

## ILLINOIS POLLUTION CONTROL BOARD

June 4, 2009

IN THE MATTER OF: )  
 )  
 PETITION OF ROYAL FIBERGLASS )  
 POOLS, INC. FOR AN ADJUSTED ) AS 09-4  
 STANDARD FROM 35 ILL. ADM. CODE ) (Adjusted Standard - Air)  
 215.301

**HEARING OFFICER ORDER**

The parties are advised that this matter has been assigned to the hearing officer identified below. From this date forward, any pleading filed with the Clerk of the Board in this matter must also be served individually on the hearing officer.

The hearing officer directs petitioner and the Illinois Environmental Protection Agency (Agency) to address the pre-hearing questions attached to this order. Please note that questions 19, 21, and 22 are directed to both parties. The remaining questions are directed to petitioner, although the Agency may comment as it sees fit.

Written responses to the Board's questions, as well as any pre-hearing testimony, must be filed at least 14 days before the hearing. A hearing date will be set when the parties decide how much time will be needed to prepare these documents. The Agency's deadline for filing its recommendation is June 12, 2009.

The parties are directed to participate in a telephone status conference with the hearing officer at 11:00 a.m. on June 22, 2009. The status conference shall be initiated by the petitioner.

IT IS SO ORDERED.




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Carol Webb  
 Hearing Officer  
 Illinois Pollution Control Board  
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**AS 09-4 ROYAL FIBERGLASS POOLS  
BOARD QUESTIONS FOR PETITIONER AND IEPA**

**SECTION 28.1.c.**

1. The petition on page 13 states, “By complying with the Composites MACT, Royal has limited its VOM emissions and also decreased the amount of solid and hazardous waste Royal generates.” Would you please elaborate on Royal’s reduction of solid and hazardous waste resulting from compliance with MACT?
2. If granted, will the adjusted standard be submitted to USEPA for inclusion in the Illinois SIP?

**104.406(d)**

3. Would you please provide a map indicating the location of the Dix Plant?
4. The petition indicates that Royal’s other manufacturing facility is located in Louisiana.
  - (a) Are there other states where Royal Fiberglass Pools, Inc. has similar manufacturing facilities?
  - (b) Do any of those states have state-specific limitations on VOM emissions beyond the MACT? If so, how does Royal Fiberglass Pools, Inc. address compliance in other states?
5. Please describe the area affected. What is the ozone attainment status of the county in which the Dix Plant is located? Is the ozone attainment status poised to be changed in the near future?
6. In Section 2 of the Technical Document, the chart entitled “January 2005: Monthly HAP/VOC/MACT Emissions Log for the Royal Pools Dix Facility” was printed larger than the page, so the table on the far right appears to have been cut off. If so, would you please resubmit the table with the missing information?
7. In general, the most recent data provided appears to be from 2005.
  - (a) Would you please comment on any change in quantities or materials used since then?
  - (b) If possible, would you please submit information reflecting the most recent available data?
  - (c) Although the Technical Document Section 3 at page 5 states that 250 pools per year is a more reasonable estimate than the 400 pools per year used in the CAAPP permit application, would you please comment on any anticipated growth or change in operations.
  - (d) Section 2 of the Technical Document on page 9 makes a calculation based on “Reducing the maximum annual production rate from 250 to 200 pools per year...” and comments, “A facility-wide production cap of 220 pools per year

would reclassify the Dix Plant as a synthetic minor source – the maximum emission rate would be just under the major HAP source emission threshold of 10 tpy.” Is Royal Pools considering revising their CAAPP Permit application to reflect a production cap of 220 pools per year and a HAP emission threshold of 10 tpy?

8. Royal Pools states that, “EPA explained that the annual emission rate and the facility CAAPP status has no bearing on compliance with 35 IAC 215 Subpart K.” TSD Section 4 at 2. Would you please comment on the maximum potential to emit on an hourly basis if production were capped at 400 pools per year, or at 220 pools per year?
9. In Section 3 of the Technical Document on page 5, the Pool Production Schedule indicates a typical work schedule of two pools per day during 100% full production, with the “greatest hourly gelcoat process emission rate” of 64.86 lb/hr. In Section 2, the chart of “Hourly Potential-to-Emit HAP/VOC for the Royal Pools Dix Facility/Maximum Hourly Baseline” indicates maximum hourly usage of 17.42 lb VOM/hour for resin application, 36.78 lb VOM/hour for gelcoat application, 0.08 lb VOM/hour for catalyst, plus 1 lb VOM/hour for mold wax.
  - (a) Would you please explain the difference in the “maximum hourly baseline” and the “hourly potential-to-emit” and indicate which the chart in Section 2 is depicting?
  - (b) Would you please indicate the overall maximum potential hourly VOM emissions?
  - (c) Since Royal can produce 2 pools per day at 100% full production, would you please comment on the scenario that both pools would undergo gelcoat application during the same hour?
  - (d) Does Royal Pools have an operating procedure in place that would limit gelcoat application and curing to one pool at a time?
  - (e) Would Royal Pools please comment on including such a limitation in the adjusted standard conditions?
  - (f) Would you please comment on including a condition in the adjusted standard limiting the adjusted standard to Royal’s current operations and limiting the maximum hourly VOM emissions to 64.86 lb/hr?
10. Would you please define MMA, AMS, DMP, MEK (MEKP) referenced in Section 2 of the Technical Document.
11. In Section 2 of the Technical Document, the chart entitled, “Maximum Hourly Baseline: Hourly Potential-to-Emit HAP/VOC for the Royal Pools Dix Facility” lists “Bondo” having a 12.57% Styrene Emission Factor and a 100% Other VOC Emission Factor. The information under VOC Content (Styrene, MMA, AMS, Other), however, is blank for Bondo. Is information available on the HAP/VOC content of Bondo? Since Bondo is

not listed in the 2005 Monthly HAP/VOC/MACT Emissions Logs, would you please comment on how seldom it is used.

- 12.** In AS 04-1, Crownline used booths equipped with dry filter medium to reduce particulate emissions; lower styrene-content gelcoat (33.4%); panel filters built in each side of the laminating area to control particulate emissions; tanks equipped with submerged inlets to reduce splashing and release of VOMs when filling; and flow-coat spray guns for lamination to reduce VOM emissions experienced with previous air atomized guns. (AS 04-1 Pet. at 5-6.) Would you please comment on the potential to employ such efforts at Royal's Dix Plant?

**104.406(e)**

- 13.** The petition on pages 5-6 states, "Specifically, Royal investigated the following alternatives: (1) reducing VOM content in production materials; (2) using alternative operating procedures and methods; and (3) installing add-on emission control technologies." The Technical Document Section 3 provides details of the evaluation of add-on emission controls, however, details do not seem to be provided for the other two alternatives mentioned. Would you please elaborate numbers (1) and (2) above?
- 14.** In Sec. 2 of the Technical Document, the chart entitled "Hourly Potential-to-Emit HAP/VOC for the Royal Pools Dix Facility" lists the HAP/VOC content of the materials used. The petition on page 7 states that the white gelcoat used contains the lowest feasible monomer contents of 28% styrene and 3% MMA. Sections 2 and 3 also indicate 161,800 lb of resin (47.5% styrene) and 3136 lb of MEKP Catalyst (2% MEK, 37% DMP) were used in 2005. Did Royal Pools investigate the availability of or experiment with other lower HAP/VOC content materials? If so, would you please document your efforts?
- 15.** Section 3 of the Technical Document on page 10 states, "Non-atomizing gelcoat equipment is available that might reduce the gelcoat emission rate. However, the available non-atomizing equipment will not provide an acceptable surface finish and has failed to reduce gelcoat emissions as promised by the manufacturer." Would you please document your efforts to evaluate the non-atomizing gelcoat equipment?
- 16.** In the Federal Register, USEPA estimates there are approximately 435 existing major source facilities that will be subject to the Federal rule 40 CFR 63 Subpart WWWW. Annual compliance costs for all existing major source facilities were estimated at \$21.5 million. This included capital, materials, monitoring, recordkeeping, and reporting costs. (68 FR 19381)
- (a)** What costs has Royal incurred to meet the Federal rule?
- (b)** Has Royal estimated the additional compliance costs associated with monitoring, recordkeeping and reporting?

**104.406(f)**

17. The petition on page two refers to “Royal’s Initial MACT Notification Letter” being contained in Section 2 of the Technical Document, however, the letter appears to be missing from that Section. Would you please provide a copy or indicate where it can be found in the record?
18. Royal indicates that it meets the Composites MACT by ensuring that all resin containers are closed when not in use and that acetone (non-HAP/non-VOC) is used in resin and gelcoat cleanup. (Pet. at 5.) Royal also indicates that it uses a 28% styrene monomer gelcoat that is “state-of-the-art in low-HAP formulations for swimming pool production.” Did Royal switch to this gelcoat to comply with MACT?
19. **This question is addressed to both the petitioner and the Agency:** The Air Quality Impact Analysis for ozone was performed based on the assumption that 25 tons per year would be the maximum VOM emitted and that the 1-hour ozone standard is 120 ppb. However, there are no limitations proposed in the adjusted standard language.
- (a) Would you please comment on proposing a condition in the adjusted standard language that would limit VOMs to 25 tpy or less.
- (b) 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.
20. Could you please indicate if Royal has made a demonstration of compliance with the NESHAP regulations under 40 CFR Part 63 Subpart WWWW to USEPA yet? [40 CFR 63.5840] Did USEPA respond to the compliance demonstration, and if so, how?

**104.406(g)**

21. **This question is addressed to both petitioner and the Agency:** The petition on page 10 states, “Royal understands that in 2005, EPA replaced the one-hour average ozone standard with an eight-hour average standard, but believes the hourly calculation presented in the attached Air Quality Impact Analysis is useful given the obvious concerns about hourly emissions that are reflected in the 8 lb/hr Rule.”

As of March 2008, the primary ozone standard was strengthened from 0.08 parts per million (ppm), set in 1997 to a level of 0.075 ppm averaged over 8 hours (73 FR16436; March 27, 2008).

- (a) Since the Air Quality Impact Analysis presented in the Technical Document Section 6 is based on the previous ozone standard, would you please provide an analysis of ozone impact in terms of the current ozone NAAQS?
- (b) Is the Scheffe (Sept. 1988) procedure and table used in Royal Pool’s Air Quality Impact Analysis (TSD Sec. 6) the same for determining the ozone increment for either 1-hour as well as 8-hour periods of time?
- (c) Is the Scheffe (Sept. 1988) procedure still the USEPA recommended procedure?

- (d) 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.
- (e) Has the IEPA provided any guidance in conducting the Air Quality Impact Analysis or indicated appropriate measures if the ozone increment appears to cause or be contributing to a violation of the ozone NAAQS?

- 22. This question is addressed to both the petitioner and the Agency:** The Petition at page 12 states, "...the daily amounts of VOM emitted by Royal's operations have a negligible impact on ambient ozone levels and would not cause a violation of the ozone NAAQS..." 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?
- 23.** If Royal were to experience a growth in production, could you please comment on how such growth would affect the VOM emissions on an hourly and 12-month average basis? Would you please comment on including a condition in the adjusted standard that would limit the amount of VOM emissions to a level consistent with the time Royal's adjusted standard petition was submitted?

## CERTIFICATE OF SERVICE

It is hereby certified that true copies of the foregoing order were mailed, first class, on June 4, 2009, to each of the persons on the attached service list.

It is hereby certified that a true copy of the foregoing order was hand delivered to the following on June 4, 2009:

John T. Therriault  
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AS 2009-004

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