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AlliedSignal Inc.
AlliedSignal Engines
550 Main Street
Stratford, CT 06497-7593

203 385 2000

April 9, 1997

Mr. Christopher Moccaie
Sr. Sanitary Engineer
Connecticut Department of Environmental Protection
Bureau of Water Management,
Permitting Enforcement and Remediation Division
79 Elm Street
Hartford, Connecticut 06106-5127

Re: Catch Basin Modification Project

Dear Mr. Moccaie:

On February 27, 1995 the AlliedSignal Stratford Army Engine Plant (SAEP) located at 550 Main Street in Stratford Connecticut, was issued a Notice of Alleged Violation (NOV) for discharges occurring in September and December 1994. These discharges contained concentrations of Total Suspended Solids (TSS) and Oil and Grease (O&G) which exceeded NPDES (NPDES permit number CT0002984) permitted concentrations. In response to this NOV, in a Compliance Statement dated March 22, 1995, SAEP agreed to "oversee three Army funded source control projects designed to reduce the amount of O&G and TSS in the stormwater discharges. These projects will include the re-engineering of two (2) outside scrap yards and the installation [modification] of at least six (6) catch basins". The status of these projects is described below.

The scrap yard projects included the redesign of the stormwater runoff collection (in the drainage area associated with outfall 002) from material in the scrap yard and the installation of an oil/water separator to pre-treat this stormwater runoff prior to further treatment in the oil abatement system and final discharge to the Housatonic River. Over 80 percent of this project has been performed and final completion is scheduled for May 31, 1997. The estimated cost of this project is $317,000.

These projects, combined with aggressive Best Management Practices (BMPs) to decrease O&G discharges and better treatment of effluent at SAEP's oil abatement plant, have greatly reduced the number of O&G concentration exceedances from the SAEP. A review of Discharge Monitoring Reports (DMRs) from March 1995 through March 1997 show that the last O&G concentration exceedance from any of the SAEP outfalls occurred almost two years ago in May of 1995.

The modified catch basin project included the design of a system to trap sediment (catch basin modifications) prior to entering catch basins. The project planned to install this system around six of the catch basins in the drainage area associated with outfall 005 (the

outfall from which two of three of the exceedances listed in the 1995 NOV occurred). Designs and specifications for the catch basin modifications have been completed and certified by a Connecticut Professional Engineer.

A review of DMRs for the two years since the NOV was issued indicate the number of TSS exceedances in the past year has been significantly reduced. A review of DMRs from March 1995 (the month after the NOV was issued) to March 1997 shows that only six TSS permit exceedances have occurred since the NOV was issued (exceedances occurred in August and November of 1995, and in February, April, and November of 1996). It should also be noted that:

- Only one exceedance as occurred since December, 1994 from the outfalls (005 and 006) listed in the 1995 NOV. In February, 1996 there was an exceedance from outfall 005.

- Two of the six exceedances occurred in the same month, August, 1995 (these exceedances occurred during the same large storm event at different outfalls).

- Only one exceedance has occurred in the past year (in November 1996). This exceedance was from outfall 002 (the drainage area for outfall 002 includes the scrap yard area) and was most likely the result of scrap yard construction activities occurring within the outfall's watershed. Successful measures were taken (covering and creating silt dams around catch basins; using covered rolloffs to store material; and covering of temporary stock piles) to prevent additional TSS excursions caused by construction activities. Construction in this area should be complete by the end of May 1997, thus these activities are not a permanent or significant source of TSS. In addition, this exceedance occurred in a different outfall (002) than the exceedances listed in the 1995 NOV (which occurred in outfalls 005 and 006). Therefore, the November 1996 exceedance was not indicative of a ubiquitous site-wide TSS problem.

Significant decreases in the number of TSS exceedances were due to:

1. Engineering controls and Best Management Practices (BMPs) for the reduction of TSS have become more effective as site personnel have become better trained in the use, maintenance, and performance of these activities. New BMPs have included regular catch basin clean-outs, improved site house keeping, greater supervision of ongoing contractor construction activities, and regular sweeping of paved outdoor areas.

2. New engineering controls have included: installation of larger process pumps in the pump houses (to decrease the total number of untreated stormwater "aborts" which bypass the oil abatement system); and the elimination of discharge 004.

3. A significant decrease in on-site activities at the facility has occurred over the past two years. Further reduction in on-site activities are anticipated. This reduction in on-site activities has reduced the overall amount of TSS material generated at the site.

Due to continued efforts to implement BMPs and future plans at the facility, it is unlikely that the trends described above will reverse themselves in the future. Therefore, it is anticipated that the number of TSS exceedances, as well as overall amounts of TSS discharged from the site, will continue to decrease.

This investigation shows that the number of TSS permit exceedances in discharges from the SAEP has been significantly reduced. Accordingly, SAEP anticipates that the numbers of exceedances will continue to decrease in the future. Therefore, SAEP proposes canceling the construction of the modified catch basins because:

1. Recent engineering controls and BMPs instituted at the SAEP have reduced TSS permit concentration exceedances in the past year to one (1). This exceedance was caused by a specific correctable activity and thus is not indicative of a site-wide TSS problem.

2. Only one TSS exceedance has occurred from one of the outfalls listed in the 1995 NOV since December 1994 (over two years).

3. Based upon current site conditions, installation of the modified catch basins in their current proposed location (the drainage area of outfall 005) will probably have little or no effect on any potential future TSS exceedances from the SAEP.

However, SAEP proposes to keep the designs for the modified catch basins on file. As appropriate, these designs will be transferred to the future owner/operator of the site. Therefore, in the unlikely event that the number of TSS exceedances from the site increase in the future, the plans and designs to install the modified catch basins can be implemented.

SAEP will continue to monitor DMRs for exceedances of permitted concentrations from its outfalls. SAEP anticipates that with the continued aggressive implementation of BMPs and operation of new engineering controls including the oil/water separator at the redesigned scrap yards (which will act as an additional sediment trap), the number of exceedances from the site will continue to decrease. As necessary, changes in controls or BMPs will be made to correct any problems observed during the monitoring process.

Prompt resolution of this issue is important to SAEP to address internal budgeting and funding requirements. Therefore, we look forward to your decision regarding construction of the modified catch basins as soon as possible.

If you have any questions please do not hesitate to call either myself at (203) 385-3741 or Keith Knauerhase at (203) 385-5124.

Sincerely,

Craig Cunningham
Team Leader, Health Safety & Environmental
AlliedSignal, SAEP

CC:rkk