## Dibble, Dickson

From: John.Kasper@ocfl.net

**Sent:** Wednesday, May 26, 2010 9:41 AM

To: Dibble, Dickson

Cc: Jodi.Dittell@ocfl.net; Darrell.Lobin@ocfl.net; Jane.Heppner@ocfl.net

Subject: RE: TIN Inc dba Temple-Inland

## Dick:

We have reviewed the general permit registration information for Temple Inland that you e-mailed me last week. Below are our comments on this package.

- 1. Boiler natural gas combustion calculations: In our letter of 5/13/10, we stated that the one 14.3 MMBTU/hr boiler operating on natural gas alone would be exempt. Even though the 14.3 MMBTU/hr rating is greater than the 10.0 MMBTU/hr applicability threshold of 40 CFR 60 Subpart Dc, we understand that Subpart Dc was not intended for small boilers fired only with natural gas. Operating on fuel oil is another matter, because we then interpret 40 CFR 60 Subpart Dc and 62-296.406 to apply in such cases. These are unit specific applicable requirements that disqualify the boiler from an exemption, so the existing boiler needs to be covered by a permit. We note that they say this boiler is subject to Subpart Dc in their regulatory applicability table.
- 2. New Boilers: This application shows a second 14.3 MMBTU/hr boiler fired with natural gas only and another boiler rated at 4.2 MMBTU/hr fired with natural gas only. Both of these boilers are described as "new", which we take to mean proposed. We were not aware of these boilers, but both appear to be exempt based on their size and natural gas as the only fuel.
- 3. Flexographic printing: Their calculations show total potential VOC emissions from three presses using water-based inks and some glues. These calculations look reasonable based on the amount of ink used. The facility spreadsheet they showed us during our site visit had VOC contents of water-based inks. Many were less than 1% VOC, one was just over 3%, and the next highest was 2.64%. Overall, the 2.64% looks reasonable to calculate PTE. Their VOC PTE total is 14.38 + 24.38 + 21.67 = 60.43 TPY in their data sheet. This sounds reasonable to us. They apparently don't want to be exempt from permitting by 62-210.(3)(a)37 because they don't want to be limited to 80,000 lb ink/yr. Their PTE is greater than the limit in 62-210.300(3)(b). So they need a permit for the printing operation, and we all agree on that. Based on their numbers, 62-296.515 RACT does not apply.
- 4. <u>Cyclone</u>: They show potential emissions of 2.38 TPY from the cyclone. But those cyclone emissions are calculated using an emission factor. Potential emissions are calculated before control (without emission factors) unless there is a federally enforceable permit condition covering the control device (62-210.200(239 PTE)). So, they need a permit to use the emission factor. Without the emission factor (before control), the potential emission is the trim waste maximum throughput of 10,881 lb/hr. This far exceeds the exemption thresholds in 62-210.300(3)(b)1. The cyclone needs to be covered by a permit.
- 5. Starch silo PM: The emissions calculated from the starch silo used an emission factor for grain receiving from trucks. Grains such as raw wheat and corn are much larger and heavier than the fine starch they use to make glue. We think a better emission factor is that for cement silos, in AP-42 Table 11.12-2. There are two emission factors for pneumatically loaded silos, one for cement and the other for fly ash. At 13,500,000 lb/yr (6750 TPY) uncontrolled, the cement number yields 2.43 TPY PM and the fly ash number yields 10.6 TPY. If they don't want to be conservative and use the number for fly ash, they should use the average of the two emission rates, 6.5 TPY PM PTE. Both are above the 5 TPY PM limit in 62-210.300(3)(b)1. for emission units.
- 6. Starch silo VE: Even without considering the silo PM emissions in TPY, the potential visible emissions during pneumatic loading without the dust collector would certainly exceed the general 20% opacity standard or the more stringent standards in 62-296.711. Our compliance inspectors observe this all the time when a dust collector fails during compliance testing at a cement batch plant. We view this as potential emissions without control exceeding a standard, similar to potential emissions exceeding a TPY exemption threshold, and this emission unit should be covered by a permit. We want to make the starch silo an emission unit to verify the dust collector works properly.
- 7. <u>Small parts washer:</u> This looks exempt based on their calculations.
- 8. HAP emissions in the inks: We take their numbers at face value.
- 9. Maintenance activities: These are usually insignificant or exempt.
- 10. DARM-PER-19: This guidance document regarding changes to control equipment was revoked 3/31/06.
- 11. Exemption letters and related documents: Regarding past exemptions granted by Central District, EPD is now the permitting authority for Orange County and we will make determinations based on our own site visits, analyses and rule interpretations, with guidance from FDEP/Tallahassee, as authorized by our SOA.

In summary, we have not changed our opinion that this facility requires a construction permit for four emission units, because a GP can be used for only one emission unit per facility.

John Kasper, P.E. Orange County EPD 407-836-1443

From: Dibble, Dickson [mailto:Dickson.Dibble@dep.state.fl.us]

**Sent:** Wednesday, May 26, 2010 8:24 AM

**To:** Kasper, John **Cc:** Ajhar, Rebecca

Subject: FW: TIN Inc dba Temple-Inland

Good morning John!

I just wanted to touch base with you regarding your review of the Temple-Inland supporting material for their registration as an Air General permit entitled facility.

We will have to take an action no later than Friday, June 4<sup>th</sup>, so if there are any additional thoughts or evaluation results that you can share with us to either deny this registration, or proceed as an AG registration, it would be greatly appreciated.

Thank you and have a great day!

Dick

## Dickson E. Dibble, ES III

FL Dept of Environmental Protection Div. of Air Resource Management Bureau of Air Monitoring & Mobile Sources Air General Permit Program Tel. (850) 921-9586 FAX (850) 922-6979 ICG-#345

Dickson.Dibble@dep.state.fl.us



**Please note**: Florida has a very broad public records law. Most written communications to or from state officials regarding state business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

From: Dibble, Dickson

Sent: Tuesday, May 18, 2010 5:26 PM

**To:** John.Kasper@ocfl.net

Cc: Ajhar, Rebecca; Veazey, Sandra; Jodi.Dittell@ocfl.net

**Subject:** TIN Inc dba Temple-Inland

John,

You probably won't be able to access the registration document using the first link below, but you should be able to using the 2<sup>nd</sup> link (the 1st pdf file labeled Registration) below.

The Registration and Fee Acknowledgement for this facility have been scanned and are now available via Document Search on Air Document Handling.

http://appprod.dep.state.fl.us/ADH/default.asp?start\_tab=doc\_search

Here are the direct links to the electronic documents.

Registration: <a href="http://arm-permit2k.dep.state.fl.us/gp/0951332/00004C8B.pdf">http://arm-permit2k.dep.state.fl.us/gp/0951332/00004C8B.pdf</a>

Fee Acknowledgement: <a href="http://arm-permit2k.dep.state.fl.us/gp/0951332/00004C8C.pdf">http://arm-permit2k.dep.state.fl.us/gp/0951332/00004C8C.pdf</a>

Once you have reviewed the documents, let's schedule a call amongst ourselves to discuss our options or course of action.

Thank you, and have a great day!

Dick

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We have reviewed the Printing Operations Air General Permit Registration Form submitted by TIN INC on behalf of Temple-Inland's Orlando facility notification of intent to use the Air General Permit. Following are our findings based on the submitted documents.

- 1. Boiler B-01 (Existing) (A-129) <u>Natural gas combustion calculations</u>: One 14.3 MMBTU/hr boiler operating on natural gas alone would be exempt. Even though the 14.3 MMBTU/hr rating is greater than the 10.0 MMBTU/hr applicability threshold of 40 CFR 60 Subpart Dc, we understand that Subpart Dc was not intended for small boilers fired only with natural gas. Operating on fuel oil is another matter, because we then interpret 40 CFR 60 Subpart Dc and 62-296.406 to apply in such cases. These are unit specific applicable requirements that disqualify the boiler from an exemption, so the existing boiler needs to be covered by a permit. We note that they say this boiler is subject to Subpart Dc in Temple-Inland's regulatory applicability table.
- 2. Boiler B-01 (Existing) (A-129) <u>Use of #2 Diesel Fuel Oil as Back-up</u>: Rule 62-210.300(3)(a)34.e., F.A.C. and Rule 62-210.300(3)(a)34.f., F.A.C. Categorical and Conditional Exemption requirements apply. TIN Inc/Temple-Inland calculations of 0.5% sulfur content #2 diesel fuel potential throughput indicate use of 894,021 gallons/year. This amount exceeds the 290,000 gallons per year exemption criteria and therefore does not qualify for exemption from permitting.
- 3. Boiler B-01 (Existing) (A-129) <u>Use of #2 Diesel Fuel Oil as Back-up</u>: Rule 62-210.300(3)(b)1., F.A.C. and Rule 62-210.300(3)(b)2., F.A.C. Generic and Temporary Exemption requirements apply, TIN Inc/Temple-Inland calculations indicate a potential to emit 31.7 tons/yr of SO<sub>2</sub>. This PTE exceeds the Generic Emission Unit Exemption (Rule 62-210.300(3)(b)1.b.(IV), F.A.C.) which allows that the unit or activity would neither emit or have the potential to emit 5.0 tons per year or more of any other regulated pollutant. Additionally, the PTE also exceeds the Generic Facility Exemption (Rule 62-210.300(3)(b)2.b.(IV), F.A.C.) which allows that the facility would neither emit or have the potential to emit 25 tons per year or more of sulfur dioxide.
- 4. New Boilers: This application shows a second 14.3 MMBTU/hr boiler fired with natural gas only and another boiler rated at 4.2 MMBTU/hr fired with natural gas only. Both of these boilers are described as "new", which we interpret to mean proposed. Both appear to be exempt based on their size and natural gas as the only fuel.
- 5. Flexographic printing: Their calculations show total potential VOC emissions from three presses using water-based inks and some glues. These calculations look reasonable based on the amount of ink used. Overall, the 2.64% looks reasonable to calculate PTE. Their VOC PTE total is 14.39 + 24.38 + 21.67 = 60.44 TPY in their data sheet. This sounds reasonable to us. They apparently don't want to be exempt from permitting by 62-210.300.(3)(a)37., F.A.C. because they don't want to be limited to 80,000 lb ink/yr. Their PTE is greater than the limit in 62-210.300(3)(b), F.A.C., so based on that they will need a permit for the printing operation. Based on their numbers, 62-296.515, F.A.C., RACT does not apply.

- 6. Cyclone: Temple-Inland indicates potential emissions of 2.38 TPY from the cyclone. But those cyclone emissions are calculated using an emission factor. Potential emissions are calculated before control (without emission factors) unless there is a federally enforceable permit condition covering the control device (62-210.200(239 PTE)). So, they need a permit to use the emission factor. Without the emission factor (before control), the potential emission is the trim waste maximum throughput of 10,881 lb/hr. This far exceeds the exemption thresholds in 62-210.300(3)(b)1. The cyclone needs to be covered by a permit.
- 7. Starch silo PM: The emissions calculated from the starch silo used an emission factor for grain receiving from trucks. Grains such as raw wheat and corn are much larger and heavier than the fine starch they use to make glue. We think a better emission factor is that for cement silos, in AP-42 Table 11.12-2. There are two emission factors for pneumatically loaded silos, one for cement and the other for fly ash. At 13,500,000 lb/yr (6750 TPY) uncontrolled, the cement number yields 2.43 TPY PM and the fly ash number yields 10.6 TPY. If they don't want to be conservative and use the number for fly ash, they should use the average of the two emission rates, 6.5 TPY PM PTE. Both are above the 5 TPY PM limit in 62-210.300(3)(b)1., F.A.C. for emission units.
- 8. Starch silo VE: Even without considering the silo PM emissions in TPY, the potential visible emissions during pneumatic loading without the dust collector would certainly exceed the general 20% opacity standard or the more stringent standards in 62-296.711, F.A.C.. This often happens when a dust collector fails during compliance testing at a cement batch plant. This is viewed as potential emissions without control exceeding a standard, similar to potential emissions exceeding a TPY exemption threshold, and this emission unit should be covered by a permit. The starch silo should be listed as an emission unit to verify the dust collector works properly.
- 9. <u>Small parts washer:</u> Use of Mineral Spirits This looks exempt based on their calculations.
- **10.** <u>HAP emissions in the inks:</u> We take their numbers at face value.
- 11. Maintenance activities: These are usually insignificant or exempt.
- **12.** <u>DARM-PER-19:</u> This guidance document regarding changes to control equipment was revoked 3/31/06.
- 13. Exemption letters and related documents: Regarding past exemptions granted by DEP Central District, EPD is now the permitting authority for Orange County and they will make determinations based on their site visits, analyses and rule interpretations, with guidance from FDEP/Tallahassee, as authorized by our SOA.