New York Regional Office

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April 25, 1997

Privileged and Confidential

Klaus M. Ziermaier, Esq. FEDERATED DEPARTMENT STORES, INC. 7 West Seventh Street Cincinnati, OH 45202

Clayton Project No. 40-97140.00

Re: Macy's Department Store - White Plains, New York

Closure of Underground Storage Tanks Installation of Aboveground Storage Tank

Dear Mr. Ziermaier:

Clayton Environmental Consultants, Inc. is pleased to provide Federated Department Stores, Inc. three copies of its report on the above mentioned project.

Please provide a copy of the report to Mr. Bob Gorman - Director, Environmental Health and Safety of Federated Department Stores, Inc.

It has been a pleasure to provide our services to Federated Department Stores, Inc. If you require further information, please call me at (908) -225-6040.

Sincerely.

Kirit H. Vora
Vice President

Director, Corporate Accounts Environmental Health and Safety New York Regional Office

SB/ow

Attachments



FUEL OIL TANK UPGRADE PROJECT REPORT

Tank Closure and Installation at Macy's Department Store Galleria Mall 100 Main Street White Plains, New York

Prepared for:

Macy's East Inc. 151 West 34th Street New York, New York 10001

Project No. 40-97140.00

Prepared by:

Clayton Environmental Consultants, Inc. 160 Fieldcrest Avenue Raritan Center Edison, New Jersey 08837

April 25, 1997



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1.0 EXECUTIVE SUMMARY

Macy's East, Inc. (Macy's) retained Clayton Environmental Consultants, Inc. (Clayton), to provide environmental engineering services for the closure of two 10, 000-gallon underground storage tanks (USTs) and the installation of a 1,000-gallon aboveground storage tank (AST) at Macy's Department Store located at Galleria Mall, White Plains, New York. The scope of Clayton's services is described in its proposal, dated October 23, 1996, which included the terms and conditions under which the work was performed.

Clayton prepared and secured the regulatory requirements regarding the project by December of 1996. The field activities were conducted on January of 1997 during which the two USTs were abandoned in place. The procedure consisted of empting, cleaning, and filling them with concrete slurry. The new AST was installed at the southeast corner of the loading area and was connected to the existing heating system. Final permits from New York State Department of Environmental Conservation and White Plains Building Department were obtained following the completion of the work.

The USTs closure and AST installation was performed in compliance with all applicable regulations, codes, and standards. Therefore, no further action is required regarding the tank system at this location. Please refer to the report for further details.



2.0 INTRODUCTION

Macy's Department Store (Macy's) has been using No. 2 fuel oil for the heating system. The fuel oil was stored inside the two USTs at the loading area. In recent years, the facility has been relying on natural gas as its primary heating source, and the two USTs were used as a secondary back system.

Macy's decided to close the two USTs and install a small AST as a back up system at the facility. The upgrading of the USTs required under the upcoming 1998 Federal regulations and the fact that the natural gas has been the primary heating source were the bases for this decision. The action eliminated the need for compliance with the 1998 federal regulations regarding the UST upgrading, while the availability of a secondary source at the facility made it qualified for the interrupted rates from the natural gas company resulting in an overall savings in heating cost. The scope of work described in the contract is included in Appendix A.

3.0 PROJECT SITE DESCRIPTION

The Galleria Mall is located at 100 Main Street, White Plains, New York. Macy's Department Store (Store) is at the northeast section of the Mall. Court Street is on the east and Main Street is on the north side of the Store. The west and south boundaries of the Store are retail stores, occupied by commercial tenants.

The two USTs are located at the entrance of the loading and parking areas. Access to this area is from Main Street. The loading and parking area is at the street level and is "L" shaped. The pump room for the heating system is at the northeast of the loading area, and the sprinkler room is next to pump room. The location of the new AST, southeast of the loading area, was proposed by Clayton and approved by Macy's representatives familiar with the store operation.

The two USTs were installed in 1979 on a concrete pad, and were constructed of steel with an exterior asphalt coating on both tanks. According to the drawings found at the stores engineer's office, as well as field observations, the USTs were not vaulted and did not have an overflow protection system. However, they were equipped with fuel oil level gauges, located at the security office. A plan view and section of the USTs, as presented on the blue prints found at Store's engineer office, are included in the figure section of this report.

Clayton inspected the site at the beginning the project. Also, thorough interior inspection of the USTs were performed during the field activities. The objectives of the inspection were to identify the presence or likely presence of any petroleum products on the property under conditions that indicate an existing or a past release of petroleum products into the structures on the property or in the ground. New York State Department of Environmental Conservation



(NYSDEC), Region 3 and The City of White Plains, Building Department were contacted regarding any documented past release of petroleum products at the facility. Clayton's inspection and investigation revealed that there have been no past records, present signs and/or evidence of any leak or spill associated with the USTs.

4.0 REGULATORY REQUIREMENTS

Clayton identified, prepared, and secured all necessary notifications, registrations, and permits from regulatory agencies and local authorities prior to project start-up. The regulatory agencies involved included New York State Department of Environmental Conservation (NYSDEC) Petroleum Storage Facilities Division and the City of White Plains Building Department. Since the heating oil is used for consumption at the facility, federal regulations do not apply.

4.1 NEW YORK STATE REGULATIONS

The presence of two 10,000-gallon USTs containing heating oil required the facility to comply with the provisions of Part 612-614 of NYSDEC regulations regarding the Petroleum Storage Facilities. The facility was registered with NYSDEC and the registration number is 3-173665. These regulations require the owner or operator of a facility to notify the NYSDEC within 30-days prior to "substantial modification" of the facility. Tank closure or installation are defined by regulation as substantial modification.

Clayton prepared the application and notified NYSDEC Region 3 of the facility modification, including the in-place closure of the two USTs and installation of the new AST. Upon closure of the two USTs, the remaining petroleum storage tanks included the new 1,000-gallon AST at the loading area, and a small 100-gallon tank at the penthouse. Since NYSDEC Part 612-614 apply only to facilities with total capacity of 1,101 gallons or more, the facility became "unregulated" by NYSDEC upon completion of the project.

4.2 WHITE PLAINS BUILDING DEPARTMENT

The City of White Plains Building Department is the local authority with jurisdiction of construction related activities, including petroleum storage tank closure and installation. It requires a permit application be filed prior to the project start up. Clayton applied for a permit from White Plains Building Department, and provided it with the information, plans and specifications, and obtained the approval prior to the project start up. The White Plains Building Department requires compliance with the National Fire Protection Association (NFPA) 31 Standards for installation of oil burning equipment.



Copies of the NYSDEC and White Plains Building Department correspondence are included in Appendix B of the report.

5.0 FIELD ACTIVITIES

The field activities started on January 13, 1997. Site activities were performed in accordance with the Occupational Safety and Health Administration (OSHA) standards Title 29 CFR 1910 and 1926, and in accordance with other applicable federal, state, and local authority's regulations. Copies of the site activities daily logs are included in Appendix C. Also a copy of the project/site specific Health and Safety Plan (HASP), prepared by Clayton, is presented in Appendix D.

5.1 UST CLOSURE

Clayton subcontracted Environmental Products and Services, Inc. (EP&S), to perform the UST closure activities at the Macy's site in accordance with EP&S and Clayton's itemized scope of services. The NYSDEC guidelines regarding permanent closure of petroleum storage tanks and tank abandonment in-place were followed. These guidelines are specified in a memorandum to Regional Waste Water, and Solid and Hazardous Waste Engineers dated January 20, 1987, and modified July 19, 1988.

The USTs contained a combined residual volume of 7,500 gallons of Number Two (2) heating oil, which was pumped out and transferred to a recycling facility. The sludge in the bottom of the USTs was suctioned directly into a vacuum truck. The air inside of the USTs was continuously monitored by an oxygen meter and a lower explosive limit meter for the concentration of oxygen and the level of explosive gases.

EP&S provided the necessary confined space entry and rescue equipment, including tripod, hoist, and full body harness. Confined space entry trained EP&S personnel entered the USTs in appropriate personnel protective equipment (PPE), clothing, and respirators. Site safety precautions were observed and checked by Clayton.

The EP&S personnel cleaned the USTs using oil absorbent pads. Each UST was completely cleaned and dried. A thorough visual inspection of the USTs interior was performed by the EP&S personnel, using a high power flash light. The inspection revealed no holes, cracks, or pitted areas inside the USTs. The east UST had a polyliner interior coating and was in very good condition. The west UST did not have a polyliner interior coating, but it was also in good condition. The store engineer did not know the reason for one UST being lined and not the other. However, he mentioned that he has been instructed to use only the east UST.



Clayton originally proposed to use Petrofill, a chemically inert material, for in-place closure of the USTs, however due to White Plain Building Department's disapproval of the material, it was not used. January 14, 1997, concrete slurry was used to fill the two USTs up to grade level. The vent lines and other openings were also filled with concrete, thus permanently closing the USTs in-place. In order to avoid creating a heavy concrete bulk load at that location, Clayton specified a light concrete mixture (50 psi) for USTs abandonment. The mixture should be easy to brake, if necessary in the future.

5.2 AST INSTALLATION

Since the facility was unregulated following the closure of the two USTs, Macy's does not have to comply with NYSDEC regulations regarding the Petroleum Storage Facilities. However, compliance with NFPA 31, "Installation of Oil Burning Equipment", is required by White Plains Building Department.

A&P Rainaldi and EP&S were contracted by Clayton to perform the piping installation for the AST. During the week of January 13, 1997, A&P Rainaldi completed the installation of the return and suction lines, the fill line, and the liquid level gauge. EP&S completed the installation of the vent line and the tank high alarm by February 3, 1997.

The 1,000-gallon AST is a pre-fabricated, 10-gauge, steel tank purchased from Mohawk Metal Products Company, Inc. It is a horizontal cylinder 4 feet diameter and 10 feet long, and is situated on 10-gauge steel cradles. It meets the UL58 standards required by NFPA 31 for the aboveground petroleum storage tanks.

The AST is equipped with a 1,100 gallon secondary containment dike (6' x 12' x 2'), also 10-gauge steel, a liquid level gauge, and a battery operated high-level audio alarm. The AST was installed at the southeast corner of the loading and parking area of the Macy's Store. The pressure test was conducted on the AST prior to installation of the piping system. Also, the piping system was pressure tested before connection to the existing heating system. The one inch steel suction and return pipes were installed on the east wall and run to the heating system pump room, and the two-inch steel fill pipe was installed on the south wall of the loading area. The AST is vented outside via a two inch steel pipe. Traffic safety bollards were installed in front of the AST to prevent any potential traffic accidents. The AST filling procedure is mounted on the south wall near the fill port, and is also included in Appendix F, along with copies of the AST accessories specifications and information.



6.0 PROJECT COMPLETION

Inspectors from The White Plains Building and Fire Departments visited the site during the field activities. They expressed their satisfaction with the site operation. Mr. Peter Russo, Senior Code Enforcement Officer with the White Plains Building Department, was present during the closure of the USTs, and the pressure test of the AST and the pipe lines. He also visited the site after installation of the vent line and the completion of the project. Mr. Russo did not present any concerns regarding the project.

Clayton submitted the documentation regarding the transfer and disposal of the waste resulting from the tank closure activities, including a copy of the waste manifest to White Plains Building Department and received the final approval for the project verbally. Copies of this information is included in Appendix E.

7.0 RECOMMENDATIONS FOR NO FURTHER ACTION

The USTs have been closed in place according to the applicable regulations and NYSDEC guidance regarding the proper methods for abandonment in place. Site restrictions and public safety have been considered during planning and execution of the project. Final closure permits have been received from NYSDEC and White Plains Building Department.

Clayton anticipates no future environmental concerns or problems associated with the closure of the USTs, and therefore, recommends no further action for the USTs at the facility. Clayton recommends a copy of this report be kept at the facility for future use by the facility's management.

Prepared by:

Susan Bayat, P.E.

Senior Environmental Engineer

Susan Bayat

Environmental Management and Remediation

New York Regional Office

Reviewed by

Kirit H. Vora, Vice President Director, Corporate Accounts

Environmental Health And Safety

New Yor¹ Regional Office