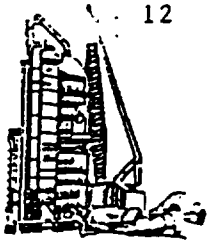


# THE EXCHANGER

Maintenance Information for the Hydrocarbon Processing I

**NATIONAL PETROLEUM REFINERS ASSOCIATION**

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## ASBESTOS ABATEMENT - ONE REFINERY'S APPROACH

In late 1986 with OSHA lowering the permissive exposure limits for asbestos and more stringent regulation by Louisiana's Department of Environmental Quality, the refinery Maintenance and Safety Departments determined that a more comprehensive and proactive asbestos abatement plan was required. Because of continual expansion and renovation over the past 20 years, the refinery had become a maze of areas which ranged from containing no asbestos, to areas where new insulation had been added on top of asbestos containing material, to areas which had their original asbestos with tar paper covering.

The following action was taken:

1. A program was undertaken to ascertain which areas contained asbestos insulation, determine its condition, map its location, estimate the quantity involved, and record this information in an organized easily updated manner.

2. A determination was made of the role that company personnel were going to play in the identification, removal, and disposal portion of the program. Steps were made to obtain the necessary training and certification required.

3. A review was made to study the various types of contracts and contractors available in order to optimize the removal of asbestos containing material as safely and economically as possible.

4. Implemented an information system which keeps all personnel (Operations, Engineering, Construction, Maintenance, Safety, Management and wage roll) informed of developments, program progress, and answer inquiries in a timely fashion.



### IDENTIFICATION

The identification program was accomplished by developing a grid and location code then sampling at a predetermined interval depending on the history of that particular part of the plant. A contract with an environmental testing firm was employed to assist in taking the sample, testing it on-site and logging the

specifics into a data base program run on a personal computer. A tagging system was developed to identify the location of asbestos containing material. Over 7,000 samples were taken in a seven month period at an estimated cost of $20 per sample. Roughly 31% of samples were found to contain asbestos.

TRAINING

After careful review of various State and Federal regulations it was decided that only small (utilizing glove bag methods) and emergency type removal/repair jobs would be done by Company personnel. Major removal projects requiring specialized equipment and techniques would be done by using a "certified" asbestos removal contractor. However, it was determined that we would train several company employees in all aspects of asbestos abatement as "competent persons" who coordinate any asbestos removal job. All monitoring and statutory records would be kept by our Safety Department. In our case the "competent person" training was performed by the monitoring/testing contractor. Others were trained at various educational institutions on record keeping requirements, regulatory compliance, and monitoring techniques. Insulator craftsmen were given more in-depth training on-site and other crafts people were given familiarization training on procedures and precautions.

CONTRACTORS AND CONTRACTS

After several educational experiences with various asbestos abatement contractors a certain expertise was gained in selecting contractors and writing project contracts. The best executed removal projects were those in which the "Competent Person" was involved all the way through from the bid procedure to the completion of disposal.

While most contracts have been "lump sum" bid, some efforts have been made to establish a "unit price" type of contract for small, short lead-time jobs. However, this has not been as easily administered as "cost plus" for small jobs.

INFORMATION SYSTEM

All through the identification and training phases the entire plant was kept informed through a series of bi-weekly updates. This provided a useful forum for disseminating information in answer to concerns expressed about the possible dangers in working with transite, service sheet gaskets and other asbestos containing materials reported to be hazardous. Progress on training and major removal projects were discussed and any other pertinent items were noted.

CONCLUSION

While not necessarily the best approach in every state or situation, it has been this refinery's experience that the program to date has been beneficial in defining our exposure; allowing us to plan effectively for future removal mandates, if any; reduce anxiety of our maintenance and construction personnel; and demonstrate competence in compliance with the various regulatory agencies.