From:	Martin Knepp
To:	Lang, Liudmyla A
Subject:	Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC
Date:	Thursday, June 6, 2024 8:57:39 AM
Attachments:	ATT00001.png ATT00002.png ATT00003.png ATT00004.png ATT00005.png ATT00006.png ATT00007.png Part H.pdf

Good Morning,
I will try to supply the information you need. On the calculations for the new coating as you can note on the MSDS there are no VOCS or reportable haps in these coatings, it is a water base coating so is there any thing to report on this.
On the public notice requirements I am sorry that I missed section H and the application packet will be at the library today. I will include part H with this e-mail.
The SIC codes are correct. If you have any questions feel free to contact me at any time between 6:00 am to 4:00 pm.

Thanks,

Martin Knepp
KEMP *Hand Crafted Cabinetry*
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405

On 6/5/2024 12:08 PM, Lang, Liudmyla A wrote:

> Dear Delbert Kemp, Martin Knepp:
>
> I am the permit writer assigned to the current application No. 027-47910-00002 for Kemp Cabinets LLC. I would like to extend to you my contact information so that we may have continued communication until your new permit is issued. Please keep this information at hand. It is common for questions to arise, and oftentimes, further clarification is needed during the permit review process.
>
> Based on my preliminary review of the application, please see the following:
>
> 1. *To expedite the review process, please e-mail me the electronic copy of your updated calculations reflecting the new coatings (preferably in Excel format). If possible, let me know when the source plans on switching to the new coating.*
>
> 2. *Based on my preliminary review of the application, the permit approval that*

is required for this application will be subject to the public notice requirements of 326 IAC 2-1.1-6. As the permit applicant, you are required to place a copy of the permit application packet for public review at a public library in the county where the source is located (preferably at the local public library nearest to the source in the county where the source is located) within ten (10) days of the submission of the application. In the GSD-01 Form, Part H, the date that the application packet was filed with the local library was not provided. Please confirm whether (or not) a copy of the application packet was placed at the local library and the date.

3. *Current permit includes the following SIC codes: 2434 (Wood Kitchen Cabinets)4213 (Trucking, Except Local). Please let me know if the SIC codes are correct, or if they need to be changed.*

IDEM, OAQ will notify you when a draft permit has been submitted for public notice and/or when a final permit has been issued. As part of the notification, IDEM, OAQ will provide information on how to access the draft and/or final permit electronically on IDEM's website. If Kemp Cabinets LLC would prefer to receive paper copies of the entire draft and/or final permit, please let me know prior to the end of the applicant review period. If you prefer to receive paper copies of the entire permit, IDEM, OAQ will mail a paper copy of the draft permit and/or original signed final permit to the source contact. If you do not request to receive paper copies of the entire permit, IDEM, OAQ will only mail a paper copy of the original signed final permit signature page to the source contact.

Please feel free to contact me at any time if you have questions, concerns, or important information regarding your permit. For your convenience, my section chief (Madhurima Moulik) may be contacted at 317-233-6663 or MMoulik@idem.IN.gov.

Thank you in advance for your time and assistance. I look forward to working with you.

Sincerely,
Luda

Indiana Department of
Environmental Management

Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

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IDEM values your feedback

PART G: Agent Information

41. Company Name of Agent: Same as Part C

42. Type of Agent: ☐ Environmental Consultant ☐ Attorney ☐ Other (specify):

43. Name of Agent Contact Person:

44. Mailing Address:

City:	State:	ZIP Code: –

45. Electronic Mail Address *(optional)*:

46. Telephone Number: ( ) –	47. Facsimile Number *(optional)*: ( ) –

48. Request for Follow-up: Does the "Agent" wish to receive a copy of the preliminary findings during the public notice period (if applicable) and a copy of the final determination? ☐ No ☐ Yes

PART H: Local Library Information

49. Date application packet was filed with the local library: June 6 2024

50. Name of Library: Carnegie Public Library

51. Name of Librarian *(optional)*:

52. Mailing Address: 300 W. Main Street

City: Washington	State: IN	ZIP Code: 47501 – 2607

53. Internet Address *(optional)*: N/A

54. Electronic Mail Address *(optional)*: N/A

55. Telephone Number: (812) 254 – 4586	56. Facsimile Number *(optional)*: ( ) –

PART I: Company Name History *(if applicable)*

Complete this section only if the source has previously operated under a legal name that is different from the name listed above in Section A.

57. Legal Name of Company	58. Dates of Use
Kemp Cabinets, LLC	to
	to
	to
	to
	to
	to
	to
	to
	to
	to

59. Company Name Change Request: Is the source officially requesting to change the legal name that will be printed on all official documents issued by IDEM, OAQ?

☒ No ☐ Yes – ***Change Company Name to:***

Continued on Next Page

From: Lang, Liudmyla A
To: Martin Knepp
Subject: RE: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC
Date: Tuesday, June 11, 2024 11:51:00 AM
Attachments: image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png
47910calcs.xlsx
image001.png

Good morning,

Please find the updated calculations. With the help of Google, I found the content of VOCs and solids.

I do have a question - during SPR #36630, the parametric monitoring (*quarterly baghouse inspections)* for the woodworking control system was removed without explanation. To comply with the 6-3 rules and to ensure TV non-applicability, the permit should include at least 1 parameter (daily visible emission notations, inspections, or pressure drop monitoring). Please let me know which one works best for the source. Could you please tell me a bit more about what kind of dust control system is that, like a baghouse or cyclone?

Sincerely,

Luda

Indiana Department of
Environmental Management
Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

Protecting Hoosiers and Our Environment

www.idem.IN.gov

Help us improve!
IDEM values your feedback

From: Martin Knepp <mart@kempcabinets.com>
Sent: Thursday, June 6, 2024 8:55 AM
To: Lang, Liudmyla A <LLang@idem.IN.gov>

Subject: Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Good Morning,
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Martin Knepp

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Please feel free to contact me at any time if you have questions, concerns, or important information regarding your permit. For your convenience, my section chief (Madhurima Moulik) may be contacted at 317-233-6663 or MMoulik@idem.IN.gov.

Thank you in advance for your time and assistance. I look forward to working with you.

Sincerely,
Luda

Indiana Department of
Environmental Management

Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

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Appendix A: Emissions Calculations
Emission Summary

Company Name: Kemp Cabinets, LLC
Source Address: 3590 N 700 E, Montgomery, Indiana 47558
Permit Number: F027-47910-00002
Reviewer: Luda Lang

Process/Emission Unit	Potential to Emit (tons/year) Before Integral Woodworking Controls									
	PM*	PM_{10}*	$PM_{2.5}$*	SO_2	NO_x	VOC	CO	Total HAP	Worst-Case Single HAP	
Surface Coating Booths 1-9	33.91	33.91	33.91	-	-	144.78	-	27.32	27.32	Xylene
Woodworking Operation**	178.43	35.69	11.90	-	-	-	-	-	-	-
Solvents	-	-	-	-	-	1.07	-	0.11	0.05	Methanol, Toluene
Propane Combustion	0.09	0.31	0.31	0.02	5.77	0.44	3.33	-	-	-
Diesel Generators	2.35	1.35	1.31	13.61	80.73	2.37	18.50	0.04	1.81E-02	Benzene
Paved Roads	3.31E-03	6.62E-04	1.62E-04	-	-	-	-	-	-	-
Total Excluding Fugitives	**214.78**	**71.25**	**47.42**	**13.63**	**86.50**	**148.67**	**21.83**	**27.47**	**27.32**	**Xylene**

Process/Emission Unit	Potential to Emit (tons/year) After Integral Woodworking Controls									
	PM*	PM_{10}*	$PM_{2.5}$*	SO_2	NO_x	VOC	CO	Total HAP	Worst-Case Single HAP	
Surface Coating Booths 1-9	33.91	33.91	33.91	-	-	144.78	-	27.32	27.32	Xylene
Woodworking Operation**	3.57	0.71	0.24	-	-	-	-	-	-	-
Solvents	-	-	-	-	-	1.07	-	0.11	0.05	Methanol, Toluene
Propane Combustion	0.09	0.31	0.31	0.02	5.77	0.44	3.33	-	-	-
Diesel Generators	2.35	1.35	1.31	13.61	80.73	2.37	18.50	0.04	1.81E-02	Benzene
Paved Roads	3.31E-03	6.62E-04	1.62E-04	-	-	-	-	-	-	-
Total Excluding Fugitives	**39.92**	**36.28**	**35.77**	**13.63**	**86.50**	**148.67**	**21.83**	**27.47**	**27.32**	**Xylene**

Process/Emission Unit	Potential to Emit after Issuance (tons/yr)									
	PM*	PM_{10}*	$PM_{2.5}$*	SO_2	NO_x	VOC	CO	Total HAP	Worst-Case Single HAP	
[1,2]Surface Coating Booths 1-9	33.91	33.91	33.91	-	-	92.09	-	24.0	9.3	Xylene
Woodworking Operation**	3.57	0.71	0.24	-	-	-	-	-	-	-
Solvents	-	-	-	-	-	1.07	-	0.11	0.05	Methanol, Toluene
Propane Combustion	0.09	0.31	0.31	0.02	5.77	0.44	3.33	-	-	-
Diesel Generators***	2.35	1.35	1.31	13.61	80.73	2.37	18.50	0.04	1.81E-02	Benzene
Paved Roads	3.31E-03	6.62E-04	1.62E-04	-	-	-	-	-	-	-
Total Excluding Fugitives	**39.92**	**36.28**	**35.77**	**13.63**	**86.50**	**95.98**	**21.83**	**24.14**	**9.29**	**Xylene**

***** For the surface coating booths and diesel generators, it has been assumed that PM2.5 emissions = PM10 emissions = PM emissions. For propane combustion, it has been assumed that PM2.5 emissions = PM10 emissions.

** In October of 1993 a Final Order Granting Summary Judgment was signed by an Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter from woodworking operations were calculated after consideration of the controls for purposes of determining permit level and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) applicability. However, for purposes of determining the applicability of Prevention of Significant Deterioration (PSD), potential particulate matter emissions from the woodworking operations were calculated before consideration of the controls.

***Only one (1) generator may be operated at a time. Max emissions was considered for summary calculations.

Note: The gray shaded cells indicate where limits are included:

[1]VOC are limited in order to render the requirements of 326 IAC 2-7 (Part 70 permits) not applicable.

[2]HAPs are limited in order to render the requirements of 326 IAC 2-7 (Part 70 permits) not applicable.

Appendix A: Emissions Calculations
VOC, Particulate - Surface Coating Operation

Company Name: Kemp Cabinets, LLC
Source Address: 3590 N 700 E, Montgomery, Indiana 47558
Permit Number: F027-47910-00002
Reviewer: Luda Lang

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (%solids)	Gallons of Material (gal/hr)	Gallons of Material (gal/day)	Pounds VOC per gallon coating less water	Pounds VOC per gallon coating	Potential VOC Emissions (lb/hr)	PTE VOC (lb/day)	PTE VOC (ton/yr)	PTE Particulate (ton/yr)	Pounds VOC per gallon solids	Transfer Efficiency
Booth 1																
NGC0162 Wipe Stain*	7.39	89.53%	0%	89.53%	0%	6.02%	0.317	7.608	6.62	6.62	2.10	50.34	9.19	0.00	109.90	100%
VDS1052*	8.78	73.00%	0%	73.00%	0%	15.50%	0.317	7.608	6.41	6.41	2.03	48.76	8.90	0.82	41.35	75%
Booth 2																
TUW2200 Primer	13.40	23.50%	0%	23.50%	0%	62.20%	0.292	7.008	3.15	3.15	0.92	22.07	4.03	3.28	5.06	75%
YYT0040 (as applied with TUW2200)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.64	75%
VWS 0912 Glaze Base	8.54	47.49%	0.84%	46.65%	0.82%	38.46%	0.573	13.752	4.02	3.98	2.28	54.79	10.00	2.81	10.36	75%
NGC0162 Wipe Stain*	7.39	89.53%	0%	89.53%	0%	6.02%	0.573	13.752	6.62	6.62	3.79	90.99	16.61	0.49	109.90	75%
TAS3010 Satin Topcoat	7.90	70.00%	0%	70.00%	0%	28.00%	0.413	9.912	5.53	5.53	2.28	54.81	10.00	1.07	19.75	75%
YYT0040 (as applied with TAS3010)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAS3010)	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
Booth 3																
TUW2200 Primer	13.40	23.50%	0%	23.50%	0%	62.20%	0.506	12.144	3.15	3.15	1.59	38.24	6.98	5.68	5.06	75%
YYT0040 (as applied with TUW2200)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.65	75%
TAF3002 Satin Topcoat*	7.80	79.00%	0%	79.00%	0%	20.00%	0.664	15.936	6.16	6.16	4.09	98.20	17.92	1.19	30.81	75%
YYT0040 (as applied with TAF3002)*	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAF3002)*	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
Booth 4																
TAF3002 Satin Topcoat	7.80	79.00%	0%	79.00%	0%	20.00%	0.089	2.136	6.16	6.16	0.55	13.16	2.40	0.16	30.81	75%
YYT0040 (as applied with TAF3002)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAF3002)	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
TUW2200 Primer*	13.40	23.50%	0%	23.50%	0%	62.20%	0.063	1.512	3.15	3.15	0.20	4.76	0.87	0.71	5.06	75%
YYT0040 (as applied with TUW2200)*	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)*	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.65	75%
Booth 5																
VWS0912 Glaze Base*	8.54	47.49%	0.84%	46.65%	0.82%	38.46%	0.105	2.520	4.02	3.98	0.42	10.04	1.83	0.52	10.36	75%
Booth 6																
TAF3002 Satin Topcoat*	7.80	79.00%	0%	79.00%	0%	20.00%	0.720	17.280	6.16	6.16	4.44	106.48	19.43	1.29	30.81	75%
YYT0040 (as applied with TAF 3002)*	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAF3002)*	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
TUW2200 Primer	13.40	23.50%	0%	23.50%	0%	62.20%	0.510	12.240	3.15	3.15	1.61	38.54	7.03	5.72	5.06	75%
YYT0040 (as applied with TUW2200)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.65	75%
Booth 6A																
TAF3002 Satin Topcoat*	7.80	79.00%	0%	79.00%	0%	20.00%	0.720	17.280	6.16	6.16	4.44	106.48	19.43	1.29	30.81	75%
YYT0040 (as applied with TAF 3002)*	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAF3002)*	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
TUW2200 Primer	13.40	23.50%	0%	23.50%	0%	62.20%	0.510	12.240	3.15	3.15	1.61	38.54	7.03	5.72	5.06	75%
YYT0040 (as applied with TUW2200)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.65	75%
Booth 7																
TUW2200 Primer	13.40	23.50%	0%	23.50%	0%	62.20%	0.459	11.016	3.15	3.15	1.45	34.69	6.33	5.15	5.06	75%
YYT0040 (as applied with TUW2200)	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1300 (as applied with TUW2200)	8.01	72.88%	0.00%	72.88%	0.00%	22.76%	0.183	4.392	5.84	5.84	1.07	25.64	4.68	0.44	25.65	75%
TAF3002 Satin Topcoat*	7.80	79.00%	0%	79.00%	0%	20.00%	0.648	15.552	6.16	6.16	3.99	95.83	17.49	1.16	30.81	75%
YYT0040 (as applied with TAF3002)*	6.78	100.00%	0%	100.00%	0%	0.00%	0.086	2.064	6.78	6.78	0.58	13.99	2.55	0.00	0.00	75%
CXC1100 (as applied with TAF3002)*	8.43	48.00%	0.00%	48.00%	0.00%	46.68%	0.046	1.104	4.05	4.05	0.19	4.47	0.82	0.22	8.67	75%
Booth 8																
NGC0162 Wipe Stain*	7.39	89.53%	0%	89.53%	0%	6.02%	0.375	9.000	6.62	6.62	2.48	59.55	10.87	0.32	109.90	75%
Booth 9																
ELAC50030, ELAC50020, ELAC50010*	10.00	72.00%	65.00%	7.00%	67.60%	31.00%	1.10	26.400	2.16	0.70	0.77	18.48	3.37	3.37	2.26	75%
											Totals		**144.78**	**33.91**		

*Coating used in worst case scenario
TUW2200 Primer is mixed with YYT0040 Thinner and CXC1300 Catalyst.
TAF3002 Satin Topcoat is mixed with YYT0040 Thinner and CXC1100 Catalyst.

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Gallons of Material (gallons/hr) = Gallons Used (gallons/week) x Operating Hours (hours per week)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Surface Coating Operations for HAPs

Material	Density (lb/gal)	Gallons of Material (gal/hr)	Gallons of Material (gal/day)	Weight % Xylene	Weight % Toluene	Weight % Ethyl Benzene	Weight % Formaldehyde	PTE Xylene (ton/yr)	PTE Toluene (ton/yr)	PTE Ethyl Benzene (ton/yr)	PTE Formaldehyde (ton/yr)	Total HAPs (ton/yr)
Booth 1												
NGC0162 Wipe Stain*	No HAPs	-	-	-	-	-	-	-	-	-	-	-
VDS1052*	No HAPs	-	-	-	-	-	-	-	-	-	-	-
Booth 2												
TUW2200 Primer*	13.40	0.292	7.008	10%	0%	0%	0.000%	1.71	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	2.63	0.00	0.00	0.00	
VWS 0912 Glaze Base	No HAPs	-	-	-	-	-	-	-	-	-	-	4.34
NGC0162 Wipe Stain	No HAPs	-	-	-	-	-	-	-	-	-	-	
TAS3010 Satin Topcoat	7.90	0.413	9.912	10%	0%	0%	0%	1.41	0.00	0.00	0.00	
YYT0040 (as applied with TAS3010)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TAS3010)	No HAPs	-	-	-	-	-	-	-	-	-	-	
Booth 3												
TUW2200 Primer*	13.40	0.292	7.008	10%	0%	0%	0.000%	1.71	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	1.71	0.00	0.00	0.00	3.43
TAF3002 Satin Topcoat	7.80	0.664	15.936	10%	0%	0%	0%	2.25	0.00	0.00	0.00	
YYT0040 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	
Booth 4												
TAF3002 Satin Topcoat	7.80	0.089	2.136	10%	0%	0%	0%	0.30	0.00	0.00	0.00	
YYT0040 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	3.00
TUW2200 Primer*	13.40	0.063	1.512	10%	0%	0%	0.000%	0.37	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	2.63	0.00	0.00	0.00	
Booth 5												
VWS0912 Glaze Base	No HAPs	-	-	-	-	-	-	-	-	-	-	-
Booth 6												
TAF3002 Satin Topcoat	7.80	0.720	17.280	10%	0%	0%	0%	2.44	0.00	0.00	0.00	
YYT0040 (as applied with TAF 3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	5.62
TUW2200 Primer *	13.40	0.510	12.240	10%	0%	0%	0.000%	2.99	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	2.63	0.00	0.00	0.00	
Booth 6A												
TAF3002 Satin Topcoat	7.80	0.720	17.280	10%	0%	0%	0%	2.44	0.00	0.00	0.00	
YYT0040 (as applied with TAF 3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TAF3002)	No HAPs	-	-	-	-	-	-	-	-	-	-	5.62
TUW2200 Primer*	13.40	0.510	12.240	10%	0%	0%	0.000%	2.99	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	2.63	0.00	0.00	0.00	
Booth 7												
TUW2200 Primer*	13.40	0.459	11.016	10%	0%	0%	0.000%	2.69	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)*	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1300 (as applied with TUW2200)*	8.43	0.183	4.392	39%	0%	0%	0%	2.63	0.00	0.00	0.00	5.32
TAF3002 Satin Topcoat	7.80	0.648	15.552	10%	0%	0%	0%	2.19	0.00	0.00	0.00	
YYT0040 (as applied with TUW2200)	No HAPs	-	-	-	-	-	-	-	-	-	-	
CXC1100 (as applied with TUW2200)	No HAPs	-	-	-	-	-	-	-	-	-	-	
Booth 8												
NGC0162 Wipe Stain	No HAPs	-	-	-	-	-	-	-	-	-	-	-
Booth 9												
ELAC50030, ELAC50020, ELAC50010*	10.00	1.100	26.400	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
							"Worst Case" Total HAPs					
							"Worst Case" Individual HAPs	**27.32**	**0.00**	**0.00**	**0.00**	**27.32**

*Coating included in worst case scenario
TUW2200 Primer is mixed with YYT0040 Thinner and CXC1300 Catalyst.
TAF3002 Satin Topcoat is mixed with YYT0040 Thinner and CXC1100 Catalyst.
METHODOLOGY
HAP emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Particulate - Woodworking Operation

Company Name: **Kemp Cabinets, LLC**
Source Address: **3590 N 700 E, Montgomery, Indiana 47558**
Permit Number: **F027-47910-00002**
Reviewer: **Luda Lang**

Control Efficiency =	98%
Hourly Wood Waste Collected (lb/hr) =	129
Annual Wood Waste Collected (ton/yr) =	565.02
Hourly Wood Waste Created (lb/hr) =	131.63
Annual Wood Waste Created (ton/yr) =	594.76

	PM	PM10	PM2.5
% Wood Waste Produced*	30%	6%	2%
Hourly Emissions Before Controls (lb/hr)	39.49	7.90	2.63
Hourly Emissions After Controls (lb/hr)	0.79	0.16	0.05
Annual Emissions Before Controls (ton/yr)	178.43	35.69	11.90
Annual Emissions After Controls (ton/yr)	3.57	0.71	0.24

Methodology
Annual Wood Waste Collected (ton/yr) = Hourly Wood Waste Collected (lb/hr) * 8760 hr/yr * 1 ton/2000 lb

Hourly Wood Waste Produced (lb/hr) = Hourly Wood Waste Collected (lb/hr) / Control Efficiency
Annual Wood Waste Produced (ton/yr) = Annual Wood Waste Collected (ton/yr) / Control Efficiency

Hourly Emissions Before Controls (lb/hr) = Hourly Wood Waste Produced (lb/hr) * % Wood Waste Created
Hourly Emissions After Controls (lb/hr) = Hourly Wood Waste Produced (lb/hr) * % Wood Waste Created * (1 - Control Effeciency)
Annual Emissions Before Controls (lb/hr) = Annual Wood Waste Produced (ton/yr) * % Wood Waste Created
Annual Emissions After Controls (ton/yr) = Annual Wood Waste Produced (ton/yr) * % Wood Waste Created * (1 - Control Efficiency)

* The source has estimated that 7% - 8% of wood waste produced at the plant is PM-sized or smaller, with the rest being larger. However, to be conservative, IDEM OAQ has based its emission factors on those of the NCDENR (Woodworking Emissions Calculator Revision C July 2007).

Note:
In October of 1993 a Final Order Granting Summary Judgment was signed by an Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter from woodworking operations were calculated after consideration of the controls for purposes of determining permit level and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) applicability. However, for purposes of determining the applicability of Prevention of Significant Deterioration (PSD), potential particulate matter emissions from the woodworking operations were calculated before consideration of the controls.

Appendix A: Emission Calculations
VOC, HAP - Clean-up Solvent Use

Company Name: Kemp Cabinets, LLC
Source Address: 3590 N 700 E, Montgomery, Indiana 47558
Permit Number: F027-47910-00002
Reviewer: Luda Lang

Solvent Used	Solvent Density (lbs/gal)	Maximum Usage* (gal/yr)	Maximum Usage (lb/yr)	Weight % VOC	Weight % Methanol	Weight % Toluene	Potential VOC Emissions (tons/yr)	Potential Methanol Emissions (tons/yr)	Potential Toluene Emissions (tons/yr)	Total Potential HAP Emissions (tons/yr)
#10 Thinner (Superior Oil Company)	6.85	38.4	262.97	80%	40%	40%	0.105	0.053	0.053	0.105
S-5034 (Superior Oil Company)	7.45	240	1787.35	100%	-	-	0.894	-	-	-
S-2012** (Superior Oil Company)	6.68	75.60	505.01	30%	-	-	0.076	-	-	-
Acetone***	-	176.4	-	-	-	-	-	-	-	-
				Potential VOC Emissions (tons/yr)			**1.075**			
				Potential HAP Emissions (tons/yr)				**0.053**	**0.053**	**0.105**

* Maximum usage has been calculated for #10 Thinner, S-5034, and acetone as 120% of the quantity of solvent purchased in 2013.

** Kemp Cabinets began using S-2012 in January, 2014. Maximum usage for this product was calculated based on the average daily use as of March, 2014. The formula used for Maximum Usage of S-2012 was Maximum Usage = average daily usage * 21 operating days/month * 12 months/year * 120%. The factor of 21 operating days per month was chosen because it is the assumption used by the source in similar calculations.

*** Acetone has been determined to have negligible photochemical reactivity and is therefore an exempt VOC pursuant to 40 CFR 51.100 (s).

METHODOLOGY
Density (lb/gal) of #10 Thinner and S-5034 = Specific Gravity of product * density of water. Specific gravity from MSDS provided by source is assumed to be at 25°C, with water = 1. Density of water at 25°C is assumed to be 8.321 lb/gal.
VOC Emissions (tpy) = Material Usage (lbs/yr) * Weight % VOC * 1 ton/2000 lbs
HAP Emissions (tpy) = Material Usage (lbs/yr) * Weight % HAP * 1 ton/2000 lbs

Appendix A: Emissions Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: > 10 MMBtu/hr and < 100 MMBtu/hr)

Company Name: **Kemp Cabinets, LLC**
Source Address: **3590 N 700 E, Montgomery, Indiana 47558**
Permit Number: **F027-47910-00002**
Reviewer: **Luda Lang**

Unit	Heat Input Capacity MMBtu/hr
Catalytic Dryer	0.04
Booth 6 Heater	0.3
Boiler	2.0
Air Make-Up Unit	3.465
Air Make-Up Unit	3.465
TOTAL	**9.27**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year			
		SO2 Emission factor = 0.10 x S		
9.27	887.5	S = Sulfur Content =	0.50	grains/100ft^3

	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.2	0.7	0.7	0.1 *(0.10S)*	13.0	1.0 **TOC value	7.5
Potential Emission in tons/yr	0.09	0.31	0.31	0.02	5.77	0.44	3.33

*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.

** No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu
Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)
Propane Emission Factors shown. Please see AP-42 for butane.
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emission Calculations
Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)
Maximum Input Rate (>4.2 MMBtu/hr)

Company Name: **Kemp Cabinets, LLC**
Source Address: **3590 N 700 E, Montgomery, Indiana 47558**
Permit Number: **F027-47910-00002**
Reviewer: **Luda Lang**

Note: Only one (1) generator may be operated at a time. Diesel #4 is the primary generator used at the plant.
Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	761.0
Maximum Hours Operated per Year	8760
Potential Throughput (hp-hr/yr)	6,666,360
Sulfur Content (S) of Fuel (% by weight)	0.500

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	3.89E-04	4.05E-03 *(.00809S)*	2.40E-02 **see below	7.05E-04	5.50E-03
Potential Emission in tons/yr	2.33	1.34	1.30	13.48	80.00	2.35	18.33

*PM emission factor is from AP-42 Table 3.4-1. The PM10 and PM2.5 emission factors for are from AP-42 Table 3.4-2. The PM10 emission factor is the sum of filterable PM10 and condensable particulate. The PM2.5 emission factor is the sum of filterable particulate less than 3 um and condensable particulate. Emission factors in lb/hp-hr were calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).
**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

Hazardous Air Pollutants (HAPs)

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06
Potential Emission in tons/yr	1.81E-02	6.56E-03	4.50E-03	1.84E-03	5.88E-04	1.84E-04	4.95E-03

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).

Potential Emission of Total HAPs (tons/yr)	**3.67E-02**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

Appendix A: Emission Calculations
Large Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (>600 HP)
Maximum Input Rate (>4.2 MMBtu/hr)

Company Name: **Kemp Cabinets, LLC**
Source Address: **3590 N 700 E, Montgomery, Indiana 47558**
Permit Number: **F027-47910-00002**
Reviewer: **Luda Lang**

Note: Only one (1) generator may be operated at a time. Diesel #2 is a back-up generator used at the plant.
Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	768.0
Maximum Hours Operated per Year	8760
Potential Throughput (hp-hr/yr)	6,727,680
Sulfur Content (S) of Fuel (% by weight)	0.500

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	3.89E-04	4.05E-03 *(.00809S)*	2.40E-02 **see below	7.05E-04	5.50E-03
Potential Emission in tons/yr	2.35	1.35	1.31	13.61	80.73	2.37	18.50

*PM emission factor is from AP-42 Table 3.4-1. The PM10 and PM2.5 emission factors for are from AP-42 Table 3.4-2. The PM10 emission factor is the sum of filterable PM10 and condensable particulate. The PM2.5 emission factor is the sum of filterable particulate less than 3 um and condensable particulate. Emission factors in lb/hp-hr were calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).
**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

Hazardous Air Pollutants (HAPs)

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06
Potential Emission in tons/yr	1.83E-02	6.62E-03	4.54E-03	1.86E-03	5.93E-04	1.86E-04	4.99E-03

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Tables 3.3-1 and 3.4-1).

Potential Emission of Total HAPs (tons/yr)	**3.71E-02**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

Appendix A: Emission Calculations
Reciprocating Internal Combustion Engines - Diesel Fuel
Output Rating (<=600 HP)
Maximum Input Rate (<=4.2 MMBtu/hr)
Emergency Diesel Generator #3

Company Name: **Kemp Cabinets, LLC**
Source Address: **3590 N 700 E, Montgomery, Indiana 47558**
Permit Number: **F027-47910-00002**
Reviewer: **Luda Lang**

Note: Only one (1) generator may be operated at a time. Diesel #3 is a back-up emergency generator used at the plant.

Emissions calculated based on output rating (hp)

Output Horsepower Rating (hp)	98.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	49,000

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	0.05	0.05	0.05	0.05	0.76	0.06	0.16

*PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

	Pollutant							
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06
Potential Emission in tons/yr	1.60E-04	7.01E-05	4.89E-05	6.71E-06	2.02E-04	1.32E-04	1.59E-05	2.88E-05

***PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)
****Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Potential Emission of Total HAPs (tons/yr)	**6.64E-04**	
Single Worst HAP	**2.02E-04**	**Formaldehyde**

Methodology
Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.
Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]
Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Kemp Cabinets, LLC
Source Address: 3590 N 700 E, Montgomery, Indiana 47558
Permit Number: F027-47910-00002
Reviewer: Luda Lang

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	0.2	1.0	0.2	25.0	5.5	200	0.038	0.008	3.0
Vehicle (leaving plant) (one-way trip)	0.2	1.0	0.2	1.0	0.2	200	0.038	0.008	3.0
		Totals	**0.4**		**5.7**			**0.017**	**6.1**

Average Vehicle Weight Per Trip = 13.0 tons/trip
Average Miles Per Trip = 0.04 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM_{10}	$PM_{2.5}$	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	13.0	13.0	13.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM_{10}	$PM_{2.5}$	
Unmitigated Emission Factor, Ef =	1.190	0.238	0.0584	lb/mile
Mitigated Emission Factor, Eext =	1.088	0.218	0.0534	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM_{10} (tons/yr)	Unmitigated PTE of $PM_{2.5}$ (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM_{10} (tons/yr)	Mitigated PTE of $PM_{2.5}$ (tons/yr)
Vehicle (entering plant) (one-way trip)	1.8E-03	3.6E-04	8.9E-05	1.7E-03	3.3E-04	8.1E-05
Vehicle (leaving plant) (one-way trip)	1.8E-03	3.6E-04	8.9E-05	1.7E-03	3.3E-04	8.1E-05
Totals	**3.6E-03**	**7.2E-04**	**1.8E-04**	**3.3E-03**	**6.6E-04**	**1.6E-04**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM_{10} = Particulate Matter (<10 um)
$PM_{2.5}$ = Particle Matter (<2.5 um)
PTE = Potential to Emit

From: Lang, Liudmyla A
To: Martin Knepp
Subject: RE: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC
Date: Monday, June 17, 2024 10:21:00 AM
Attachments: image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.png
image010.png
image011.png
image012.png
image013.png
image014.png

Thank you for the prompt response, I will make the changes you requested and will send the draft documents for your review soon.

Luda

Indiana Department of
Environmental Management
Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

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From: Martin Knepp <mart@kempcabinets.com>
Sent: Monday, June 17, 2024 9:49 AM
To: Lang, Liudmyla A <LLang@idem.IN.gov>
Subject: Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Good Morning,
Yes,everything is run through 1 bag house but I do want to note that several of the saws that are listed are not used full time.
Also as I look at this list there are some changes that need to be made. The #8 one toe kick saw needs to be eliminated no longer in use.
On #19 2 up right panel saws needs to be changed to 1 up right panel saw.

Thanks,

Martin Knepp

KEMP *Hand Crafted Cabinetry*
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325

Fax # 812-486-2405

On 6/17/2024 8:12 AM, Lang, Liudmyla A wrote:

Good morning:

After reviewing the proposed draft permit, my section chief has a follow-up question. Is the one baghouse controlling all of the following units?

(1)	*One (1) molding machine*
(2)	*One (1) straight line rip saw*
(3)	*One (1) edge bander*
(4)	*One (1) dovetailer*
(5)	*One (1) dado machine*
(6)	*One (1) beam saw*
(7)	*Five (5) table saws*
(8)	*One (1) toe kick saw*
(9)	*Two (2) jointers*
(10)	*One (1) planer*
(11)	*One (1) wide belt sander*
(12)	*One (1) fin sander*
(13)	*Two (2) upcut saws*
(14)	*Two (2) CNC routers*
(15)	*One (1) drawer sander*
(16)	*One (1) band saw*
(17)	*Two (2) drill presses*
(18)	*Seven (7) miter saws*
(19)	*Two (2) upright panel saws*
(20)	*One (1) wire brush machine*
(21)	*One (1) design roller press*
(22)	*One (1) shelf hole machine*
(23)	*Two (2) shapers*
(24)	*Two (2) blum hinge machines*

Thanks,
Luda

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From: Lang, Liudmyla A
Sent: Tuesday, June 11, 2024 3:16 PM
To: Martin Knepp <mart@kempcabinets.com>
Subject: RE: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Sure! I will let the admin know.

Thank you

Indiana Department of
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• (317) 233-0863 • LLang@idem.IN.gov

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From: Martin Knepp <mart@kempcabinets.com>
Sent: Tuesday, June 11, 2024 3:08 PM
To: Lang, Liudmyla A <LLang@idem.IN.gov>
Subject: Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Use your new calculations as I am certain that will be close to what we will use if we stay with a water base coating. When the finish room decides which one they will be using I will let you know.
At the present time they are spraying the coating that I turned in to you.
Also I would prefer a paper copy of the draft and the final permit.

Thanks,

Martin Knepp

KEMP *Hand Crafted Cabinetry*
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405

On 6/11/2024 2:41 PM, Lang, Liudmyla A wrote:

Mr. Knepp:

1. Thank you for your response. Do you think we can we assume that booth 9's coating (in the worst-case scenario) will contain maximum 7% VOC and 28% solids or should I change back and use the original calculations for booth 9 with no changes?

2. I will add the quarterly baghouse inspection requirement back to the Permit.

Luda

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From: Martin Knepp <mart@kempcabinets.com>
Sent: Tuesday, June 11, 2024 1:36 PM
To: Lang, Liudmyla A <LLang@idem.IN.gov>
Subject: Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Good Afternoon,
Sorry for not responding before now. I discovered about a day after I sent the application in that the finish that I turned in is not the one they are going to be using permanently so I was trying to figure out what they are going to be using .
As of today we are not sure what coating is going to be used in booth 9 long term, but the finish room tells me it will be similar to what I did turn in. They will be trying small amounts of maybe 2 or 3 different water base coatings in the next 6 to 8 weeks
to see which works best. On the bag house I do a daily visible inspection and a quarterly bag inspection on the bag house and have these inspection forms on file.
I hope this answers your questions if not feel free to contact me.

Thanks,

Martin Knepp

KEMP Hand Crafted Cabinetry
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405

On 6/11/2024 11:51 AM, Lang, Liudmyla A wrote:

Good morning,

Please find the updated calculations. With the help of Google, I found the content of VOCs and solids.

I do have a question - during SPR #36630, the parametric monitoring (*quarterly baghouse inspections)* for the woodworking control system was removed without explanation. To comply with the 6-3 rules and to ensure TV non-applicability, the permit should include at least 1 parameter (daily visible emission notations, inspections, or pressure drop monitoring). Please let me know which one works best for the source. Could you please tell me a bit more about what kind of dust control system is that, like a baghouse or cyclone?

Sincerely,

Luda

Indiana Department of Environmental Management
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• (317) 233-0863 • LLang@idem.IN.gov

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From: Martin Knepp <mart@kempcabinets.com>
Sent: Thursday, June 6, 2024 8:55 AM
To: Lang, Liudmyla A <LLang@idem.IN.gov>
Subject: Re: IDEM OAQ Contact Information for Application No. 027-47910-00002 for Kemp Cabinets LLC

Good Morning,
I will try to supply the information you need. On the calculations for the new coating as you can note on the MSDS

there are no VOCS or reportable haps in these coatings, it is a water base coating so is there any thing to report on this.
On the public notice requirements I am sorry that I missed section H and the application packet will be at the library today. I will include part H with this e-mail.
The SIC codes are correct. If you have any questions feel free to contact me at any time between 6:00 am to 4:00 pm.

Thanks,

Martin Knepp

KEMP **Hand Crafted Cabinetry**
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405

On 6/5/2024 12:08 PM, Lang, Liudmyla A wrote:

> Dear Delbert Kemp, Martin Knepp:
>
> I am the permit writer assigned to the current application No. 027-47910-00002 for Kemp Cabinets LLC. I would like to extend to you my contact information so that we may have continued communication until your new permit is issued. Please keep this information at hand. It is common for questions to arise, and oftentimes, further clarification is needed during the permit review process.
>
> Based on my preliminary review of the application, please see the following:
>
> 1. *To expedite the review process, please e-mail me the electronic copy of your updated calculations reflecting the new coatings (preferably in Excel format). If possible, let me know when the source plans on switching to the new coating.*
>
> 2. *Based on my preliminary review of the application, the permit approval that is required for this application will be subject to the public notice requirements of 326 IAC 2-1.1-6. As the permit applicant, you are required to place a copy of the permit application packet for public review at a public library in the county where the source is located (preferably at the local public library nearest to the source in the county where the source is located) within ten (10) days of the submission of the*

application. In the GSD-01 Form, Part H, the date that the application packet was filed with the local library was not provided. Please confirm whether (or not) a copy of the application packet was placed at the local library and the date.

3. *Current permit includes the following SIC codes: 2434 (Wood Kitchen Cabinets)4213 (Trucking, Except Local). Please let me know if the SIC codes are correct, or if they need to be changed.*

IDEM, OAQ will notify you when a draft permit has been submitted for public notice and/or when a final permit has been issued. As part of the notification, IDEM, OAQ will provide information on how to access the draft and/or final permit electronically on IDEM's website. If Kemp Cabinets LLC would prefer to receive paper copies of the entire draft and/or final permit, please let me know prior to the end of the applicant review period. If you prefer to receive paper copies of the entire permit, IDEM, OAQ will mail a paper copy of the draft permit and/or original signed final permit to the source contact. If you do not request to receive paper copies of the entire permit, IDEM, OAQ will only mail a paper copy of the original signed final permit signature page to the source contact.

Please feel free to contact me at any time if you have questions, concerns, or important information regarding your permit. For your convenience, my section chief (Madhurima Moulik) may be contacted at 317-233-6663 or MMoulik@idem.IN.gov.

Thank you in advance for your time and assistance. I look forward to working with you.

Sincerely,
Luda

Indiana Department of Environmental Management

Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

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From:	Lang, Liudmyla A
To:	Martin Knepp
Subject:	Applicant Review for FESOP Renewal No. F027-47910-00002 for Kemp Cabinets, LLC
Date:	Tuesday, June 18, 2024 11:51:00 AM
Attachments:	image003.png image004.png image005.png image006.png image007.png image008.png 47910tsdAR.docx 47910calcsAR.xlsx 47910perAR.docx image009.png
Importance:	High

Dear Delbert Kemp, Martin Knepp:

Attached is the draft FESOP Renewal and supporting documents for review. As a courtesy, this draft is being provided to you for an opportunity to review and provide comments prior to posting the public notice on IDEM's website. This supplemental step of providing you the draft permit does not take away your legal right to provide comments during the thirty (30) day comment period.

The time clock for FESOP Renewal No.: F027-47910-00002 will be stopped during your review until you either provide comments or indicate that you do not have any comments. Due to permit accountability and IDEM's intention to public notice the permit in a timely manner, you are being allotted two (2) weeks from today to provide comments in writing, email is sufficient. If you have any conflicts or special circumstances that would impede your review process during the time allotted, please notify me directly at the email address or phone number listed below as soon as possible. If you have not responded on or before *July 3, 2024*, IDEM will assume that you have no comments pertaining to this draft and all files will be forwarded for public notice.

During this review period, I will be available to address your concerns, answer any questions that you may have, or make necessary revisions to this draft.

Please send a reply email to me immediately confirming that you have received this draft version of the permit for review and that you are able to access these files in their current format.

The following documents are not included in this review but will be included during the public notice period:

Public Notice Letter
Attachment A: 40 CFR 60, Subpart IIII
Attachment B: 40 CFR 63, Subpart ZZZZ
Attachment C: 40 CFR 63, Subpart CCCCCC

Pursuant to 326 IAC 2-1.1-7, the fee for this permitting action is expected to be $0.
Please note: This is not a bill. This represents the anticipated fee and is subject to change if additional review is required or the permit level changes for some reason (e.g. an additional NESHAP review is required). You will receive a final bill from the OAQ Permits Administration and Support Section.

Sincerely,
Luda

Indiana Department of
Environmental Management

Liudmyla (Luda) Lang
Senior Environmental Manager
• (317) 233-0863 • LLang@idem.IN.gov

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From: Martin Knepp
To: Lang, Liudmyla A
Subject: Re: Applicant Review for FESOP Renewal No. F027-47910-00002 for Kemp Cabinets, LLC
Date: Tuesday, June 18, 2024 1:11:05 PM
Attachments: ATT00001.png
ATT00002.png
ATT00003.png
ATT00004.png
ATT00005.png
ATT00006.png
ATT00007.png

Good Afternoon,
I got it and I can access your files and I will be reviewing it later this week or maybe first of next week.

Thanks,

Martin Knepp
KEMP *Hand Crafted Cabinetry*
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405

On 6/18/2024 11:51 AM, Lang, Liudmyla A wrote:

> Dear Delbert Kemp, Martin Knepp:
>
> Attached is the draft FESOP Renewal and supporting documents for review. As a courtesy, this draft is being provided to you for an opportunity to review and provide comments prior to posting the public notice on IDEM's website. This supplemental step of providing you the draft permit does not take away your legal right to provide comments during the thirty (30) day comment period.
>
> The time clock for FESOP Renewal No.: F027-47910-00002 will be stopped during your review until you either provide comments or indicate that you do not have any comments. Due to permit accountability and IDEM's intention to public notice the permit in a timely manner, you are being allotted two (2) weeks from today to provide comments in writing, email is sufficient. If you have any conflicts or special circumstances that would impede your review process during the time allotted, please notify me directly at the email address or phone number listed below as soon as possible. If you have not responded on or before *July 3, 2024*, IDEM will assume that you have no comments pertaining to this draft and all files will be forwarded for public notice.
>
> During this review period, I will be available to address your concerns, answer any questions that you may have, or make necessary revisions to this draft.
>
> Please send a reply email to me immediately confirming that you have received this draft version of the permit for review and that you are able to access these files in their current format.

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Public Notice Letter
Attachment A: 40 CFR 60, Subpart IIII
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Attachment C: 40 CFR 63, Subpart CCCCCC

Pursuant to 326 IAC 2-1.1-7, the fee for this permitting action is expected to be $0.
Please note: This is not a bill. This represents the anticipated fee and is subject to change if additional review is required or the permit level changes for some reason (e.g. an additional NESHAP review is required). You will receive a final bill from the OAQ Permits Administration and Support Section.

Sincerely,
Luda

Indiana Department of
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From: Martin Knepp
To: Lang, Liudmyla A
Subject: Permit Renewal
Date: Tuesday, June 25, 2024 7:16:48 AM

Good Morning,
I have reviewed Kemp's FESOP draft permit and every thing looks good to me.
--

Thanks,

Martin Knepp
KEMP *Hand Crafted Cabinetry*
3590 N 700 E
Montgomery, IN 47558
Ph # 812-486-3325
Fax # 812-486-2405