

US EPA ARCHIVE DOCUMENT



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**

**AIR AND RADIATION DIVISION  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590**

REPLY TO THE ATTENTION OF:

**MEMORANDUM**

**SUBJECT:** March 14, 2014, Call Notes

**FROM:** Michael Langman  
Environmental Scientist

**TO:** G&K Services Part 49 Synthetic Minor Permit Record

On March 14, 2014, EPA participated in a conference call with G&K Services to address questions regarding methods to ensure compliance with volatile organic compound (VOC) and hazardous air pollutant (HAP) synthetic minor limits. The following people were present or participated in this call:

- EPA: Michael Langman
- G&K Services: Steve Botts, Brian Duffy

During the call, EPA discussed whether additional requirements were needed to ensure compliance with synthetic minor limits. The synthetic minor limits G&K Services requested in its permit application included a 234 ton per year limit on VOC emissions, 9.9 tons per year limit on single HAP emissions, and a 24.9 tons per year limit on all HAPs combined. These limits are intended to avoid major PSD permitting and major HAP requirements. In the permit, production limits will be used to ensure compliance with the synthetic minor limits. Based on the emission factors for VOC and HAPs, HAP emissions will limit the overall amount of towels that can be processed by the facility.

G&K Services explained that the limit on VOC in the permit application was originally presented as carbon, but not propane. G&K Services also mentions that handheld devices, known as petromizers, are available and can extract solvent from soiled towels. The extracted solvent can be used to measure VOC and HAP emissions.

G&K Services offered during the call alternatives to periodic stack testing that could be sufficient to ensure compliance with the synthetic minor limits. They agreed that annual production limits based on the weight of soiled towels processed can be used to ensure compliance with synthetic minor limits. They offered to be subject to an additional margin of compliance to reduce the amount of towels that can be processed at the facility per year. EPA

and G&K Services agreed that a 15% margin of compliance could be used to maintain a buffer between the HAP thresholds. G&K Services explained that there may be some variability in the test results. The proposed margin of compliance ensures that this variability is captured and recognized. Further, G&K Services notes that normal operations at the facility have historically been nowhere near the maximum production limits for either print or shop towels. As support, they refer to the 2012 actual emissions inventory. VOC emission in 2012 were 57 tons per year, highest single HAP emissions were 4.1 tons per year, and total HAP emissions were below 24.9 tons per year.

G&K Services also offered to limit print and shop towel processing based on a formula where the amount of print towels times its emission factor plus the amount of shop towels times its emission factor should be below the limit. This will allow flexibility to process both print and shop towels per year while ensuring compliance with the production limit. The formula is as follows, where P is the weight of soiled print towels, S is the weight of soiled shop towels, and EF is the emission factor for either print or shop towels:

$$P \times EF_p + S \times EF_s = Limit$$

EPA agreed that the margin of compliance and recordkeeping would be sufficient to ensure compliance with the synthetic minor limits. EPA requested the emission test results where VOC and HAP emissions factors were determined. EPA intends to include the test results in the permit action for the construction permit.