

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF:	)	
	)	
PETITION OF ROYAL FIBERGLASS POOLS,	)	AS 2009-04
INC. FOR AN ADJUSTED STANDARD FROM	)	(Adjusted Standard-Air)
35 ILL. ADM. CODE 215.301	)	
	)	

**NOTICE**

TO: John Therriault, Assistant Clerk  
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PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the ILLINOIS EPA'S RESPONSE TO FURTHER QUESTIONS POSED BY THE ILLINOIS POLLUTION CONTROL BOARD IN THE MATTER OF ROYAL FIBERGLASS POOLS' PETITION FOR AN ADJUSTED STANDARD of the Illinois Environmental Protection Agency a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL  
 PROTECTION AGENCY

By: /s/ Charles E. Matoesian

Charles E. Matoesian  
 Assistant Counsel  
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DATED: October 27, 2009

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**THIS FILING IS SUBMITTED  
 ON RECYCLED PAPER**

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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**ILLINOIS EPA’S RESPONSE TO FURTHER QUESTIONS POSED BY THE ILLINOIS  
POLLUTION CONTROL BOARD IN THE MATTER OF ROYAL FIBERGLASS  
POOLS’ PETITION FOR AN ADJUSTED STANDARD**

NOW COMES Respondent, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA" or "Agency"), by its attorney, Charles E. Matoesian, and files this response to the questions of the Illinois Pollution Control Board’s (“Board”) attached to the Hearing Officer’s Order of October 21, 2009.

1. **Question 19(b)** of the Hearing Officer Order asked, “Would you also please comment on proposing a condition that would require a re-evaluation of the adjusted standard if the ozone NAAQS is revised.”

*Royal responded that “a reevaluation would be of little value.” Royal Resp. to HOO 6-4-09 at 7.*

*The Agency responded, “IEPA believes that a condition requiring re-evaluation is necessary in this rulemaking...If changes are deemed necessary, the Illinois EPA will initiate a rulemaking before the Board at that time.” Ag. Resp. to HOO 6-4-09 at 2.*

*Would the Agency please clarify if this comment is intended to suggest that a condition should be included in the adjusted standard language requiring the re-evaluation of the adjusted standard if there is a change in the ozone? Or was this comment simply to clarify that a rulemaking is the usual course of action when changes are deemed necessary?*

**Response to Question 19(b) of the Hearing Officer Order:** *The Agency does not believe that a revision to the ozone NAAQS should automatically trigger a re-evaluation of the adjusted standard. If monitoring data show a violation of the ozone NAAQS, then a revision to the State Implementation Plan (SIP) that considers all contributing sources to nonattainment would properly address this matter.*

2. **Question 21(d)** of the Hearing Officer Order asked, "Please comment on the results of the Air Quality Impact Analysis if the ozone increment were added to the 8-hour background air quality reading of the 4<sup>th</sup> highest measured ozone concentration from the past 4 consecutive years."

Royal responded that Royal does not have ready access to the 4-year data and that the Scheffe method "is not mathematically compatible with assessments of eight-hour average impacts." Royal Resp. to HOO 6-4-09 at 8.

Royal characterized the air quality impact from the adjusted to be "negligible." Royal Resp. to HOO 6-4-09 at 7. Royal estimated the 1-hr average ozone increment to be 4 ppb. The Agency stated that it believes the air quality impact to be "negligible" and (later in its response to 21(d)) that, "USEPA has not provided more recent guidance to address ozone impacts on an 8-hour basis."

The Board directs the parties to the following documents and asks for further clarifications regarding the air quality impacts.

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- (a) In light of the information above, please comment on the results of the Air Quality Impact Analysis if the scaled ozone increment were added to the 8-hour background air quality reading of the 4<sup>th</sup> highest measured ozone concentration from the most recent 3 years.
- (b) Please comment on how this value relates to the 75 ppb 8-hour NAAQS.
- (c) Please indicate if the air quality impact from the adjusted standard would still be considered negligible.

**Response to Question 21(d) of the Hearing Officer Order:** The Agency wishes to clarify that it considers an ozone increment increase of as little as 2 ppb (for both 1-hour and 8-hour averaging periods) to be potentially significant; thus, a 4 ppb increase would be of potential significance. The characterization of a 4 ppb ozone air quality impact as "negligible" is not consistent with the Agency's position.

The Board's follow-up questions note that the Agency's response to Question 21(d) included the statement that "USEPA has not provided more recent guidance to address ozone impacts on an 8-hour basis." For single facility assessments, the IEPA is not aware of any more current USEPA guidance, and therefore will continue to conduct air quality reviews based upon the established methodology (Scheffe Method). Importantly, this methodology does not specify the estimation of an 8-hour ozone increment from the 1-hour ozone increment. The Agency does not endorse the use of scaling factors that are based on steady-state, Gaussian plume-type assumptions. Ozone is a secondarily formed pollutant, not a directly emitted pollutant, and is therefore not steady state.

*The Scheffe Method is a screening technique, which by design is conservative in order to be protective of the ozone air quality standards. It is unrealistic to expect that the maximum predicted ozone increment would occur coincidentally with the 4<sup>th</sup> highest 8-hour ozone concentration for a given year. If the ozone increment from the Air Quality Impact Analysis “were added to the 8-hour background air quality reading of the 4<sup>th</sup> highest measured ozone concentration from the most recent 3 years” (2005-2007, Hamilton County), it would be 81 ppb, somewhat below the 1997 8-hour ozone standard of 85 ppb (the level determined by monitoring data rounding conventions). But more importantly, if the 4 ppb ozone increment were added to the 2005-2007 8-hour ozone design value (73 ppb)---the design value being the appropriate metric for comparison with the ozone NAAQS---the combined contribution would be even lower. Recently (March 12, 2008), USEPA tightened the 8-hour ozone primary and secondary standards to 0.075 ppm (75 ppb). A comparison of this new level of the standard with 2007-2009 Hamilton County monitoring data, shows a combined ozone increment and ozone design value of 72 ppm. The potential air quality impact from the adjusted standard is significant, but it is not expected to cause or contribute to violations of the 8-hour ozone standard.*

3. **Question 22** of the Hearing Officer Order asked, “Since Hamilton County ozone monitoring stations already show exceedences of the 8-hour ozone standard of 75 ppb, would you please comment on including a condition in the adjusted standard limiting Royal Pools VOM emitting operations on ozone action days where ambient conditions are likely to exceed the 75 ppb 8-hour ozone standard?”

*Royal responded in opposition to such a condition “since it would be unworkable from a logistical standpoint. It would require Royal to monitor every day whether the ambient conditions are ‘likely to exceed’ the ozone standard. This raises the question of what ‘likely to exceed’ means. More importantly, it would require Royal to then contact its employees on a daily basis to inform them whether to come into work that day.” Royal Resp. HOO 6-4-09 at 8-9.*

*The Agency responded that the IEPA has no objection to such a condition. Ag. Resp. to HOO 6-4-09 at 2-3.*

*Again, the Board directs the parties to the following information and asks for further comments on a potential condition in the adjusted standard limiting Royal Pools VOM emitting operations on ozone action days.*

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**Response to Question 22 of the Hearing Officer Order:** *The 2008 8-hour ozone standard is currently being reconsidered by USEPA, but based upon the 2006-2008 and 2007-2009 Hamilton County ozone data, the area is clearly in attainment with the 75 ppb standard. The SIP-development process exists to remedy nonattainment conditions. It would be inappropriate to require a single facility amongst a group of potentially contributing facilities to accept a condition limiting “VOM emitting operations on ozone action days where ambient conditions*

are likely to exceed the 75 ppb 8-hour ozone standard". The Agency would support voluntary actions by the company on ozone action days, not mandatory requirements.

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- (a) *Since the Scheffe method bases the ozone increment on the daily maximum NMOC emissions rate, would you please comment on the calculation below estimating the daily impact of the ozone increment of 4 ppb as represented in the petition?*

**Response to Question 22(a) of the Hearing Officer Order:** *The maximum emissions rate of 29.76 tons per year is derived from a maximum daily rate projected to occur for every day the facility is in operation. The maximum daily rate (229 lb/day) is unlikely to occur continuously; furthermore, the magnitude and distribution of ozone from precursor emissions, with changing meteorological conditions, would also be highly variable. Consequently, the 4 ppb maximum ozone increment would not be attained on days when emission rates were less than the maximum daily rate or when meteorological conditions were not conducive to ozone formation.*

- (b) *Although Royal's emissions are not considered in the St. Louis (Metro-east) area, the local air monitoring station for Royal in Hamilton County does indicate that days do occur where the ozone concentrations are above 75 ppb. This results in an Air Quality Index greater than 100. While Ozone Action Days are not declared for Hamilton or Jefferson County, would the Agency please clarify if these days typically coincide with ozone action days for the St. Louis (Metro-east) area?*

**Response to Question 22(b) of the Hearing Officer Order:** *An exceedance of the 8-hour ozone standard in Hamilton or Jefferson County would likely coincide with an ozone action day declaration in the Metro-east area. Based on the past several years of ozone data in both Hamilton County and the Metro-east region, 8-hour concentrations have been consistently lower in Hamilton County. Therefore, an exceedance of the 8-hour ozone standard in the more rural regions of Hamilton County would likely coincide with exceedances in the more urban areas of Metro-east.*

- (c) *Since the Agency has indicated the IEPA would have no objection to including a condition regarding VOM limitations on ozone action days, would the Agency please elaborate on how this might be done?*
- 1) *Does the Agency recommend a numeric emission limitation? If so, should VOM emissions be limited to 229 lb/day on ozone action days in order to ensure the daily environmental impact of the adjusted standard is no greater than what was represented in the petition as "negligible"? Does the Agency suggest a different numerical limit or a different way to limit VOM emissions on ozone action days?*

- 2) *To show compliance with this possible condition, does the Agency believe the VOM limitation could be documented simply through recordkeeping of Royal's operations on ozone action days without additional air monitoring?*
- 3) *Is air quality information available to Royal in a real time format for the Hamilton air monitoring station? If so, would it be possible for Royal to rely on such information to limit its VOM emissions?*
- 4) *If not, does the Agency recommend that Royal rely on forecasts made for the St. Louis (Metro-east) area for ozone action days since this is the closest monitoring area that provides forecasts and alerts? Would the Agency recommend that Royal observe ozone actions days as those days where the St. Louis (Metro-east) air monitoring system measures an Air Quality Index of 100 or greater?*

**Response to Question 22(c) of the Hearing Officer Order:** *As noted previously, the Agency would support voluntary actions by the company to limit VOM emitting operations on ozone action days, but not mandatory limits for those operations on ozone action days.*

- (d) *Would Royal please comment on how it might comply with this possible condition?*
  - 1) *In order to ensure the daily environmental impact of the adjusted standard is no greater than what was represented in the petition as "negligible", would Royal please consider ways to track operations showing how VOM emissions are limited as might be suggested by the Agency (such as no more than 229 lb/day) on ozone action days?*
  - 2) *Would Royal please address the steps it would take to determine when there will be an ozone action day?*
  - 3) *Would Royal please address how it would keep records of its operations (without additional air monitoring) on ozone action days to ensure compliance with this condition?*

**Response to Question 22(d) of the Hearing Officer Order:** This question is not addressed to the Illinois Environmental Protection Agency.

Respectfully submitted,  
**ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY**

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