



***Racine Fire Department***  
*810 Eighth St, Racine WI 53403*

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February 1, 2018

Honorable Mayor and  
Common Council

Dear Honorable Mayor and Common Council,

The Racine Fire Department is requesting permission to apply for the 2017 FEMA Assistance to Fire Fighters (AFG) grant for purchasing two Gemini chemical analyzers from Thermo Scientific for monitoring of hazardous chemicals which have accumulated on firefighting clothing and equipment after a fire, and to purchase two commercial grade laundry extractor machines for washing firefighting clothing after a fire.

The Gemini Analyzers from Thermo Scientific allow us to identify a very broad range of unknown chemicals safely, and confidently using what is known as FTIR and Raman spectroscopy technology in one instrument. It is a hard and proven fact that firefighters are exposed to an extremely broad range of chemicals in the smoke of fires. Byproducts of combustion contain high concentrations of cancer causing chemicals. Recent studies by Underwriters Labs in Chicago have quantified the toxicity of those chemicals and how those cancer causing chemicals collect on firefighting equipment.

The analyzers will be used to monitor all firefighting clothing and equipment after a fire for decontamination purposes. Once all equipment is decontaminated the items will be monitored a second time to evaluate the effectiveness of decontamination. In addition, the crew cab of fire apparatus will be monitored for contamination and appropriate measures taken to decon the cabs should any contamination be detected.

The second part of this request is to purchase two commercial grade washing machine/extractors. These extractors are especially built to wash firefighting clothing and extract chemicals that may be embedded within that clothing. Currently we have three extractors and this acquisition will place extractors in two remaining fire stations.

**Fiscal Note:** The grant request is for \$210,000 of which the City's hard match is 10% or \$21,000. Funds will be allocated from our Haz Mat (non levy) account with the balance coming from our equipment account. Grant number 00168.

Respectfully submitted,

Steve Hansen, Fire Chief