

Session 49 Common Permitting Mistakes and How to Avoid Them

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Topics

- Evaluating need for permit
- Preapplication meeting
- Compiling permit application data
- Preparing and submitting application
- Interaction with the agency staff during application processing
- Draft permit review and submission of comments
- Obtaining permit and setting up permit management system

What Permits Do

- Authorize construction of an air emissions source
- Give permission to operate
- Define emission limits
- Define operating conditions
- Specify recordkeeping and reporting requirements
- State monitoring requirements
- Define emission testing requirements

Evaluate Need for Permit

- Review operational needs and estimate pollutant-specific emissions
- Can emissions/coating usage rates be kept below permitting threshold?
- Balance permit avoidance with long-term business needs
- Define type of permit necessary

Preapplication Meeting

- Business needs and source specifics
- Discuss schedule
- Outline any unique project characteristics
- Identify any special data needs
- Identify the agency permit engineer
- Identify company permit contact

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Compiling Application Data

- Understand current and future business needs
- Define operating rates and schedule
- Define representative coatings and compositions
- Translate composition data for application
- Conduct what-if analysis to establish application data limits
- Conduct regulatory review to identify applicable emission limits and standards

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Compiling Application Data

- Review Material Safety Data Sheets and Environmental Data Sheets (MSDS/EDS) for compositions and properties
- Percent volatiles, VOC and OC
- As supplied, as applied
- Thinners and cleanup materials
- Review current data sources: coating logs, purchasing and inventory records, line speed, film thickness, etc.

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Permit Application Guidelines

- Eliminate confidential information
- Convert P&ID into simple block diagrams
- Use generic names for chemicals
- Describe process in general terms
- Expect all things in the application and the permit to be legally enforceable and public

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Preparing and Submitting Application

- Follow technical and procedural submission instructions
- Compile supporting documents (e.g. maps, process flow diagrams, MSDS)
- Document emission calculations and their bases
- Check for consistency with other permit documents and/or emissions reports
- Obtain required signatures
- Enclose permit fee, if required

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Interaction During Permit Processing

- Know your permit engineer
- Make initial contact upon submission of the application to gauge the process
- Provide additional data if requested
- Ask to review informal draft
- Face-to-face meeting, if necessary

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Review Draft Permit Documents

- Review emissions limits
- Ensure that the operating data are correct
- Review recordkeeping and reporting requirements to ensure that in-house systems are capable of generating the required data
- Review monitoring and emission testing requirements
- Spot any inconsistencies/typographical errors
- Submit formal letter with comments

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Permit Contents

- General conditions
- Specific conditions
- Emission limits
- Monitoring requirements
- Recordkeeping and reporting requirements
- Compliance verification requirements

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Ensuring Ongoing Compliance

- No substitute for line-by-line analysis of permit requirements
- Know what general requirements exist outside of your permits
- Insure operation can deliver 100% compliance
- Insure monitoring and recordkeeping requirements can be met
- Document your emissions basis

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Obtain Permit and Set up Permit Management System

- Conduct line by line review of the final permit and answer "how do I comply?"
- Meet with operational staff and highlight key recordkeeping, monitoring, and reporting requirements
- Set up recordkeeping systems
- Prepare a calendar of key reporting dates
- Set up computer systems

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Recordkeeping

- Anticipate what recordkeeping will be required
- Are recordkeeping requirements attainable by operating departments?
- Establish a file retention procedure
- Reinforce with operating departments who is responsible for delivering compliance with recordkeeping requirements.
- Will records be written or electronic?

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Reporting

- Quarterly, semi-annual, and annual reports
- Deviations and corrective actions
- Malfunction, breakdown, and special events
- Deadlines
- Agencies receiving reports
- Electronic reporting/hard copy reports

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Operating Procedures

- Review permit with operations to insure
 - They can deliver what is required by the permit
 - Operating flexibility is included
- Discuss requirements for
 - Monitoring frequency and parameters
 - Start-up and shutdown
 - System washout and change-over
 - Maintenance periods
 - Equipment malfunctions

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(Source: Ohio Permit Guide)

Keys to Successful Permitting

- Plan ahead.
- Meet with your Ohio EPA district office before you submit your applications.
- Talk with the district/local air agency about your time frames for the project.
- File a complete application.
- After submitting your application, talk with your district office or local air agency to monitor the progress of your permit application review.

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(Source: Ohio Permit Guide)

Keys to Successful Permitting

- Respond promptly to information requests from the district office or local air agency.
- Try to avoid making significant changes to the application during the permit review process, where possible.
- **DO NOT** begin any construction activities until you get your permit.
- Once you get it, read and make sure you understand your permit.
- Comply with the terms and conditions of your permit.

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Indiana Permit Resource

accessindiana Agency Listing Policies Text Only Contact Webmaster Help Search R.gwr GO

The accessIndiana Web site and online services will be unavailable from 7:00pm 7/16/2005 to 9:00am 7/17/2005 for some reasons.

Permit Guide
The "Plain English" Guide to Environmental Permitting

Table of Contents

- Air
- Land Development
- Waste
- Water
- Non-IDEM
- Specific Topics
- Other Information

Search IDEM's Guides

Search IDEM Guides

Air

IDEM > Guides > IDEM Permit Guides > Air

Air Emissions Related Issues

Air Permitting

- Air Emissions: Determining Whether a Source Should Be Regulated
- Construction of Entirely New Sources (New Source Construction Permit for emissions units and pollution control equipment)
- Air Operating Permits
- Construction Approval for (changes to) Existing Sources
- SSOA Permit Types

Other Regulatory Requirements

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Ohio Permit Guide



Guide to Environmental Permitting in Ohio

- <http://www.epa.state.oh.us/ocapp/sb/publications/permitguide.pdf>

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Kentucky Permit Resource

A screenshot of the KBEAP website. At the top right, it lists the program's location: 'Kentucky Business Environmental Assistance Program, 227 Gatton College of Business & Economics, Lexington, KY 40506-0034, Phone: (800) 562-2327, Fax: (859) 323-1907'. The main content area is titled 'General Resources' and features a section for 'Five Easy Steps to Air Compliance'. It explains that the program has broken down Kentucky's air quality permitting requirements into five easy steps. 'STEP ONE' is 'read your permit in its entirety, making notes of any emission points or units, emission limitations, applicable regulations, testing and monitoring requirements, permit expiration dates, general permit conditions, and discrepancies between the permit and your operations.' 'STEP TWO' is 'record-keeping procedures', stating that facilities must maintain all records for five years and listing some records that may be required under a permit.

KBEAP Home
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What We Do
Featured Clients
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General Resources
Emission Calculations
Permitting Resources
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General Resources
Five Easy Steps to Air Compliance
If your Kentucky facility has an air quality permit, then you probably already know that it can be a very daunting task to comply with your permit conditions. The Kentucky Business Environmental Assistance Program (KBEAP) has broken down Kentucky's air quality permitting requirements into five easy steps.
STEP ONE
One of the easiest ways to comply with your air quality permit is to simply **read** your permit in its entirety, making notes of any emission points or units, emission limitations, applicable regulations, testing and monitoring requirements, permit expiration dates, general permit conditions, and discrepancies between the permit and your operations.
STEP TWO
Second, all air quality permits require some type of **record-keeping** procedures. Generally, facilities must maintain all records for five years. A few records that may be required under your facility's air quality permit include:

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Top Ten Mistakes

10. Failing to follow technical and procedural submission instructions
9. Including trade names, actual usage/production rates, and actual operating hours
8. Basing the application on limited number of coating materials
7. Lack of interaction with agency staff during the application processing phase

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Top Ten Mistakes

6. Promising optimistic permit schedule to management
5. Not responding to inquiries for additional information by the permit agency staff
4. Failing to carefully review the permit draft
3. Failing to read your final permit and integrating it into your daily operation
2. Starting construction before the permit is issued
1. Not obtaining the permit

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Database Software Tools

- Microsoft Excel®
 - Extensive calculation capabilities
 - Data management standard
 - Existing data can be brought into a single system
- Microsoft Access®
 - Relational database
 - Extensive data import/export capabilities
 - Macro automation capabilities
- Visual Basic Automation
 - Common platform for Microsoft applications
 - Provides comprehensive automation capabilities

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Microsoft Access [Thinner Properties]

File Edit View Insert Format Records Tools Window Help

Update Thinners

Entry Date: Tuesday, October 27, 1999 Entered by: OPTIM

Thinner Name: JRD Reducer Thinner ID: 11355

Supplier: Dupont

Used in: Commercial Active

Note 1:
 Note 2:

VOC Content, lb/gal	7.3	Coating Density, lb/gal	7.3
OC Density, lb/gal	7.3	OC Content by Volume, %	99.88
Solids by Volume, %	0.14	Solids Content by Weight, %	0.15
Water content by volume, %	0		

HAP	Concentration, %
Cumene	1.00
Ethylbenzene	5.00
Toluene	10.00
Xylene (mixed isomers)	20.00

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Daily VOC As Applied Deviation Report

Shift	Operator	Coating and thinner as applied VOC, lb/gal		Multi-component coating and thinner as applied VOC, lb/gal	
		Limit	lb/gal	Limit	lb/gal
6/00/98	1 999		7.42	4.50	
8/5/98	3 346		5.68	4.50	
10/13/98	3 12				4.91 4.50
10/15/98	3 12				5.80 4.50
10/16/98	3 12				5.29 4.50
11/2/98	3 346		4.60	4.50	
11/10/98	3 346		5.43	4.50	
11/13/98	3 346		5.43	4.50	
11/16/98	3 346		4.77	4.50	
11/24/98	1 402				4.61 4.50
11/30/98	2 893		4.73	4.50	
11/30/98	2 893		4.76	4.50	
12/2/98	1 869		4.78	4.50	
12/2/98	2 893		5.43	4.50	
12/2/98	2 893		4.73	4.50	
12/4/98	1 999				4.61 4.50

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Coating Composition Data (Sorted by Name)

Black Topcoat

Coating ID: 890 Active: Yes Used in: Commercial

Supplier: Dupont

Density, lb/gal: 8.13 OC Density, lb/gal: 7.21

VOC Content, lb/gal: 4.30 Volume Solids Content, %: 40.40

Volume OC Content, %: 59.60 Weight Solids Content, %: 47.11

Volume Water Content, %: 0.00

Hazardous Air Pollutants (HAP) Concentrations

CAS No.	HAP ID	Concentration, %
1330-20-7	Xylene (mixed isomers)	24.00
0100-66-3	Toluene	31.35
0100-41-4	Ethylbenzene	5.00
0078-80-3	Methyl ethyl ketone (2-butanone)	11.85
0100-41-4	Ethylbenzene	0.80
1330-20-7	Xylene (mixed isomers)	6.55

Brown 383 Aliphatic Polyurethane CAR

Coating ID: F8M105 Active: Yes Used in: Military

Supplier: Sherwin Williams

Density, lb/gal: 10.64 OC Density, lb/gal: 7.05

VOC Content, lb/gal: 3.45 Volume Solids Content, %: 50.90

Volume OC Content, %: 49.10 Weight Solids Content, %: 67.50

Volume Water Content, %: 0.00

Hazardous Air Pollutants (HAP) Concentrations

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Coating HAP Data (Sorted by HAP)

HAP ID	CAS No.	Coating ID	Coating Name	Concentration, %
2,4-Toluene diisocyanate	0594-84-9	V62V44	Polane Plus Catalyst	0.80
4,4'-Methylenedianiline	0101-27-9	F10149PB	Part B Adhesive Glue Uraltite	10.00
Cumene	0090-02-8	70055	Chroma One Activator	0.07
		7925	Certari Repair Hardener	0.10
Dibutyl tin dilaurate	0004-74-2	F10149PB	Part B Adhesive Glue Uraltite	50.00
Ethylbenzene	0100-41-4	88726K	Smokley Slick Chromabase	6.00
		99A	Certari Acrylic Enamel	2.07
		99G	Black Topcoat	5.00
		99K	Black Topcoat	0.80
		ALC-200	Part A Techstar	6.00
		88798K	Chromabase Mix	2.89
		89549K	Chromabase Mix	2.77
		75755	Chromadecor Activator	7.00
		86771K	Chromabase	3.08
		CS288A	Certari Mix	4.78
		CS488J	Chroma	2.31
		F0461K	Chromabase Mix	2.52
		89492K	MSA Chromabase	6.00
		F1892K	Chromabase Mix	2.65
		75505	Chromadecor Activator	4.14
		88552K	White Chromabase	5.00
		75505	Chromadecor	4.52
		42470S	Chromagrip or System Dark Gray Sealer	2.84

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Facility 1998 Hazardous Air Pollutant Summary for the Facility (lb/yr)

HAP	CAS No.	Coating	Thinner	Cleanup	MMS component coating	MMS component thinner	Total
2,4-Toluene diisocyanate	0594-04-9				0.21		0.21
4,4-Methylenedianiline	0101-27-9				4.98		4.98
Cumene	0096-02-6	0.01	0.03		0.00	0.01	0.05
Diethyl phthalate	0094-74-2				24.92		24.92
Ethylbenzene	0100-41-4	131.48	3.68	95.31	6.23	0.08	236.78
Glycol ethers	NA	2.37			0.16		2.53
Hexamethylene-1,6-diisocyanate	0622-06-0	47.01			0.00		47.01
Methanol	0067-66-1				1.08		1.08
Methyl ethyl ketone (2-Butanone)	0078-93-3	44.14	49.51	297.55	34.36	0.13	425.71
Methyl isobutyl ketone (Hexane)	0100-10-1	378.27	4.73	124.16	35.38	0.01	542.55
Naphthalene	0091-20-3	14.84			0.02		14.86
Toluene	0106-98-3	374.39	24.75	806.07	23.88	2.32	1231.41
Xylene (mixed isomers)	1330-20-7	906.30	17.30	143.64	28.91	0.31	1096.55
		1899.59	109.19	1464.73	109.16	2.86	3629.43

WRQ Reflection for the Web - QAD

13.6 Product Structure Inquiry 07/14/05

Parent Item/ODM Code: 316246600 E-LUX/MILL/GAS HHT/2CO EA
 As Of: 07/14/05 Levels: Rev:
 PCO Number: ID: Database: Output: page

Level	Component Item	Description	Qty Per	UM	Ph	I	Iss
1	316246600-F8	F-LUX/MILL/GAS HHT/2CO	1.0	EA			
.2	429224	.023 X 34.059 HF 0437	0.761	LB			
.2	4CL217TP	EM-313 TOPCOAT WITH NO A MARSA	0.000563	GA			no
.2	4CL2378T	PROTECTIVE COATING	0.002324	GA			no
.2	46V779PX	FRIGIDAIRE GRAY	0.000036	GA			no
.2	4HH082HP	GRAY BASE LEGACY CR#2	0.002791	GA			no
1	441950	TL CTN	0.033	EA			
1	442350	TL 7 SLOT PARTITION	0.219	EA			

Browse or type search string and press [RETURN]:
 Use cursor and page keys to navigate, F4 to exit. [Line 1].

WRQ Reflection for the Web - QAD

4BK131PX	ASVOC	0.0200000000	09/29/02
	VOC	0.0200000000	09/29/02
4BK132LX	ASVOC	4.6700000000	01/01/04
	CAO	0.0510000000	01/01/04
	ETHBENZ	0.0030000000	01/01/04
	NAPTH	0.0010000000	01/01/04
	VOC	5.0100000000	01/01/04
	XYLE	0.0150000000	01/01/04
4BK133LX	ASVOC	4.4200000000	01/01/04
	ETHBENZ	0.0040000000	01/01/04
	NAPTH	0.0310000000	01/01/04
	VOC	4.7700000000	01/01/04
	XYLE	0.0160000000	01/01/04
4BK100CHP	ASVOC	5.2900000000	09/29/02
	CUME	0.0020000000	09/29/02
	ETHBENZ	0.0090000000	09/29/02
	GLYETH	0.0290000000	09/29/02
	MIBK	0.0120000000	09/29/02
	NAPTH	0.1030000000	09/29/02

Browse or type search string and press [RETURN]: 3333333
 Use cursor and page keys to navigate, F4 to exit. [Line 134].

Thermoseal Permit Requirements

Parameter	Permit Limit	Record-keeping	Reporting
OC emissions rolling 30-day period	58.3 tons	Daily	Excursion within 45 days
OC emissions rolling 365-day period	180 tons		
Overall OC recovery efficiency rolling 30 day period	90.60%		
Liquid organic material processed through ethanol distillation unit on a rolling 365-day basis	1000 tons		

