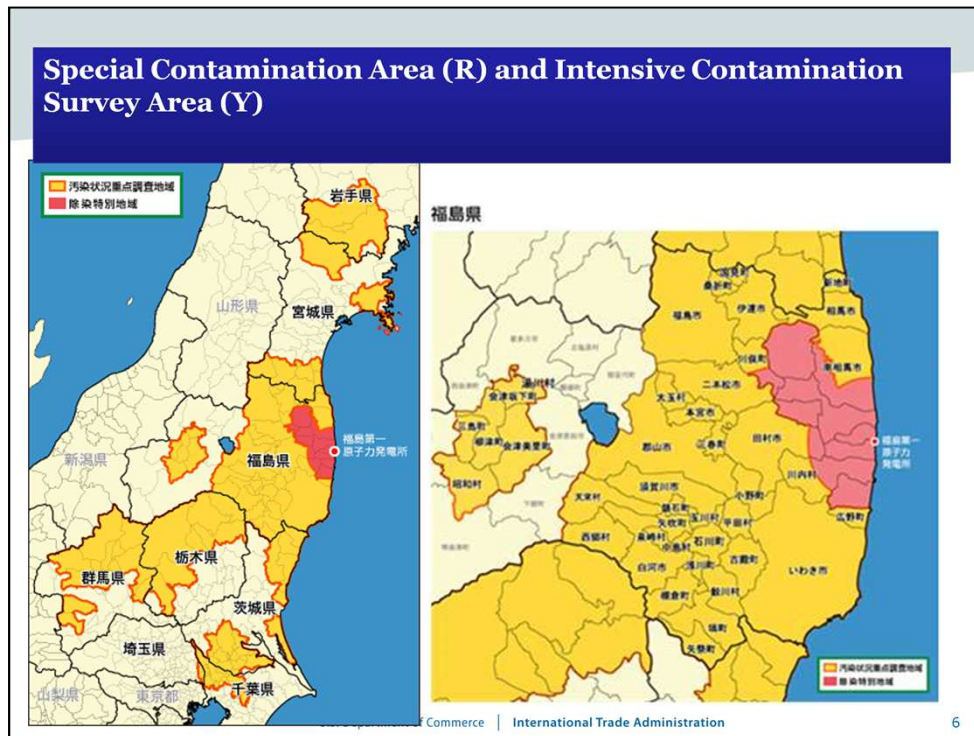
The Act on Special Measures Concerning the Handling of Radioactive Pollution

- Came into force on January 1, 2012.
- Planning and implementation of decontamination work
- Collection, transfer, temporary storage, and final disposal of waste
- Identifies the responsibilities of national and local governments.

Japan does have an approach toward dealing with decontamination. The Act on Special Measures Concerning the Handling of Radioactive Pollution came into force on January 1, 2012.

It addresses the needs for decontamination work as well as storage and waste disposal.

It splits up the responsibilities between the central and local governments. This is important since it makes it more difficult when looking at how to best help Japan or look for business opportunities.



Decontamination work is split into two areas, a Special Contamination Area (in red) where intense contamination occurred, and the Intensive Contamination Survey Area (in yellow) where less contamination occurred.

The central government is responsible for the red area.

Local governments are responsible for the yellow areas.

Special Contamination Area and Intensive Contamination Survey Area

Special Contamination Area (Red Zone)

- 11 municipalities in (former) restricted zone or planned evacuation zone (<20km from the NPP, or annual cumulative dose is >20mSv)
- Decontamination is implemented by the national government.

Intensive Contamination Survey Area (Yellow Zone)

- 104 municipalities in 8 prefectures , in which over 0.23 mSv/hour of air dose rate (equivalent to over 1 mSv/Year) is observed.
- Decontamination is implemented by each municipality. The national government will take financial and technical measures.

This is how they designated each area, based on how many millisieverts were detected.

So the special decontamination area is basically less than 20 km from the Plant or where the annual dose is greater than 20 millisieverts.

The intensive contamination area spreads over 8 prefectures.

This also shows the responsibility for each area again.

Decontamination Policy in Special Targeted Area

Up to 2013

- Decontamination should be implemented taking into account the level of air dose rate.

Area less than 20mSv/year :

to less than 1mSv/year as long-term goal.

Area from 20~50mSv/year:

to less than 20mSv/year by the end of FY 2013.

Area more than 50mSv/year :

Demonstration projects will be implemented. Lessons learnt will be reflected into future decontamination policy.

Post 2013

- Aiming for reducing additional exposure dose less than 1mSv/Y as long-term goal
- Check and evaluate two-year decontamination results, consider proper actions, and revise implementation plans as needed.

Here are the goals for the red area.

In the most highly contaminated area, they still plan to do demonstration projects to figure out the best way to deal with decontaminating the area.

This may be an opportunity for U.S. firms for using U.S. technology.

Progress of Work in Special Decontamination Area (late September)

Work to be done in 11 Municipalities

- Advance Decontamination 10/11
- Identification of owners of houses, etc. 10/11
- Decontamination plan 6/11
- Full scale Decontamination Works 1/11
- Securing temporary storage sites 5/11

Here is some of the work that has been done in 11 municipalities in the red zone. It lists stages of work and the number of municipalities that have reached these stages.

Note that very little of the full scale decontamination has taken place.

Guidelines Under the Act

Waste-related guidelines:

storage, maintenance and management standards and disposal standards

Decontamination-related guidelines:

methods for the investigation and measurement, decontamination and other measures, collection, transfer and storage of the removed soil

Guidelines for decontamination workers:

exposure dose management methods, preventive measures against internal exposure, safety and health management systems

This just shows that there are all sorts of guidelines for the decontamination

Decontamination Process

- Identification of the stakeholders of the land
- Meetings to explain the results of field surveys to the residents
 - Get consent from residents
- Monitoring the radiation levels and checking the condition of the buildings (field surveys)
- Decision of the decontamination methods
 - Get consent to work
- Decontamination operations
- Monitoring radiation levels after the decontamination
 - Reporting results
- Completion of the decontamination (monitoring continues)

Here is some additional background on the process.

Note that a lot of the work involved outreach to the local residents and communities to get permission to do the work.

Not all of the work is technical.

Decontamination Activities/Model Projects

Water cleaning



Wall wiping



High-Pressure Water cleaning



Various forms of concrete floor cleaning



Topsoil removal

Here is the type of work that was being done power-washing, wiping, etc.

Those on the June trip saw this taking place.

Progress in Intensive Decontamination Area

- 78 out of 104 municipalities finalized their decontamination implementation under the Act (as of Aug 10, 2012)

Fukushima City Example

- Planning term : 5 years until Sep. 2016 (2 years as an intensive term)
- Priority: Houses in high air dose areas, public facilities, especially for children.

Storage Facilities

- Efforts to locate storage facilities are also underway.

Here is some background on the progress in the yellow areas.

They have a five –year plan. It includes areas such as specific parts of the city, high and low-dose areas, farmland, forested areas, public facilities.

Storage Facilities also need to be identified. We visited such a storage facility during the June visit.

Challenges for Japan

- Seeking for more efficient/effective technology
 - Opportunities?
- Public communication for securing temporary storage sites, interim storage facilities, etc.
 - Opportunities?
- Research on the behavior and environmental fate of Cesium
 - Opportunities?

These challenges also indicate where there are opportunities for U.S. firms.

1. Seeking for more efficient/effective technology for decontamination from the perspective of cost, time, etc. through demonstration project and R&D (incl. Soil/ Waste minimization and volume reduction)
2. Public Communication for securing storage sites or facilities.
 1. Challenging for U.S. firms- but maybe possible if working with a partner.
3. Research on cesium

Seeking Technology Japanese Approach

Immediate Goals-When Partnering with Foreign Firms

- Search for specific technologies
 - Danger of technologies being copied
- Prefer to keep Japanese methodologies

Longer Term- Developing Domestic Industry

- Motivations
 - Embarrassment
 - Desire to develop domestic industrial structure

I want to point out some experiences we have with the first challenge- finding appropriate technology.

Japan is very focused on finding a technology to use. They are confident with their methodologies for clean-up. They just want to get something they do not have that they can implement.

There is a danger of a technology being copied. I believe there is already such a case regarding decontamination work.

Japan has the long term goal of developing its own domestic remediation industry. They were embarrassed they could not deal with the effects of the Nuclear Plant.

Japan also wants to develop its own domestic industry.

Abe Administration's reconstruction efforts

- Japanese Domestic Criticism of Ministry of Environment
 - Speed
 - Method
- Budget raised 19 trillion yen to 25 trillion yen over five years through fiscal 2015.
- On Feb. 1 opened the Fukushima Reconstruction and Revitalization Bureau.
- Simplified procedures for relocating farmland.
- 320,000 people remain evacuated and only 24 percent of debris has been disposed of.
- Construction has started on only 5,651 units of 21,000 (27%) permanent public restoration housing units for disaster victims.

» (Daily Yomiuri February 13)

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16

Budget for restoration raised 19 trillion yen to 25 trillion yen over five years through fiscal 2015.

On Feb. 1 opened the Fukushima reconstruction and revitalization bureau, under the Reconstruction Agency,.

The General Bureau will be headed by Reconstruction Minister Nemoto, and the Senior Vice Ministers for Reconstruction, Economy, Trade and Industry, and Environment will be in charge. The Former Administrative Vice Minister for Reconstruction, Mr. Minehisa, will assume the role of General Secretary (Jimu Kyokucho) of the organization. Approximately 70 officials from the Reconstruction Agency and the Environment Ministry will staff the General Bureau.

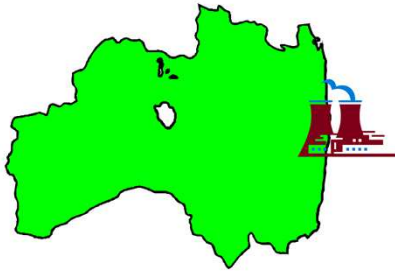
Meanwhile, Nikkei also reported that the “Fukushima Reconstruction Recovery General Headquarters (福島復興再生総括本部)” was newly set up in Tokyo. It will be headed by the Reconstruction Minister, and will consist of Director-Generals of various Ministries, such as MLIT, MAFF and METI. The Reconstruction Minister will be able to give instructions directly to the various Ministries, and will deal with issues that are too complex for the Fukushima Reconstruction Recovery General Bureau to handle.

Simplified procedures for relocating farmland.

320,000 people remain evacuated and only 24 percent of debris has been disposed of.

Construction has started on only 5,651 units of 21,000 (27%) permanent public restoration housing units for disaster victims,.

Part II - U.S. Government Assistance



Here is our Department of Energy at work.

USG-GOJ Coordination-The Decommissioning and Environmental Management Working Group

The Decommissioning and Environmental Management Working Group focuses on bilateral cooperation to address the long-term consequences of the Fukushima accident.

- lessons learned related to facility decommissioning,
- spent fuel storage and decontamination, and
- managing the longer term consequences of an incident, such as monitoring contaminated areas.
- DOE and the EPA
- the Ministry of Economy, Trade and Industry (METI) and the Ministry of Environment (MOE)
- Currently, the US is developing a workplan for working group activities over the next 1-2 years.

At the policy level, a Working Group has been set up to work on Fukushima.

DOE and EPA are leading it, along with METI and MOE.

A working plan is being developed.

This may result in more useful information on lessons learnt being shared.

Perhaps someone can come and speak about this at a future meeting.

Business Focused Assistance

DOE and DOC cooperation

USG –Activities

- Commercial Service Market Alerts
- Embassy Science Fellow and Support
 - Help with procurements
 - Commerce Support
- Target Pilot Projects in the Exclusion Zone
 - More cooperation, targeted procurements
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- Business –to- Business Working Group on remediation issues.
 - Develop relationship with Japanese firms
 - Share experiences, help facilitate clean-up

Here are some ideas we have been working with the DOE on.

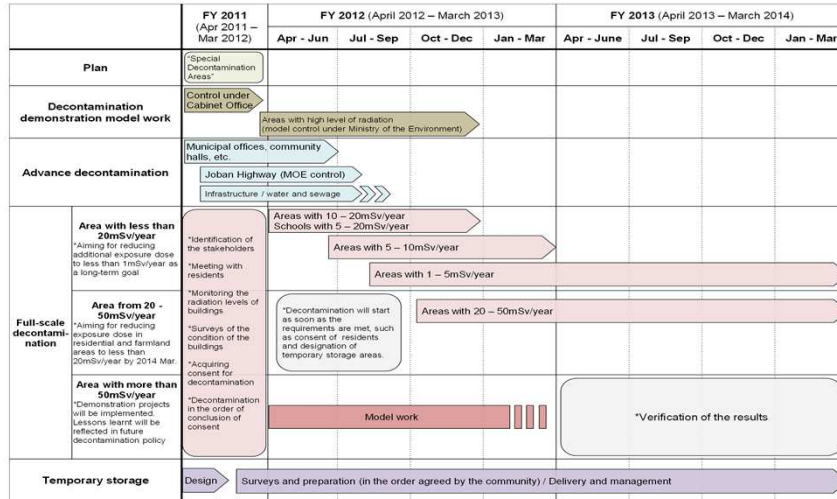
A Target Pilot Projects Program in the Exclusion Zone. We may be seeing some sort of progress on this.

DOE is planning on sending an Embassy Science Fellow up into the area to assist with studying the region and providing input on procurements.

We would like to send a Liaison into the area to provide support, but are looking for funding resources.

We would like to form a business to business working group to keep firms engaged on this issue. The Japanese Government has expressed interest in this i

Decontamination Schedule



Tender Process 1

- Firms must be registered as legal entities in Japan.
- GOJ tenders are on the relevant websites and the preparation period is usually 2 to 4 weeks.
- Firms must hold a “Qualification of Civil Engineering Work from the Ministry of Environment (MOE) for Participation in Open and Competitive Bidding” certification.
- Required qualification grade, “A” to “D”

“A” is the highest level and qualifies firms to participate in projects exceeding 300 million yen (approximately \$3.3 million). Also, an “A” grade is considered the minimum standard for nuclear decontamination projects.

Tender Process 2

- Submit required documents . (See CS website)
- An “Integrated Tender Evaluation System” is used to appraise each bidder’s proposal.
 - Tender price:
 - Technical proposal:
 - Additional innovative and novel proposals
- MOE tenders for Fukushima nuclear decontamination:
 - http://www.env.go.jp/kanbo/chotatsu/index_nyusatsu_koji.html

To apply for tenders, bidders must submit a number of required documents .

An “Integrated Tender Evaluation System” is used to appraise each bidder’s proposal. This system is an overall rating methodology used by MOE to assess the suitability of each applicant firm for the particular project being tendered. This evaluation system consists of the following elements:

Tender price:

Technical proposal:

Additional innovative and novel proposals

MOE tenders for Fukushima nuclear decontamination work are made public via the following website (in Japanese only):

http://www.env.go.jp/kanbo/chotatsu/index_nyusatsu_koji.htm

Approved technologies and additional proposals

- MOE list of approved decontamination technologies, depending upon six different land/facility and process categories.
 - List open to change.
- Additional Proposals

See CS Japan Fukushima Market Alert Website

Fukushima Decontamination Market Alerts

Commercial Service Japan
Fukushima Decontamination Market Alerts

<http://export.gov/japan/>

Embassy Science Fellows

- 2 Fellows from the Energy Department's Savannah River Site and the Pacific Northwest National Laboratory.
- Began February 4 Ministry of Environment
- DOC Tohoku Liaison
- Trips to Tohoku

Robert Sindelar from the Energy Department's Savannah River Site and Mark Triplett from the Pacific Northwest National Laboratory.

Target Pilot Projects

- 2 projects in highly in highly contaminated zone
- Estimated timeline: April
- Embassy Science Fellows, DOE, DOC working on Procurement Procedures

Demonstration Technologies

- 10 projects, May 24 deadline, 21 million yen per demonstration
- Categories
 - Efficient technology for decontamination work
 - Waste reduction technology.
 - Contaminated Waste Treatment Technology
 - Technology for collection and treatment of discharged water
 - Technology for transportation, temporary and interim storage
 - Any technology to support decontamination work

Planned Schedule:

Application Deadline: May 24, 2013

Examination of document and hearing (to be held in Tokyo), and selection: mid-June

Demonstration: starting from July 2013

Evaluation of technology results: mid-November

Budget: 21 million yen per a demonstration

U.S.-Japan Fukushima Business Working Group (tentative)

- Business to Business engagement on Fukushima
 - Business opportunities
 - Sharing expertise- experiences
- Matchmaking Opportunity
- Late Spring
- Need GOJ approval

Part III.- Problems and Challenges

Please admire my transition slide

Obstacles I: General Difficulties 1

- Unique Business Culture
 - Importance of personal connections
 - Strong relationship between stakeholders
 - Government-Business
 - Business-Business
- Industry
 - Highly-developed in certain areas
 - Confidence in abilities
 - Insular mindset
- Desire to develop its own industrial infrastructure
 - Investment, not cost
- Development of domestic standards
 - Confidence in standards
 - Standards as impetus for innovation

There are a lot of difficulties with working with Japan. Here is a list of a number of them. These all make it difficult for U.S. firms to easily penetrate the market.

There are strong ties between firms and firms and industry that make it hard for firms to easily switch partners.

These connections also ensure that information about business opportunities filters out in a non-transparent manner.

Japanese also have a confidence in their abilities and the standards they create, often wanting to create standards that are better than preexisting international ones. They often use such standards as an impetus for innovation.

Also, they often view business in terms of an investment, rather than a simple cost. So they would rather make the effort of creating a domestic infrastructure rather than simply purchase what is already available.

Obstacles I: General Difficulties 2

- Local Prefectures
 - Funding
 - Public relations
 - Employment
- No centralized coordination
- Interest in copying technologies
- Construction market trends/competitiveness
- Lack of precedent

Here are some additional difficulties.

When dealing with local prefectures, even those from outside of the region face difficulties.

It is important to point out that Japan's domestic public works sector has seen declining investment for close to 15 years now, so many firms have gone out of business, profit margins are low, and competition is very intense.

Work on Fukushima is seen as an opportunity.

Some advice

- U.S. companies wishing to enter the Japanese market should
 - Consider teaming with a reputable, well-connected agent or distributor
 - Cultivate business contacts through frequent personal visits
 - Be prepared to make an investment
 - Understand the need for after-sale service
 - Take the long view

Japan's business culture attaches a high degree of importance to personal relationships, and these take time to establish and nurture.

Patience and repeated follow-up are typically required to clinch a deal. The customs and pace of deal-making in Japan are quite different from the United States.

Here is some general advice we often give to firms interested in working in Japan and how to approach some of the obstacles mentioned.

US Department of Commerce Commercial Service

Commercial Service can help primarily with three main things:

Gold Key Service: A set of pre-screened meetings with prospective Japanese representatives (agents, distributors, etc.), ideal for firms that do not yet have representation in the Japan market.

Single Company Promotion: A promotional audience event designed to raise the profile of U.S. products and services in Japan, ideal for firms that already have representation in the Japanese market.

Advocacy: Official U.S. Government advocacy in relation to specific Japanese government public tenders, in the form of exclusive advocacy (when only one U.S. firm is involved) or generic advocacy (when more than one U.S. firm is involved).

Here are some of the services our Commercial Service can provide

Department of Commerce Contacts

- Export Assistance Centers
 - <http://export.gov/eac/index.asp>
- Commercial Service Tokyo
 - <http://export.gov/japan/>
 - Office.Tokyo@trade.gov
- Market Access and Compliance/Office of Japan, Korea, and Taiwan
 - Danius.Barzdukas@trade.gov

Here are some contact points or
US Export Assistant Centers

Commercial Service Tokyo- their website has a lot of information
You can contact someone there by sending a message to them.

I am also a contact point. If you have any problems, contact me. I also send out information to those who were on the June trip. If you are interested, I can put you on my mailing list.