

# **Petroleum Association Of Japan Training Program**

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## **Background**

Petroleum Association of Japan is a non profit making and non governmental trade association established in 1955 to encourage the sound development of the Japanese petroleum industry. Petroleum Association of Japan comprises of 21 major oil companies in Japan who have in 1973 formed PAJ Oil Spill Co-operative (POSCO) as a voluntary mutual aid organization based on lessons learned from the JURIANA incident in Japan in 1971.

As world events progressed, concern about the marine environment grew until a whole new approach to oil spill was triggered on March 24<sup>th</sup> 1989 by the Exxon Valdez. Since then many countries operating procedures have changed in line with the Oil Pollution Act of 1990 and the IMO OPRC Convention. In 1990 the then Ministry of International Trade and Industry (MITI) now the Ministry of Economy Trade and Industry (METI) arranged a government subsidy for a Major Oil Spill Response Program to be started and implemented by Petroleum Association of Japan.

This Major Oil Spill Response Program was started in 1991 and today some 10 plus years later has evolved into reliable and well operated organization with 11 oil spill bases, well trained members and an excellent international reputation.

The Major Oil Spill Response Program activities are split into 3 categories these being Preparedness and Response, Research and Development and Hosting International Conferences such as this. A Major part of Preparedness and Response is training and that is the subject which I would like to expand upon today.

Petroleum Association of Japans Training Program started in 1991 with the implementation of the Major Oil Spill Response Program, but, as in the case of the Exxon Valdez in the USA, the Nakhodka incident of 1997 in Mikuni, focused Petroleum Association of Japan resources on training of personnel as well as some other points.

## **Present Situation**

There are at present 11 Oil Spill Stockpile bases worldwide, 6 in Japan, Yokkaichi, Mizushima, Niigata, Muroran, Okinawa, and Chiba and one each in Saudi Arabia, UAE, Malaysia, Indonesia and Singapore. Each base a selection of good quality equipment which is well proven in the field. There are no vessels included at the stockpile bases but most of the maintenance contractors either own vessels or have access to them.

The equipment belongs to Petroleum Association of Japan and the bases are established in areas which are selected due to their proximity to risk of an incident. In Japan the bases are at Member companies premises and overseas they are either at Japanese Oil Companies or with Logistics organizations which can mobilize the equipment quickly. Each Stockpile base has an appointed maintenance contractor whose role is to perform monthly maintenance on the equipment and make sure it is in first class condition and ready to go in the event it is required for an incident.

The Major Oil Spill Response Programs aims are to lend out the equipment free of charge to the parties concerned but Oil Spill Response Operations are not normal or regular events and the equipment is both specialized and difficult to handle if the operators are not trained well in advance. This point became clear during the Nakhodka incident and proved it is vital to train as many people as possible from the maintenance contractor, staff of member companies, POSCO members and other concerned parties. It is with this history and experience that has seen Petroleum Association of Japan training program develop to the level it is today which I will now illustrate.

## **Training In Japan.**

Basic Training.

The basic training of personnel is usually conducted at the member company premises adjacent to the stockpile base in Japan. These training courses are usually run for 2 days and are a combination of hands on training with the equipment at the base, theory and video presentations. Petroleum Association of Japan have produced a training video on each piece of equipment which they have and these videos run approximately 20 minutes each. The videos have been meticulously produced with computer graphics, real time assembly and operation of the equipment and are an excellent introduction for the beginner.

These beginner courses are normally run at each base once a year and the emphasis of this course is as an introduction to Oil Spill Response, the equipment capabilities and logistics necessary to support a recovery operation.

It is important to remember that while the maintenance contractors staff may stay in their positions for many years, the Oil Company staff are usually promoted and moved every 2 or 3 years which ensures a constant flow of new students. This is a very positive point as not only do more people in the company become aware of oil spill activities and are able to play a role in any future event but their names and level of experience are kept on a database in case they are needed in the future.

#### Intermediate Training.

These training exercises are the next step up from basic training and are again conducted at the member company premises adjacent to the stockpile base in Japan. The courses are attended by Member Company and Contractor staff from the other bases and normally there is an attendance of about 25 to 30 persons and the courses are held approximately 4 times per year. Considerable planning goes into each course to select the useful scenario and mix of equipment to be deployed.

Each Stockpile base is located in a different area of Japan and they all have unique conditions. As an example Muroran in the north has very rocky shoreline with severe winters and weather conditions, so we used these conditions to practice at sea recovery with larger systems.

On the other hand Okinawa in the south has beautiful beaches and hot weather so this is an ideal place to concentrate on a beach exercise etc. Incidentally we will be holding the next exercise in Okinawa next week after the symposium.

The duration of these intermediate Skill-up courses is 3 days and during that time all of the staff have the chance to operate the equipment and learn about it's limitations and their own. Half of the time is spent at sea on the vessels, deploying and recovering the equipment, chasing imaginary oil slicks, and transferring the collected substances to the shore for storage. The other half of the time is either in the classroom planning the exercise or on the dockside learning about the equipment and how to install it on the vessels. The emphasis of these courses is the effective installation of the equipment and it's operation.

At this point I would like to point out that there are no full time Oil Spill Response personnel appointed by Petroleum Association of Japan except management responsible for the implementation of the Major Oil Spill Response Program based here in this building. All of the staff which have been trained or that are

involved with the program have other full time jobs and this includes the maintenance contractors.

### Comprehensive Training.

These courses are held once or twice a year in different parts of Japan and involve the large boom systems and oil skimming equipment. These courses are usually 3-4 days in duration and involve specially chartered vessels of 60 meters and a full range of support vessels.

Petroleum Association of Japan has various large scale equipment which is complex to operate and these course are imperative should it becomes necessary to mount a large scale clean up operation quickly and efficiently. By simulating these events in the form of training we have overcome all of the major obstacles in advance thus ensuring a smooth operation in the emergency. Scenarios chosen for these exercises are both demanding and carefully designed to give the staff the maximum exposure to the problems that may be faced.

Vessel operators are trained to develop boom handling skills not normally necessary in their everyday activities and also develop techniques to handle the heavy equipment and vast quantities of recovered substance.

We have actively encouraged independent thought at these exercises and many new ideas come out of the debriefing meetings held at the end of each exercise. These exercises are sometimes plagued with problems such as bad weather, equipment failure or operational problems. These hold ups are positive points as we have to learn to overcome these in case of a real incident.

### **Training Overseas.**

IMO Level 2 Training at SOSRC in Singapore.

Once a year a number of staff are sent to Singapore for IMO level 2 training course. The course is conducted by a company called Singapore Oil Spill Response Centre Pte.(SOSRC) who is also the maintenance contractor for the Petroleum Association of Japan stockpile bases in Singapore, Malaysia and Indonesia. The duration of the course is one week and are a mixture of practical and theory training. These courses are particularly useful to the staff as they are conducted in a different country where additional thought provoking situations are encountered and different approaches to similar problems can be practiced. During October 2000 Petroleum Association of Japan members staff were attending this course in Singapore when the Natuna Sea incident happened and so the delegates got some good experience in cleaning real oil from the beach. I

was told later by the course manager that this incident was not planned by them to make the course more realistic.

IMO Level 3 Training at EARL in Singapore.

Each year senior management from the Petroleum Association of Japan member companies also attend this course which is run once a year. This course highlights the national level problems caused by oil pollution of the marine environment and the complex management decisions required during a significant event. The duration of the course is 2 to 3 days and extremely useful tool for future decision making in the event of a major incident.

Joint Training Exercises in Overseas Countries

In addition to the training courses carried out in Japan and Singapore there is also a significant part of the training program devoted to training the overseas base staff and exercises with other national organizations. Training has been carried out as follows:

1996 at Arabian Oil Company in Ras Al Khafji , Saudi Arabia

1997 at Lamnalco in Sharjah, United Arab Emirates

1999 PAJ took part in Exercise Ghazal in Abu Dhabi , United Arab Emirates

1999 With Saudi Aramco at Ras Tanura Terminal in Saudi Aramco

2000 With PIMMAG in Port Dickson, Malaysia

2001 Planned with ADNOC Abu Dhabi ,United Arab Emirates

2001 Planned With PIMMAG in Labuan East, Malaysia

### **Future Plans**

The last 2 exercises on the list had to be cancelled due to the events of September 11<sup>th</sup> but there are more training courses and exercises planned for this year both in Japan and overseas. Many new staff will be introduced to the subject of Oil Spill Response and a few will be promoted or retire but they will never forget their exposure to Oil Spill Training, especially those staff involved in the Nakhodka incident . Petroleum Association of Japan will also not forget the staff it has trained because your names are on the database so don't be surprised if some time in the future on a dark night in the middle of winter there will be an oil spill and you will be asked to help.

## **Conclusion**

Training of Petroleum Association of Japan members staff is a constant process driven by the need to be in control when the large scale incident happens. There are many issues to be taken into consideration for the future but the constant movement of staff due to promotion, retirement and company changes coupled with the evolutionary process of equipment development, new technologies and clean up practices, dictates the need for a modern, comprehensive and international training program. This has evolved in the case of Petroleum Association of Japan thanks in a great part to the Ministry of Economy Trade and Industry for their foresight and support.

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