



REGIONAL AIR POLLUTION CONTROL AGENCY

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September 3, 2013

Certified Mail

Mr. Kazunori Shibayama
6184 Schumacher Park Dr.
West Chester, OH 45069

**RE: FY 2013 Full Compliance Inspection
Three Bond International, Inc.
Ohio EPA Facility ID 0857103289**

Dear Mr. Shibayama:

WARNING LETTER

This letter is in regards to monitoring, record keeping and reporting issues identified during a site inspection conducted by the Regional Air Pollution Control Agency (RAPCA) on June 7, 2013 at Three Bond International, Inc. (Three Bond), located at 101 Daruma Parkway, Moraine, Ohio. This facility is identified by Ohio EPA Facility ID 0857103289. Issues and discrepancies were documented for Ohio EPA air emissions units (EUs) K001-K015. EUs K001-K015 are permitted under permit to install and operate (PTIO) P0104101 effective on February 23, 2009. P0104101 contains federally enforceable hazardous air pollutant (HAP) and volatile organic compound (VOC) emissions limits to limit these pollutants to levels less than U.S. EPA's major source thresholds for the Title V operating permit program. Within the PTIO, the EUs are grouped according to the type of coating process.

EUs	Coating Process
K008	tumbling
K014	rotary
K001, K002, K003, K004, K005, K009, K010, K011, K012	dip
K006, K007, K013, and K015	automated and rotary

Background

RAPCA began addressing monitoring and record keeping and reporting issues with Three Bond in 2010 following a full compliance inspection completed on July 15, 2010. Discussions continued with Three Bond throughout 2010 and 2011 until a follow-up full compliance inspection was completed on December 9, 2011. RAPCA then issued a letter on January 31, 2012 detailing our findings, some of

which included missing dates, incorrect formulas in spreadsheet cells, and records showing coating usage over 8 gallons per day. Three Bond responded to RAPCA on February 27, 2012 and met with RAPCA on April 18 and June 15, 2012 specifically to discuss the corrective actions taken by Three Bond. Subsequent emissions spreadsheets submitted to RAPCA on May 16, July 6, July 23, August 30, October 22, October 29, and December 5, 2012 still had errors and these errors were discussed in numerous emails and telephone conversations on July 20, August 30, October 22, and October 31, 2012.

The final revised reports for the second and third quarter 2012, which were to be accurate, were submitted by Three Bond on December 17, 2012. In these reports Three Bond reported no deviations. However, Three Bond also submitted corrected emissions spreadsheets along with the reports and when RAPCA began to prepare for the 2013 inspection we found that the spreadsheets still contained errors that affected the accuracy of the emissions calculations.

The June 7, 2013 site visit began with an opening conference to discuss Three Bond's monitoring and record keeping during which RAPCA was informed that Three Bond was aware of the ongoing problems and that the spreadsheet usages, emissions, and calculations had been reviewed and were correct as of January 2013. We requested that Three Bond submit electronic copies of the April and May 2013 emissions spreadsheets and while on site we reviewed the hand written production data for April for comparison. Attachment 1 is a copy of Three Bond's emissions spreadsheet for May that RAPCA has reviewed; the highlighted red cells are errors that impact the total usages and emissions calculations and the highlighted yellow cells are errors that do not impact emissions. Attachment 2 is a list of discrepancies found between the April production records and the April emissions spreadsheet. The issues discussed below are the result of RAPCA's review of Three Bond's records for April and May 2013 and there may be other issues in addition to these that have not yet been identified.

Daily Coating Usage Monitoring and Record Keeping

The coating processes at Three Bond are subject to Ohio Administrative Code (OAC) and Montgomery County Combined General Health District Air Pollution Control Regulations (MCCGHDAPCR) rule 3745-21-09(U)(2)(e)(i) which limits the coating of metal to 8 gallons per day.

OAC and MCCGHDAPCR rule 3745-21-09(B)(3)(d) and P0104101 term and condition C.1.d)(1) for K008; C.2.d)(1) for K014; C.3.d)(1) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.d)(1) for K006, K007, K013, and K015 require that Three Bond maintain daily records of the volume, in gallons, of each coating employed, and the total volume, in gallons, of all the coatings employed so that compliance with the 8 gallons per day coating limit can be verified.

During the June 7, 2013 site visit, there were no daily totals of coating usage available. Rather, the monthly spreadsheet for each EU must be sorted by day and then the usages each day summed to obtain the actual daily coating usage.

RAPCA reviewed the daily handwritten production records for April 2013. These records were compared to the emissions spreadsheet submitted by Three Bond to RAPCA on June 10, 2013 and RAPCA found that not all of the daily production records were entered into the emissions spreadsheet and/or the information in the spreadsheet was sometimes inconsistent with the production records. See attachment 2 for a list of specific omissions and errors by date.

Additionally, the production record units which are in kilograms were incorrectly converted to gallons by Three Bond. The conversion uses the density listed on the material safety data sheets (MSDS) for the coatings prior to mixing in any viscosity adjustment solvents and/or solids capsules; therefore, the density is not accurate for the coatings as applied.

Failure to maintain accurate daily records of coating usage is a violation of OAC and MCGHDAPCR rule 3745-21-09(B)(3)(d), P0104101, and Ohio Revised Code (ORC) 3704.05.

Monthly VOC and HAP Record Keeping

P0104101 term and condition C.1.d)(2) for K008; C.2.d)(2) for K014; C.3.d)(2) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.d)(2) for K006, K007, K013, and K015 requires monthly records of...the volume in gallons of each coating and cleanup material employed...the VOC content of each coating and cleanup material employed, in pounds per gallon...the total VOC emissions from all coating employed, in pounds...the total VOC emissions from coating and cleanup materials, in tons...the rolling, 12-month summation of VOC emissions and usages in tons.

P0104101 term and condition C.1.d)(3) for K008; C.2.d)(3) for K014; C.3.d)(3) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.d)(3) for K006, K007, K013, and K015 requires monthly records of...the pounds of each HAP per gallon of each HAP-containing material applied...the number of gallons of each coating, thinner, additive, cleanup material, and other material applied during the month...the total emissions of each individual HAP, in tons...the total emissions of all HAPs combined in tons...the rolling, 12-month summation of the emissions of each individual HAP...the rolling, 12-month summation of the emissions of combined HAPs.

RAPCA has identified a number of errors and omissions which subsequently makes the rolling 12-month summation of VOC and HAP emissions inaccurate. The monthly record keeping required is to support Three Bond's compliance with OAC and MCGHDAPCR rule 3745-31-05(D) and the facility's eligibility to remain synthetic minor for HAPs and VOC.

First, since Three Bond is not entering all of the daily production records into the monthly emissions spreadsheet and is using incorrect densities to convert from kilogram to gallons, the monthly total coating usages are inaccurate.

Second, Three Bond uses coatings manufactured by their parent company in Japan, some of which are employed as received from Japan while others are mixed on site with solids and solvents. Three Bond does not maintain MSDSs for the coatings as applied and the MSDSs for the coating constituents do not contain VOC contents; rather, they only identify the chemical constituents. RAPCA has reviewed the MSDSs supplied by Three Bond in 2012 which were stated to be accurate during the June 7, 2013 site visit and found that the emissions spreadsheet contains VOC and HAP information that is inconsistent with the MSDSs for coatings 2411, 2481, 2430, 2440C, and 23N002.

In addition, during the June 7, 2013 site visit we were informed that the coating formulation for 2481 was changed to water-based in November 2012. We were later informed on July 8, 2013 via email that the formulation was never changed. In that same email, Three Bond acknowledged the error and updated the emissions spreadsheets for April and May so that the solvent-based formula was used to calculate emissions. However, it is unclear if this material was used between November 2012 and March 2013, and if so, whether Three Bond corrected the November 2012 - March 2013 emissions calculations to correct the error.

Third, RAPCA has identified numerous calculation errors in the spreadsheet that impacts the total VOC and HAP emissions from coating and cleanup materials. RAPCA is therefore unable to determine compliance with HAP and VOC emissions requirements due to the inaccuracy of the records.

8 gallons/day Exceedance

As stated above, P0104101 and OAC and MCCGHDAPCR rule 3745-21-09(U)(2)(e)(i) requires Three Bond to use less than 8 gallons per day of coating material when coating metal. When RAPCA reviewed the May 2013 spreadsheet, we sorted and then summed the coatings used by date and we found usage of 10.06 gallons at K008 on May 22, 2013.

Failure to comply with the limit of less than 8 gallons per day of coating material when coating metal is a violation of OAC and MCCGHDAPCR rule 3745-21-09(U)(2)(e)(i), P0104101, and ORC 3704.05.

Compliance Reporting

P0104101 term and condition C.1.e)(1) for K008; C.2.e)(1) for K014; C.3.e)(1) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.e)(1) for K006, K007, K013, and K015 and OAC and MCCGHDAPCR rule 3745-21-09(B)(3)(e) requires that Three Bond notify RAPCA in writing of any daily record showing

that the coating usage on any of the EUs exceeded 8 gallons; the notification is required to be submitted within 45 days of the exceedance and is required to include a copy of the daily record. To date, no such notification for the May 22, 2013 exceedance has been received by RAPCA.

P0104101 term and condition C.1.e)(2) for K008; C.2.e)(2) for K014; C.3.e)(2) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.e)(2) for K006, K007, K013, and K015 requires that quarterly deviation reports submitted by Three Bond include any changes made to a parameter or value used in dispersion modeling or, if no changes have been made, then the report is to include a statement to this effect. None of the quarterly reports submitted by Three Bond for 2012 or 2013 include the required air toxics statement.

P0104101 term and condition C.1.e)(3) for K008; C.2.e)(3) for K014; C.3.e)(3) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.e)(3) for K006, K007, K013, and K015 require that Three Bond submit quarterly deviation reports that identify all exceedances of the rolling, 12-month VOC emissions limit and the rolling, 12-month HAP emissions limits (individual and combined). The quarterly report due July 31, 2013 covering the second quarter of 2013 was received on August 23, 2013.

OAC and MCCGHDAPCR rule 3745-15-06 and P0104101 term and condition C.1.e)(4) for K008; C.2.e)(4) for K014; C.3.e)(4) for K002, K003, K004, K005, K009, K010, K011, K012; and C.4.e)(4) for K006, K007, K013, and K015 requires that Three Bond submit an annual Permit Evaluation Report (PER) each year covering the previous calendar year. The PER for 2012 was required to be submitted by February 15, 2013 and was received on February 26, 2013. The report stated that there were no deviations from the operating restrictions, emissions limits, monitoring and record keeping, and/or reporting requirements. Based on the discussions between RAPCA and Three Bond that occurred throughout 2012 and the violations outlined above, the PER is not accurate.

Failure to submit reports, failure to submit timely reports, and/or to failure to submit accurate reports is a violation of P0104101 and ORC 3704.05.

In response to the issues identified above, RAPCA is requesting that Three Bond audit their records for quality assurance purposes, submit a compliance plan to address each of the issues identified above, and address any additional issues that are found in the audit. At a minimum, Three Bond is required to:

1. Review each of the EUs production records for 2012 and 2013 and correct the spreadsheets for missing coating usage data.
2. Identify all exceedances of the 8 gallons per day coating usage limit and report each daily exceedance to RAPCA.
3. Correct the VOC and HAP constituents of the coatings where necessary and identify to RAPCA which coating formulations were corrected.
4. Submit the MSDS for coatings 2415B, 2403B, 2450B, and 2478.

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5. Correct all calculation errors in the spreadsheets for 2012 and 2013.
6. Submit a revised PER for 2012 which identifies all known deviations of P0104101.
7. Submit revised annual HAP and VOC reports for 2012.
8. Develop and submit, for review, a sampling and testing protocol using U.S. EPA Reference Method 24 to determine the as applied VOC content of the coatings. Once reviewed, the testing will be implemented on a schedule agreed upon by RAPCA and Three Bond.

Additionally, RAPCA requests that Three Bond develop and implement an emissions tracking Quality Assurance/Quality Control (QA/QC) Plan to ensure that all information and calculations are correct and updated when necessary.

RAPCA appreciates your prompt attention in the above matters. All items requested above shall be submitted within **forty-five days** of receipt of this letter. RAPCA acknowledges the complexity of the issues cited above as well as the volume of information requested; therefore, Three Bond shall contact RAPCA upon receipt of this letter to schedule a meeting. The meeting shall be scheduled for no later than September 13, 2013. Once the meeting has taken place and Three Bond has supplied the requested information, RAPCA will make a more complete determination of the Three Bond's compliance status with respect to any possible exceedances of applicable emissions limits.

If you have any questions, feel free to contact me at 937-225-5934.

Sincerely,



Jefferis R. Canan
Enforcement Group Supervisor

Enclosures

Cc Michael Foley, Three Bond International, Inc., Moraine facility
Maxwell Shumba, Three Bond International, Inc., Moraine facility
Jefferis Canan, RAPCA (via e-mail)
Carlos Lynch, RAPCA (via e-mail)
Jennifer Riley, RAPCA (via e-mail)

Viscosity adjustment solvent usage (gallon/month)				MFC Pallet		Total MFC solvent	
MFC	Method	Toluene	ECX	Total (gallon/month)	Unit	Total (gallon/month)	Unit
2402A	0.000	0.685	0.670	1.355	1.355	2.113	2.113
2415A	0.000	0.431	0.000	0.431	0.431	4.015	4.015
2415B	0.000	0.153	0.149	0.152	0.152	0.535	0.535

Errors that do not appear in the caption table:



Coating ID	Density (lb/gal)
2402A	9.46
2411A	9.47
2415A	9.81
2430	8.67
2440B	8.77
2415B	9.04
2409B	9.49
2450B	9.69
2440C	9.85
23N-002	7.04

2411A
9.47

Three Bond

*April 2013 daily usage recorded by operators comparison to monthly records

Air Emissions Unit	Incorrect/Missing Data
K001	Missing- 4/29/13 data for MEC 2415 usage of 6.395 kg MEC/solvent and solvent additions of 0.400 kg, 0.45, 0.285 mixed solvent
K002	Missing- 4/30/13 data for MEC 2403 usage of 3.095 kg MEC/solvent; Solvent additions shown as ZERO
	Incorrect Date appears to be used- Usage of 1.55 Kg MEC/solvent and zero solvent additions shown on 4/16 VS 4/17 shown in handwritten daily records
	Incorrect Date appears to be used-Usage of 2.015 kg MEC/solvent and solvent additions of 0.230 kg mixed solvent shown on 4/15 VS 4/16 shown in handwritten daily records
K003	Incorrect usage- 4/18/13 has incorrect mixed solvent usage amount shown in spreadsheet. Should be 0.20 kg per operators records and montly records show 0.100 kg
K004	Missing- 4/24/13 data for MEC 2403 Red usage of 3.245 kg MEC and Solvent additions of 0.335 kg mixed solvent
	Incorrect Date appears to be used - 4/14/13 data for MEC 2403 Red usage of 2.170 kg MEC/solvent and solvent additions of 0.400 mixed solvent does not exist. It may have been logged under 4/4/13 instead
	Missing or Incorrect Date- 4/11/13 data for MEC 2403 3.080 kg MEC/solvent and solvent additions of 0.200 mixed solvent does not exist. It may have been logged under 4/1/13 instead
K005	Missing- 4/29/13 data for MEC 2450 usage of 1.53 kg MEC/solvent and solvent additions of 0.08 kg toluene
	Missing- 4/26/13 data for MEC 2403B usage of 1.255 kg MEC/solvent and solvent additions of 0.415 kg solvent (uknown kind)
	Incorrect usage- 4/22/13 includes has a solvent usage of 0.470 kg mixed versus 0.430 kg shown in hand written daily records
K006	Incorrect Data- Monthly records show entry for 4/8/13 for solvent addition used as toluene only. The handwritten daily records show a mixed sovlent was added.
K008	Missing- 4/27/13 data for MEC 2430 of 3.965 kg MEC/solvent
	Incorrect usage- 4/22/13 solvent usage in monthly spreadsheet shown as 1.170 kg and in the hand written daily records it's shown at 0.170 kg
K009	Missing- 4/22/13 data for MEC 2481 usage of 0.325 kg MEC/solvent and solvent addition of 0.21 kg toluene
K010	Missing- 4/24-13 data for MEC 2478 usage of 6.977 kg MEC (water based)
	Missing- 4/18/13 data for MEC 2478 usage of 3.120 kg MEC (water based)
K015	Missing- 4/22/13 data for MEC 2430 usage of 3.345 kg MEC/solvent and solvent additions of 0.260 kg toluene
	Missing- 4/25/13 data for MEC 2430 usage Of 3.635 kg MEC/solvent and solvent additions 0.340 kg toluene
	Missing 4/1 data for 2411 usage of 4.03 kg MEC/solvent and 0.500 kg, .275, 0.275, and 0.200 kg mixed solvent
	Inaccurate usage- 4/3/13 monthly records for MEC 2430 Blue shows usage of 1.715 kg MEC/solvent applied but does not include solvent additions of 0.840 kg toluene applied as shown on the hand written daily records