



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

AUG 01 2018

Mr. Jason Johannessen
President
Rack Builders Inc.
3809 Dye Road
Quincy, IL 62301

RE: New Source Review Permit, Permit by Rule
Project Number: 2018-07-040
Facility ID Number: 127-0079

Dear Mr. Johannessen:

Enclosed with this letter is your permit to construct. The entire permit must be retained in your files. Please review your permit carefully. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri. *Section A: General Notification Information* and *Section B: Special Conditions for Surface Coating Operations* are part of your permit. *Section C: Other Potentially Applicable Requirements* of your original application should be replaced with the attached pages, a revised Section C. The application forms located on our website, specifically Section C, contain outdated rule references. Many of the rules for certain geographical areas have been rescinded and consolidated into state-wide rules. The attached Section C has been revised to reflect the current applicable rules. In addition, the worksheets contained in the permit-by-rule application for surface coating have been updated to include more complete instructions. Please use these in lieu of the original worksheets provided in the application.

Operation in accordance with these conditions is necessary for continued compliance. An on-site compliance inspection will be performed at a later date, to validate your statements and conditions claimed on the permit by rule notification. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.



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Mr. Jason Johannessen
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If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to me at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale, P.E.
Permits Section Chief

KBH:shj

Enclosures

c: Northeast Regional Office
PAMS File 2018-07-040

Permit Number:

*9/4/18
Scanner messed up.
Signed copy sent to the
applicant. SH*



**PERMIT
TO
CONSTRUCT
PERMIT BY RULE**

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct and operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Construction Permit Number: 082018-001
Project Number: 2018-07-040
Installation ID: 127-0079

Installation Name and Address

Rack Builders Inc.
805 Warren Lane
Palmyra, MO 63461
Marion County

Parent Company's Name and Address

Rack Builders Inc.
3809 Dye Road
Quincy, IL 62301

Installation Description:

Manufacture of industrial pallet racks; will include two liquid paint booths with dry filters and two 2 million Btu/hr natural gas-fired drying ovens.

AUG 01 2018

Effective Date

Director or Designee
Department of Natural Resources

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Compliance and Enforcement Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your permit-by-rule application and this permit. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start-up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:

<http://dnr.mo.gov/regions/>

RECEIVED

2018 JUL 23 PM 12:01



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
P.O. BOX 176, JEFFERSON CITY, MO 65102-0176

**APPLICATION FOR AUTHORITY TO CONSTRUCT
PERMIT BY RULE NOTIFICATION
SURFACE COATING OPERATIONS**

AIR POLLUTION
CONTROL PGM

APCP USE ONLY	
CHECK NO. 16737	CHECK RECEIVED (MM/DD/YY) 7-23-18
CHECK AMOUNT \$700.00	CHECK DATE (MM/DD/YY) 7-18-18
PROJECT NO.	PERMIT NO.

SECTION A: GENERAL NOTIFICATION INFORMATION - ALL NOTIFICATIONS MUST BE ACCOMPANIED BY A \$700 FEE.

SECTION A-1: GENERAL INSTALLATION INFORMATION

1. INSTALLATION NAME Rack Builders, Inc.	2. FIPS 127	2. PLAN T NO. 0079
3. INSTALLATION STREET ADDRESS 805 Warren Lane		
4. INSTALLATION MAILING ADDRESS 805 Warren Lane		
6. CITY Palmyra	STATE MO	ZIP CODE 63461
6. COUNTY NAME Marion	7. 1/4, of 1/4, of SECTION TOWNSHIP RANGE Section 36, Township 58N, Range 6W	
9. PARENT COMPANY Rack Builders, Inc.		
10. PARENT COMPANY MAILING ADDRESS 3809 Dye Road		
11. CITY Quincy	STATE IL	ZIP CODE 62301
12. INSTALLATION CONTACT PERSON Jason Johannessen	13. CONTACT PERSON'S TITLE President	
14. CONTACT PERSON'S MAILING ADDRESS 3809 Dye Road, Quincy, IL 62301		
16. INSTALLATION CONTACT TELEPHONE NO. 217-214-9482	18. INSTALLATION CONTACT FAX NO.	
17. INSTALLATION CONTACT E-MAIL ADDRESS jason.johannessen@rackbuildersinc.com		
18. PROJECTED DATE TO COMMENCE CONSTRUCTION October 1, 2018	19. PROJECT DATE OF OPERATION STARTUP November 1, 2018	

SECTION A-2: INSTALLATION DESCRIPTION

20.
Manufacture industrial pallet racks; will include two liquid paint booths with dry filters and two natural gas-fired drying ovens

SECTION A-3: CERTIFICATION STATEMENT

I certify that I have personally examined and am familiar with the information in this application and believe that the information submitted is accurate and complete. I am aware that making a false statement or misrepresentation in this application is grounds for denying or revoking this permit.

21. SIGNATURE OF RESPONSIBLE OFFICIAL <i>Jason Johannessen</i>	22. DATE 07/18/2018
23. TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL Jason Johannessen	24. RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER 217-214-9482
25. TITLE OF RESPONSIBLE OFFICIAL President	

SECTION B: SPECIAL CONDITIONS FOR PRINTING OPERATION (CONTINUED)

SPECIAL CONDITION	EMISSION SOURCE COMPLIES?	APPLICABLE EMISSION LIMIT OR STANDARD	METHOD OF COMPLIANCE
10 CSR 10-6.062(3)(B)3.E.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The surface coating operations shall be performed indoors, in a booth or in an enclosed work area. The booth shall be designed to meet a minimum face velocity at the intake opening of each booth or work area of one hundred feet (100') per minute. Emissions shall be exhausted through elevated stacks that extend at least one and one-half (1 1/2) times the building height above ground level. All stacks shall discharge vertically. There shall be no obstructions, such as rain caps, unless such services are designed to automatically open when booths are operated.	Proper work practice.
10 CSR 10-6.062(3)(B)3.F.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	For spraying operations, emissions of particulate matter must be controlled using either a water wash system or a dry filter system with a ninety-five percent (95%) removal efficiency as documented by the manufacturer. The face velocity at the filter shall not exceed two hundred fifty feet (250') per minute or that specified by the filter manufacturer, whichever is less. Filters shall be replaced according to the manufacturer's schedule or whenever the pressure drop across the filter no longer meets the manufacturer's recommendation.	Proper work practice.
10 CSR 10-6.062(3)(B)3.G.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Coating operations shall be conducted at least fifty feet (50') from the property line and at least two hundred fifty feet (250') from any recreational area, residence, or other structure not occupied or used solely by the owner of the property upon which the facility is located.	Proper work practice.
10 CSR 10-6.062(3)(B)3.H.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	The facility shall not be located in an ozone non-attainment area.	Proper work practice.
10 CSR 10-6.062(3)(B)3.I.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Record keeping. The operator shall maintain the following records and reports: All material safety data sheets for all coating materials and solvents. A monthly report indicating the days the surface coating operation was in operation and the total tons emitted during the month, and the calculation showing compliance with the rolling average emission limits of sub paragraphs 10 CSR 10-6.062(3)(B)3.d. A set of example calculations showing the method of data reduction including units, conversion factors, assumptions, and the basis of assumptions. These reports and records shall be immediately available for inspection at the installation.	Determined through proper record keeping. Worksheets A, B, and C (or equivalent) shall be used to demonstrate compliance with this condition. These records shall be maintained for not less than five (5) years, and they shall be immediately available to any Missouri Department of Natural Resources personnel upon request. The operator shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (1) days after the end of the month during which these conditions are exceeded.

SECTION C: OTHER POTENTIALLY APPLICABLE REQUIREMENTS

This section is intended to identify regulations that may apply to this installation. There may be others not listed that apply. To determine rule applicability and specific standards please consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. A copy of the CSR can be found at <http://www.sos.mo.gov/adrules/csr/current/10csr/10csr>.

Please note: this permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources, and other applicable federal, state, and local laws and ordinances.

REGULATION OR CONSTRUCTION PERMIT REFERENCE	APPLICABLE EMISSION LIMIT OR STANDARD	METHOD OF COMPLIANCE
10 CSR 10-6.045 Open Burning Restrictions	No person shall not conduct, cause, permit or allow the disposal of tires, petroleum-based products, trade waste, construction or demolition waste, salvage operation waste or asbestos containing materials by open burning, except as allowed in the rule.	Any person intending to engage in open burning shall submit a request to the Director.
10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions	The permittee shall not commence construction or modification of any installation subject to this rule; begin operation after construction or modification; or begin operation of any installation which has been shut down longer than 5 years without first obtaining a permit.	In the event of a malfunction, which results in excess emissions that exceed 1 hr, the permittee shall implement corrective action and submit reports.
10 CSR 10-6.065, Operating Permits	The permittee shall comply with all applicable requirements identified in the operating permit (OP) and retain a copy of the OP on-site and make available to any Missouri Department of Natural Resources personnel upon request.	As required by the rule, the permittee shall submit an operating permit application and submit an annual compliance certification in accordance with the regulation. The permittee shall maintain a current equipment list on-site with the date of installation of the equipment.
10 CSR 10-6.070 New Source Performance Regulations	<p>The following federal NSPS standards may apply:</p> <ul style="list-style-type: none"> • (EE) Surface Coating of Metal Furniture • (MM) Automobile and Light-Duty Truck Surface Coating Operations • (SS) Industrial Surface Coating: Large Appliances • (TT) Metal Coil Surface Coating • (WW) Beverage Can Surface Coating Industry • (FFF) Flexible Vinyl and Urethane Coating and Printing • (TTT) Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines 	As required by regulations.
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	<p>The following federal MACT standards may apply:</p> <ul style="list-style-type: none"> • (GG) Aerospace Mfg. & Rework Industry • (JJ) Wood Furniture Manufacturing • (III) Auto & Light Duty Trucks Surface Coating • (KKKK) Metal Can Surface Coating • (MMMM) Miscellaneous Metal Parts Surface Coating • (NNNN) Large Appliance Surface Coating • (OOOO) Printing, Coating & Dyeing of Fabrics & Textiles • (PPPP) Plastic Parts & Products Surface Coating • (QQQQ) Wood Building Products Surface Coating • (RRRR) Metal Furniture Surface Coating • (SSSS) Metal Coil Surface Coating • (HHHHH) Surface Coating & Paint Stripping • (QQQQQ) Wood Preserving Area Sources 	As required by regulations.

Appendix B: Air Pollution Control Program

Table of Hazardous Air Pollutants and Screening-Model Action Levels

Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM	Chemical	CAS #	SMAL tons/yr	Group ID	VOC	PM
CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	ETHYL ACRYLATE	140-88-5	1		Y	N
CHLOROFORM	67-66-3	0.9		Y	N	ETHYL BENZENE	100-41-4	10		Y	N
ETHYL CHLORIDE	75-00-3	10		Y	N	NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y
ETHYLENE GLYCOL	107-21-1	10		Y	N	NITROBENZENE	98-95-3	1		Y	N
ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2					NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N
ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N	NITROPHENOL, [4-]	100-02-7	5		Y	N
ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N	NITROPROPANE, [2-]	79-46-9	1		Y	N
ETHYLENE OXIDE	75-21-8	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N
ETHYLENE THIOUREA	96-45-7	0.6		Y	Y	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N
FORMALDEHYDE	50-00-0	2		Y	N	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N
GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N
GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N	PARATHION	56-38-2	0.1		Y	Y
HEPTACHLOR	76-44-8	0.02		Y	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y
HEXACHLOROBENZENE	118-74-1	0.01		Y	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N
HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N
HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N	PHENOL	108-95-2	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N
HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N	PHOSGENE	75-44-5	0.1		Y	N
HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N	PHOSPHINE	7803-51-2	5		N	N
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N
HEXACHLOROETHANE	67-72-1	5		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	POLYCYLIC ORGANIC MATTER		0.01	V	Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y
HEXANE, [N-]	110-54-3	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PROPIONALDEHYDE	123-38-6	5		Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PROPYLENE OXIDE	75-56-9	5		Y	N
HYDROQUINONE	123-31-9	1		Y	N	PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	QUINOLINE	91-22-5	0.006		Y	N
ISOPHORONE	78-59-1	10		Y	N	QUINONE	106-51-4	5		Y	N
LEAD COMPOUNDS		0.01	Q	N	Y	RADIONUCLIDES		Note 1	Y	N	Y
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y
MALEIC ANHYDRIDE	108-31-6	1		Y	N	STYRENE	100-42-5	1		Y	N
MANGANESE COMPOUNDS		0.8	R	N	Y	STYRENE OXIDE	96-09-3	1		Y	N
MERCURY COMPOUNDS		0.01	S	N	N	TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y
METHANOL	67-56-1	10		Y	N	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N
METHOXYCHLOR	72-43-5	10	V	Y	Y	TETRACHLOROETHYLENE	127-18-4	10		N	N
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N
METHYL CHLORIDE	74-87-3	10		Y	N	TOLUENE	108-88-3	10		Y	N
METHYL ETHYL KETONE (Delisted)	78-93-3					TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N
METHYL HYDRAZINE	60-34-4	0.06		Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N
METHYL IODIDE	74-88-4	1		Y	N	TOXAPHENE	8001-35-2	0.01		Y	N
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	TRICHLOROBENZENE, [1,2,4-]	120-82-1	10		Y	N
METHYL ISOCYANATE	624-83-9	0.1		Y	N	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N
METHYL METHACRYLATE	80-62-6	10		Y	N	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	TRICHLOROETHYLENE	79-01-6	10		Y	N
METHYLCYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TRIETHYLAMINE	121-44-8	10		Y	N
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TRIFLURALIN	1582-09-8	9		Y	Y
MINERAL FIBERS		0	T	N	Y	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
NAPHTHALENE	91-20-3	10	V	Y	N	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	VINYL ACETATE	108-05-4	1		Y	N
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N

Appendix B: Air Pollution Control Program

Table of Hazardous Air Pollutants and Screening Model Action Levels

NOTES																																																																															
Note 1	Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.																																																																														
Note 2	Emissions of compounds in this aggregate group are combined for comparison to the Major Source Thresholds. Except for those compounds specifically listed, emissions of compounds in this aggregate group are also combined for comparison to the SMALs and RALs.																																																																														
Note 3	Emissions of compounds in this aggregate group are combined for comparison to the Major Source Thresholds but are not combined for comparison to the SMALs and RALs.																																																																														
Note 4	The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. The mass of the metal portion of the compound is used to determine emissions for comparison to the SMALs and RALs.																																																																														
Note 5	The total mass of the compound is used to determine emissions for comparison to the SMALs, RALs, and Major Source Thresholds.																																																																														
Note 6	The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. For these compounds, emissions within the same aggregate group are combined for comparison to the SMALs and RALs, and the 2,4-D portion of 2,4-D Salts and Esters and the Dinitro-ortho-cresol (DNOC) portion of 4,6-Dinitro-o-cresol Salts are used to determine emissions for comparison to the SMALs and RALs.																																																																														
Note 7	The total mass of the compound is used to determine emissions for comparison to the Major Source Thresholds. Except for those compounds specifically listed, emissions of cyanide compounds are combined and the mass of the cyanide portion (-C≡N) of the compound is used to determine emissions for comparison to the SMALs and RALs. For those compounds specifically listed in the table, emissions are not combined and the total mass of the compound is used for comparison to the SMALs and RALs.																																																																														
Note 8	Elemental lead is not considered a hazardous air pollutant. However, the lead portion of lead compounds (in addition to elemental lead) is considered a criteria pollutant and should be included in the lead criteria pollutant potential emissions calculations.																																																																														
Note 9	<p>The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million.</p> <p>The RAL units for Dibenzodioxins/Dibenzofurans (Dioxins/Furans) and Polychlorinated biphenyls (PCBs) are picograms per cubic meter (pg/m3)</p> <p>For comparison to the Major Source Threshold combine emissions within each aggregate group and use the total mass of each compound.</p> <p>For comparison to the SMAL and RAL, emissions of polychlorinated dibenzodioxins & polychlorinated dibenzofurans (PCDD/PCDF) and polychlorinated biphenyls (PCB) are scaled according to the toxic equivalency factor method and then combined for comparison to the SMAL and RAL:</p> <p>For comparison to the SMAL:</p> <ol style="list-style-type: none"> 1) scale the annual emissions of each PCDD/PCDF and PCB by its respective toxic equivalency factor (TEF) 2) after the emissions are scaled, combine them into a single potential annual emissions (tons/year) for comparison to the SMAL <p>For comparison to the RAL:</p> <ol style="list-style-type: none"> 1) scale the annual emissions of each PCDD/PCDF and PCB by its respective toxic equivalency factor (TEF) 2) after the emissions are scaled, combine them into a single emission rate (lb/hr) or (grams/second) for modeling 3) the resulting ambient concentration is compared to the RALs for Dioxins/Furans 																																																																														
Note 10	<p style="text-align: center;">Toxic Equivalency Factors for PCDD, PCDF, and PCB compounds</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 25%;">PCDDs</th> <th style="width: 10%;">TEF</th> <th style="width: 25%;">PCDFs</th> <th style="width: 10%;">TEF</th> <th style="width: 20%;">PCBs</th> <th style="width: 10%;">TEF</th> </tr> </thead> <tbody> <tr> <td>2,3,7,8-TCDD</td> <td>1.0</td> <td>2,3,7,8-TCDF</td> <td>0.1</td> <td>3,3',4,4'-TCB</td> <td>0.0001</td> </tr> <tr> <td>1,2,3,7,8-PeCDD</td> <td>1.0</td> <td>1,2,3,7,8-PeCDF</td> <td>0.03</td> <td>3,4,4',5-TCB</td> <td>0.0003</td> </tr> <tr> <td>1,2,3,4,7,8-HxCDD</td> <td>0.1</td> <td>2,3,4,7,8-PeCDF</td> <td>0.3</td> <td>3,3',4,4',5-</td> <td>0.1</td> </tr> <tr> <td>1,2,3,7,8,9-HxCDD</td> <td>0.1</td> <td>1,2,3,4,7,8-HxCDF</td> <td>0.1</td> <td>3,3',4,4',5,5'-</td> <td>0.03</td> </tr> <tr> <td>1,2,3,6,7,8-HxCDD</td> <td>0.1</td> <td>1,2,3,7,8,9-HxCDF</td> <td>0.1</td> <td>2,3,3',4,4'</td> <td>0.00003</td> </tr> <tr> <td>1,2,3,4,6,7,8-HpCDD</td> <td>0.01</td> <td>1,2,3,6,7,8-HxCDF</td> <td>0.1</td> <td>2,3,4,4',5</td> <td>0.00003</td> </tr> <tr> <td>1,2,3,4,6,7,8,9-OCDD</td> <td>0.0003</td> <td>2,3,4,6,7,8-HxCDF</td> <td>0.1</td> <td>2,3',4,4',5</td> <td>0.00003</td> </tr> <tr> <td></td> <td></td> <td>1,2,3,4,6,7,8-HpCDF</td> <td>0.01</td> <td>2',3,4,4',5</td> <td>0.00003</td> </tr> <tr> <td></td> <td></td> <td>1,2,3,4,7,8,9-HpCDF</td> <td>0.01</td> <td>2,3,3',4,4',5-</td> <td>0.00003</td> </tr> <tr> <td></td> <td></td> <td>1,2,3,4,6,7,8,9-OCDF</td> <td>0.0003</td> <td>2,3,3',4,4',5-</td> <td>0.00003</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2,3',4,4',5,5'-</td> <td>0.00003</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>2,3,3',4,4',5,5'</td> <td>0.00003</td> </tr> </tbody> </table>	PCDDs	TEF	PCDFs	TEF	PCBs	TEF	2,3,7,8-TCDD	1.0	2,3,7,8-TCDF	0.1	3,3',4,4'-TCB	0.0001	1,2,3,7,8-PeCDD	1.0	1,2,3,7,8-PeCDF	0.03	3,4,4',5-TCB	0.0003	1,2,3,4,7,8-HxCDD	0.1	2,3,4,7,8-PeCDF	0.3	3,3',4,4',5-	0.1	1,2,3,7,8,9-HxCDD	0.1	1,2,3,4,7,8-HxCDF	0.1	3,3',4,4',5,5'-	0.03	1,2,3,6,7,8-HxCDD	0.1	1,2,3,7,8,9-HxCDF	0.1	2,3,3',4,4'	0.00003	1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,6,7,8-HxCDF	0.1	2,3,4,4',5	0.00003	1,2,3,4,6,7,8,9-OCDD	0.0003	2,3,4,6,7,8-HxCDF	0.1	2,3',4,4',5	0.00003			1,2,3,4,6,7,8-HpCDF	0.01	2',3,4,4',5	0.00003			1,2,3,4,7,8,9-HpCDF	0.01	2,3,3',4,4',5-	0.00003			1,2,3,4,6,7,8,9-OCDF	0.0003	2,3,3',4,4',5-	0.00003					2,3',4,4',5,5'-	0.00003					2,3,3',4,4',5,5'	0.00003
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