

Rolf D. Schmued

On the afternoon of March 20, 1990, Mr. Rolf Schmued was interviewed. Mr. Schmued was employed by Rockwell International, Inc., and its corporate predecessors for almost 40 years. During the early part of his tenure, he worked primarily for the industrial engineering department. From 1970 until 1986, he was the company's environmental administrator.

Although Mr. Schmued had extensive knowledge of the operations at both the Canoga facility and the SSFL, he was more knowledgeable about the Canoga facility. He stated that the degreasing of metals with solvents has been a standard industrial practice for many years. Later, perhaps in the 1950's, scientists and engineers realized that rocket engines must be free of hydrocarbon deposits before liquid oxygen could be run through them. For both of these reasons, most metal parts were degreased prior to assembly and some might even be degreased several times before leaving the plant. All of the degreasers that he could remember were vapor degreasers, nonportable, and equipped with distillation units. In the vapor degreasing process, solvent vapors condensed on the metal parts being cleaned and then dripped back into the degreasing pit. The dirty solvent was then run through a distillation unit and reused. After extensive use, the solvent was pumped out and the degreaser refilled with new solvent. Prior to usage, the solvents were stored in 55-gallon drums in a warehouse at the Canoga facility.

According to Mr. Schmued, when the groundwater contamination was first discovered at the plant, RIC investigated the possibility of solvent leakage through the concrete pits and discovered that concrete was not impervious to TCE and TCA.

On a map of the Canoga property site, with the different buildings owned or used by Rockwell since 1956, Mr. Schmued identified and numbered the locations of 10 degreaser pits. The main degreaser, labeled No. 1, was part of the original equipment for Air Force Plant (AFP) 56. Most manufactured components went through this degreaser. This in-ground unit, like all of the degreasers that originally used trichloroethylene (TCE), later switched to trichloroethane (TCA). RIC used TCE until the enactment of Rule 66 by the Los Angeles Air Pollution Control District. Degreaser No. 3, not original equipment but relatively old, was in the turbopump area of the Development Laboratory of AFP No. 56. This degreaser had a distillation unit in the ceiling. Degreaser No. 10 was a fairly large unit located in a clean room in AFP No. 56. Around 1970, degreaser No. 2, which used tetrachloroethylene (PCE), was added for use in the Space Shuttle Main Engine program (SSME).

Appendix B
SSFL
March 1990 Interview Summary

There were several other degreasers located in the other buildings at the Canoga facility. In the Vanowen Building, the Materials and Processes department operated an aboveground degreaser. This PCE degreaser, No. 4, was used for the SSME project. Unit No. 5 was a small TCA degreaser used by the quality assurance people in Building 09. Mr. Schmued thought that there might have been some dip tanks in the South Shed, or Building 29. This area was labeled No. 6 on the Canoga map by Mr. Schmued.

There was a large degreaser in Manufacturing Building 1. This degreaser, No. 7, was a twin to No. 10 in AFP No. 56. This in-ground unit, possibly used in the turbopump construction area, used TCE and, later, TCA. Mr. Schmued also thought that there might have been degreasers in Manufacturing Buildings 3 and 4 (MB 3 and MB 4). He was more certain about there being one in MB 4, labeled degreaser No. 9 on the Canoga map.

Mr. Schmued recalled much less about the use of freon at Canoga. He did think that the chemical was used as a coolant in Manufacturing Building 1. The freon was stored outside and pumped into and out of the facility but remained in a closed-loop system.

He knew nothing specific about the use of aviation fuel, although it could have been used for experiments in the chemical laboratory. [Note: Aviation fuel could account for the presence of toluene and xylene in the groundwater samples from Canoga.]

To the best of his knowledge, almost all of the work done at Canoga was for either the United States Air Force or for the National Aeronautics and Space Administration (NASA). He remembered having worked on occasional projects for the United States Army, one of which was called Redstone.

Mr. Schmued did not have as much contact with SSFL until he became environmental administrator in 1970. Concerning the use of TCE at the flight lab he did not think that the solvent used to flush engines was collected until sometime in the 1970's. He thought that only kerosene-burning engines--the Jupiter, Thor, Atlas, MB-3, and Delta engines--needed to be flushed with TCE after firing. Aircraft engines that were tested at SSFL did not require TCE flushing. The equipment lab at SSFL also used TCE until it converted to TCA around 1974.

Mr. Schmued was aware of two landfills at SSFL. One was located behind the maintenance shop and was operated before he had much contact with SSFL. He believed that only hardware, not chemicals, were disposed of there. A second landfill was in Area II. Numerous chemicals, possibly some from Canoga, were buried there. The drums that contained these chemicals were later unearthed under Mr. Schmued's supervision and properly disposed of as hazardous wastes.