



February 21, 2013

RE: H&M Gopher Control Engine Exhaust Emissions

Dr. Brines,

Thank you for the opportunity to discuss H&M Gopher Control products; as you know, H&M Gopher Control equipment does not rely on toxic liquid chemical application to eliminate pests but rather on engine exhaust emissions.

All Kohler Co. engines which power H&M Gopher Control equipment are certified to the most stringent, applicable CARB Tier III and EPA Phase III nonroad engine standards. These standards specify HC+NOx and CO emission standards. The certification limits are as follows:

CARB: 10g HC+NOx/kW-hr and 549g CO/kW-hr for the CH270
8g HC+NOx/kW-hr and 549g CO/kW-hr for the CH440 and CH640

EPA: 10g HC+NOx/kW-hr and 610g CO/kW-hr for the CH270
8g HC+NOx/kW-hr and 610g CO/kW-hr for the CH440 and CH640

Note: EPA and CARB allow inter-family averaging to comply with the HC+NOx standards only.

H&M Gopher Control equipment relies on engine CO emissions in particular for extermination. All three listed engine models emit roughly 420g CO/kW-hr when measured on the EPA certification cycle. During development testing and certification, Kohler Co. measures HC, CH₄, NO_x, CO and CO₂ emission as required by EPA and CARB; the primary exhaust constituents are N₂, H₂O, CO₂.

Kohler Co. has optimized combustion systems so that catalysts are not required to accomplish the stringent standards. In addition to manufacturing concerns (cost, availability, waste stream management and quality controls), catalysts pose a significant safety risk when mounted on nonroad equipment. Catalysts operate at very high temperatures and are a fire and burn hazard.

Further, increased N₂O emissions are a byproduct of the catalytic reaction. N₂O has a very high global warming potential.

I am available to answer questions should they arise. Kohler Co. appreciates your consideration of this matter.

Sincerely,



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