

March 17, 1995

Ms. Christine Yario  
State of Connecticut  
Department of Environmental Protection  
Water Management Division/PERD  
79 Elm Street  
Hartford, CT 06106-5127

Dear Ms. Yario:

This letter is to request a permit modification for the stormwater discharges (discharges 001-006) at the AlliedSignal Stratford Army Engine Plant. The facility's location is 550 Main Street, Stratford, CT (Permit NO. CT0002984, DEP/WPC NO. 138-023).

**Background**

The Stratford Army Engine Plant has an Oil Abatement Plant that treats process water and stormwater (Attachment #1.). The Oil Abatement Plant can treat three million gallons of stormwater in a twenty-four hour period. Water is pumped to the Oil Abatement Plant from a series of six pump houses. Occasionally, during heavy downpours, the amount of water coming in to the pump houses exceeds the pumping capacity of the two primary "dry weather" pumps and some stormwater diverts to the Housatonic River via one or two secondary "abort" pumps.

The stormwater abort discharges have had exceedances of permitted levels of oil & grease and suspended solids since sampling began on these discharges in 1980 (Attachment #2.). These excursions led to a number of EPA and DEP generated enforcement actions against the operators of the Stratford Army Engine Plant (Attachment #3.).

The most recent enforcement action was an Administrative Order by the EPA issued August 30, 1993. The Administrative Order mandated the completion of a number of source control projects to remove the sources of oil & grease and suspended solids. Among the projects completed are: the installation of larger process pumps in the pump houses, regular catch basin clean-outs, the installation of oil skimmers in the pump houses, the elimination of discharge 004, and oil & grease source controls (Attachment #4.). Although these projects have reduced the magnitude and



frequency of excursions, the abort discharges still occasionally exceed permitted levels.

### **Oil and Grease Levels**

Flow analyses (Attachment #5.) indicate that during dry weather the oil & grease levels in the pump houses remain below permitted levels. This is an indication that the source controls remove most of the oil & grease inputs to the pump houses from process inputs. This also indicates that the oil & grease found in the stormwater aborts is mainly from contact with rain on the rooftops, roads, and the plant yard.

### **Suspended Solid Levels**

The Stratford Army Engine Plant lies along the shores of the Housatonic River. The facility is prone to large amounts of wind blown material coming onto the facility because of the low profile of surrounding land, the pervasive wind conditions common to coastal areas, and the off-site presence of particulates and other matter.

Sample analyses have shown that a high percentage of the suspended solids are silica, indicating that most the suspended solids consist of sand (Attachment #6.). Along with wind blown material from off-site, another major contributor to the suspended solid material in the pump houses is sand spread on the surrounding State and Town roads and on the facility's roadways and sidewalks during snow and ice conditions.

### **Future Projects**

The reduction of oil & grease inputs and suspended solid inputs to the pump houses are considered on-going projects. Projects planned for the immediate future are the installation of new catch basins to decrease the amount of solids that reach the pump houses and the re-engineering of two scrap yards on site to remove them as possible oil sources. Both of the projects have been proposed to the US Army for funding approval.

### **Request for Permit Modification**

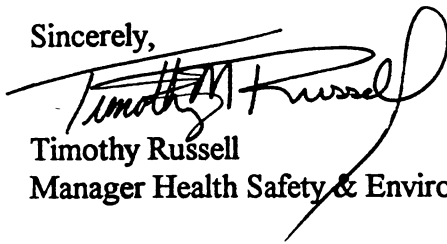
AlliedSignal is asking for a permit modification to increase the current permit standards of 10ppm oil and grease and 20ppm total suspended solids for the pump house discharges. We are requesting that oil & grease levels be increased to a monthly average of 100 ppm and that petroleum hydrocarbon fraction be used as the permit standard. Suspended solid limits should be increased to a monthly average of 100 ppm and the amount of silica in the sample should be subtracted from the suspended solid total. The limits of 100 ppm have precedence given our understanding that POTW's have similar permit standards for oil & grease and suspended solids.

Beyond increasing the permit levels, a different type of sampling method could better reflect the impact of the stormwater aborts on the Housatonic River. Stormwater aborts are only a fraction of the stormwater that leaves the facility during a storm. A flow proportional sample of all the stormwater discharges associated with the site (discharges 001-007), would better reflect the quality of the stormwater leaving the facility.

During the third week of April, representatives of the Army who oversee the environmental and project funding concerns of the Stratford Army Engine Plant will be in Stratford to discuss the various aspects of the source control projects and on-going permits excursions. If possible we would like to schedule a meeting with the DEP during that week to present a detailed scope of the projects and to discuss the proposed permit modification.

Please contact Jim Morrell at 203-385-5124 if you require any additional information or if you have any questions about the information provided.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy Russell", with a large, sweeping flourish extending from the end of the signature.

Timothy Russell  
Manager Health Safety & Environmental

Attachments: