

State of Rhode Island
Department of Environmental Management
Office of Air Resources
235 Promenade Street
Providence, RI 02908-5767
(401) 222 - 2808



Air Toxics Operating Permit Application

FORM ATOP-APP1

TABLE OF CONTENTS

FORM ATOP - APPL1

FORM -- **AIR POLLUTION CONTROL PERMIT FEES FORM**

SECTION 1 -- **GENERAL INFORMATION**

SECTION 2 -- **PROCESS INFORMATION**

SECTION 3 -- **POLLUTANT SPECIFIC INFORMATION**

SECTION 4 -- **AIR POLLUTION CONTROL DEVICES**

SECTION 5 -- **SITE MODELING DATA INFORMATION**

SECTION 6 -- **AIR POLLUTION CONTROL REGULATION No. 22, TABLE III**

SECTION 7 -- **GUIDANCE FOR COMPLETING AIR TOXICS OPERATING PERMIT APPLICATION**



**State of Rhode Island & Providence Plantations
 Department of Environmental Management
 Office of Air Resources
 Air Toxics Operating Permits**

AIR POLLUTION CONTROL PERMIT FEES

Please complete this form, attach it to the check or money order, and submit it to the Office of Management Services. Payment must be made payable to **General Treasurer, State of Rhode Island**. The information requested below must be provided to coordinate the filing of your fee with your application. **This fee is a filing fee and therefore it must be paid before we can begin review of your application.**

APPLICANT'S NAME		FACILITY'S NAME:	
MAILING ADDRESS:		SITE ADDRESS:	
CITY:		CITY:	
STATE:	ZIP CODE:	COUNTY:	ZIP CODE:
TELEPHONE:		TELEPHONE:	
FAX:		FAX:	
Email:		Email:	

The Department's rules and regulations established pursuant to Chapters 23-23 and 42-17.2-2(z) of the General Laws of Rhode Island, require the payment of fees for air pollution permits. All application fees must be submitted to:

**RI Department of Environmental Management
 Office of Management Services
 235 Promenade Street
 Providence, RI 02908-5767**

THE APPLICATION FORM AND ANY ACCOMPANYING DOCUMENTS MUST BE SUBMITTED TO THE OFFICE OF AIR RESOURCES AT THE ADDRESS SHOWN ON THE APPLICATION FORM.

<input type="checkbox"/> TOXICS OPERATING APPLICATION--(\$809,00) <input type="checkbox"/> SECOND TIER TOXICS OPERATING PERMIT APPLICATION --(\$2,310.00) <input type="checkbox"/> ADJUSTMENTS TO SECOND TIER--(\$1,501.00) TOTAL FEE SUMITTED: \$ _____	FOR OFFICIAL USE ONLY: Fee Amount Received: \$ _____ Date Received: _____ Received By: _____ For Deposit into Account No. 1752-80600
--	---

AUTHORIZED SIGNATURE DATE

TYPED OR PRINTED NAME OF SIGNATORY TITLE OF SIGNATORY



Section 1 - General Information

FACILITY NAME:			
MAILING ADDRESS:		SITE ADDRESS:	
CITY:		CITY:	
STATE:	ZIP CODE:	COUNTY:	ZIP CODE:
CONTACT PERSON:		TITLE:	
TELEPHONE:		FAX:	
Email:			
OWNER OF FACILITY:			
MAILING ADDRESS:			
CITY:		STATE:	ZIP CODE:
TELEPHONE:		TITLE:	
Email:		FAX:	
REGISTERED AGENT:			
EPA ID No.:			

I, the undersigned, hereby certify under penalty of law, that I am a responsible individual, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

 AUTHORIZED SIGNATURE DATE

 TYPED OR PRINTED NAME OF SIGNATORY TITLE OF SIGNATORY



Section 2 - Process Information

DESCRIPTION OF PROCESSES AND PRODUCTS:	
SIC CODE(S):	NAICS CODE(S):
Hours of Operation: _____ hours/day	_____ days/week _____ weeks/year
<i>Plant Elevation Above Mean Sea Level:</i>	
APC Regulation No. 22 listed substances emitted:	
APPLICATION FOR (Check one):	
<input type="checkbox"/> NEW PERMIT	<input type="checkbox"/> RENEWAL
	<input type="checkbox"/> PERMIT CHANGE
PLEASE ENSURE YOU HAVE ENCLOSED THE AIR POLLUTION CONTROL PERMIT FEE FORM ATOP - FEE1 WITH THE APPLICATION.	

I, the undersigned, hereby certify under penalty of law, that I am a responsible individual, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

AUTHORIZED SIGNATURE _____	DATE _____
TYPED OR PRINTED NAME OF SIGNATORY _____	TITLE OF SIGNATORY _____



Section 3 - Pollutant Specific Information

Facility Name:	Approval No.(if applicable):
Emission Unit I.D. No.(s):	
Fill out this form for each pollutant listed in Section 6, which is used or emitted at your facility. Note: if a substance is used on more than one emission unit; fill out this form for each substance on each emission unit and sum the results for each listed substance. Allot usage of substance among emission units.	
POLLUTANT INFORMATION:	
Listed Air Toxic substance and its associated process:	
Amount (lbs.) used in last calendar year: _____ Amount (lbs.) emitted in last calendar year: _____	
Note: The amount of substance used for a given year is beginning inventory plus amount purchased minus ending inventory .	
Does the total amount of this chemical emitted from the facility exceed the minimum quantity in Table III of Section 6? <input type="checkbox"/> No (if No, complete the next two lines) <input type="checkbox"/> Yes (if Yes, complete the entire application)	
Amount of chemical used and emitted in the preceding three calendar years:	Year:_____ Quantity used _____ Quantity Emitted _____ Year:_____ Quantity used _____ Quantity Emitted _____ Year:_____ Quantity used _____ Quantity Emitted _____
NOTE: If usage of this Listed Air Toxic Substance did not exceed the minimum quantity in the present year, but did exceed the minimum quantity in the previous years or is within 10% of the minimum quantity, do you project that usage may exceed the minimum quantity in the future? <input type="checkbox"/> No <input type="checkbox"/> Yes (if Yes, complete the entire application)	
DESCRIPTION OF EMISSION UNIT EMITTING AIR TOXICS:	
Stack I.D. No(s):	Stack Inside Diameter (m):
Stack Height above grade (m):	Stack Flow Rate (m/s):
Stack gas exit temperature (K):	
Stack Type: <input type="checkbox"/> Conventional vertical <input type="checkbox"/> Horizontal roof monitor <input type="checkbox"/> Wall vent <input type="checkbox"/> Fugitive (no stack)	
Frequency of Contaminant Emissions: <input type="checkbox"/> Continuous <input type="checkbox"/> Batch	
Periods that this emission unit emits contaminants: Total hours/week _____ Total weeks/year _____	

I, the undersigned, hereby certify under penalty of law, that I am a responsible individual, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

 AUTHORIZED SIGNATURE DATE

 TYPED OR PRINTED NAME OF SIGNATORY TITLE OF SIGNATORY



Section 4 - Air Pollution Control Devices

Facility Name:	Approval No.(if applicable):
Air Pollution Control I.D. No.(s):	Stack I.D. No.(s):
List all Emission Unit I.D. No.(s) that are controlled by this unit:	
Control efficiency of the control device: _____%	
<p>Are Emission Units fully enclosed (100% capture efficiency)</p> <p style="text-align: center;"> <input type="checkbox"/> Yes <input type="checkbox"/> No (if No, complete lines one and two) </p> <p>1. Provide a value for capture efficiency: _____%</p> <p>2. Describe the procedure for determining capture efficiency: _____</p> <p>_____</p>	
<p>Provide and estimate of the facility's emissions of this pollutant to ambient air for the following time periods:</p> <p>Peak 1-hour emission rate: _____ lbs/hr.</p> <p>Peak 24-hours emission rate: _____ lbs/day</p> <p>Actual annual emission rate: _____ lbs/yr.</p> <p>NOTE: provide copies of equations and source of data inputs used to make these calculations. See Section 7 for sample formulas</p>	

I, the undersigned, hereby certify under penalty of law, that I am a responsible individual, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

 AUTHORIZED SIGNATURE

 DATE

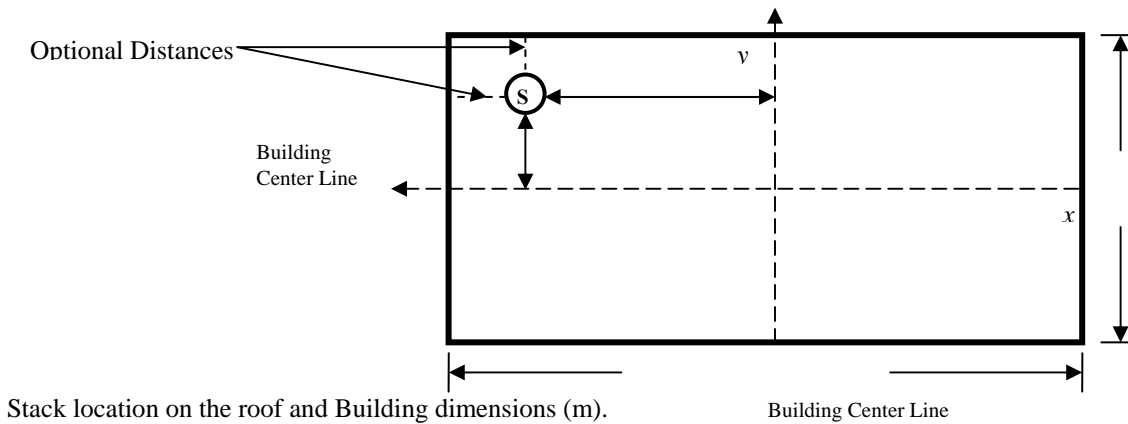
 TYPED OR PRINTED NAME OF SIGNATORY

 TITLE OF SIGNATORY



Section 5 - Site Modeling Data Information

Facility Name:	Building Name:
Stack I.D. No.(s):	Emission Unit I.D. No.(s):



<p>GENERAL FACILITY INFORMATION</p> <p>ATTACH THE FOLLOWING:</p> <ol style="list-style-type: none"> 1. A site plan of the facility showing all stack, building dimensions, and base elevations. 2. An area map that provides dimensions for all buildings within 300 feet of the stack (s), and emission points of the Listed Air Pollutants in TABLE III, Section 6. Include height, width, and length for these structures. 3. This information must be included with the application in order to process the permit. <p style="text-align: center; border: 1px solid black; padding: 5px;">THE INFORMATION DETAILED ABOVE MUST BE INCLUDED IN ORDER TO PROCESS THE PERMIT APPLICATION.</p>
--

I, the undersigned, hereby certify under penalty of law, that I am a responsible individual, and that I have personally examined, and am familiar with, the information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the information is on knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false or incomplete information, including the possibility of fine or imprisonment.

 AUTHORIZED SIGNATURE

 DATE

 TYPED OR PRINTED NAME OF SIGNATORY

 TITLE OF SIGNATORY



Section 6 - Air Pollution Control Regulation No. 22
TABLE III

TABLE III				
MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)				
<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Acetaldehyde	75070	50		
Acetamide	60355	5		
Acetone	67641	20,000		
Acetonitrile	75058	200		
Acetophenone	98862	900		
2-Acetylaminofluorene	53963	0.09		
Acrolein	107028	0.07		
Acrylamide	79061	0.09		
Acrylic acid	79107	3		
Acrylonitrile	107131	1		
Aldrin	309002	0.002		
Allyl chloride	107051	3		
2-Aminoanthraquinone	117793	10		
4-Aminobiphenyl	92671	0.02		
Ammonia	7664417	300		
Aniline	62533	3		
o-Anisidine	90040	2		
Antimony & compounds ^a , including antimony trioxide		0.6		
Aramite	140578	10		
Arsenic & compounds ^a (inorganic)		0.02		
Arsine	7784421	0.2		
Asbestos	1332214	400 ^b		
Azobenzene	103333	3		
Barium	7440393	2000		
Benzene	71432	10		
Benzidine	92875	0.002		
Benzoic acid	65850	30,000		
Benzotrichloride	98077	0.03		
Benzyl chloride	100447	2		
Beryllium & compounds ^a		0.04		
Biphenyl	92524	600		
Bis (chloromethyl) ether	542881	0.002		
Bis (2-ethylhexyl) phthalate (DEHP)	117817	40		
Boron and borates		4		
Bromates (including Potassium bromate)		0.8		

**TABLE III
 MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)**

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Bromine and compounds (except Hydrogen bromide & Bromates) ^l		200		
Bromodichloromethane	75274	3		
Bromoform	75252	100		
1,3-Butadiene	106990	3		
Butyl benzyl phthalate	85687	2,000		
Cadmium & compounds ^a		0.07		
Calcium cyanamide	156627	100		
Captan	133062	100		
Carbaryl	63252	900		
Carbon disulfide	75150	2,000		
Carbon tetrachloride	56235	8		
Carbonyl sulfide	463581	70		
Catechol	120809	500		
Chloramben	133904	200		
Chlordane	57749	0.1		
Chlorinated paraffins (avg length C12- C13, 60% chlorine)	108171262	4		
Chlorine	7782505	10		
Chlorine dioxide	10049044	9		
Chloroacetic acid	79118	10		
2-Chloroacetophenone	532274	0.09		
4-Chloroaniline	106478	30		
Chlorobenzene	108907	20,000		
Chlorobenzilate	510156	80		
1-Chloro-1,1-difluoroethane (CFC 142B)	75683	36,500		
Chlorodifluoromethane (HCFC-22)	75456	36,500		
Chloroform	67663	20		
Chloromethyl methyl ether	107302	0.1		
2-Chlorophenol	95578	60		
4-Chloro-o-phenylenediamine	95830	20		
Chloropicrin	76062	10		
Chloroprene	126998	100		
p-chloro-o-toluidine	95692	1		
Chromium III & compounds ^a , insoluble salts		20,000		
Chromium VI & compounds ^a		0.009		
Cobalt & compounds ^a		0.1		
Coke oven emissions	8007452	0.2		
Copper & compounds ^a , except Copper cyanide		40		
p-Cresidine	120718	2		
Cresols/Cresylic acid isomers and mixtures (Methylphenols)	1319773	20,000		
Cumene	98828	1,000		
Cupferron	135206	2		
Cyanide & compounds (inorganic) ^l , except Hydrogen cyanide		100		

**TABLE III
 MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)**

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Cyclohexane	110827	20,000		
2,4-Diaminoanisole	615054	20		
2,4-Diaminotoluene	95807	0.1		
Diazomethane	334883	90		
Dibromochloromethane	124481	100		
1,2-Dibromo-3-chloropropane	96128	0.05		
Dibutylphthalate	84742	700		
1,2-Dichlorobenzene	95501	700		
1,4-Dichlorobenzene (p-Dichlorobenzene)	106467	10		
3,3'-Dichlorobenzidene	91941	0.3		
Dichloro diphenyl dichloroethylene (DDE)	3547044	1		
cis- 1,2-Dichloroethene	156592	1,000		
trans- 1,2-Dichloroethene	156605	200		
Dichloroethyl ether (Bis (chloroethyl) ether)	111444	0.3		
2,4-Dichlorophenoxyacetic acid, salts & esters (2,4-D)	94757	90		
1,3-Dichloropropene	542756	20		
Dichlorvos	62737	1		
Dieldrin	60571	0.02		
Diethanolamine	111422	300		
Diethyl sulfate	64675	0.3		
1,1-Difluoroethane (HCFC 152a)	75376	36,500		
3,3'-Dimethoxybenzidine	119904	0.09		
p-Dimethyl aminoazobenzene	60177	0.09		
n,n-Dimethyl aniline	121697	20		
3,3'-Dimethyl benzidine	119937	0.002		
Dimethyl carbamoyl chloride	79447	0.03		
Dimethyl formamide	68122	3,000		
1,1-Dimethyl hyrazine	57147	0.1		
1,2-Dimethyl hyrazine	540738	0.0007		
2,4-Dimethylphenol	105679	200		
Dimethyl phthalate	131113	1,000		
Dimethyl sulfate	77781	0.02		
4,6-Dinitro-o-cresol	534521	4		
2,4-Dinitrophenol	51285	10		
2,4-Dinitrotoluene	121142	1		
1,4-Dioxane (1,4-Diethyleneoxide)	123911	10		
1,2-Diphenylhydrazine (Hydrazobenzene)	122667	0.5		
Epichlorohydrin	106898	90		
1,2-Epoxybutane	106887	200		
Ethyl acrylate	140885	50		
Ethyl benzene	100414	9,000		
Ethyl carbamate (Urethane)	51796	0.3		

TABLE III
MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Ethyl chloride (Chloroethane)	75003	10,000		
Ethylene dibromide (Dibromoethane)	106934	0.2		
Ethylene dichloride (1,2-Dichloroethane)	107062	4		
Ethylene glycol	107211	700		
Ethylene glycol monobutyl ether	111762	4,000		
Ethylene glycol monoethyl ether	110805	100		
Ethylene glycol monoethyl ether acetate	111159	40		
Ethylene glycol monomethyl ether	109864	30		
Ethylene glycol monomethyl ether acetate	110496	10,000		
Ethylene imine (Aziridine)	151564	0.005		
Ethylene oxide	75218	1		
Ethylene thiourea	96457	9		
Ethylidene dichloride (1,1-Dichloroethane)	75343	70		
Fluorides & compounds, including Hydrogen fluoride		7		
Formaldehyde	50000	9		
Glutaraldehyde	111308	9		
Heptachlor	76448	0.009		
Hexachlorobenzene	118741	0.02		
Hexachlorobutadiene	87683	2		
Hexachlorocyclohexanes, technical grade & mixed isomers	608731	0.2		
alpha-Hexachlorocyclohexane	319846	0.07		
beta-Hexachlorocyclohexane	319857	0.2		
gamma-Hexachlorocyclohexane (Lindane)	58899	0.1		
Hexachlorocyclopentadiene	77474	20		
Hexachloroethane	67721	30		
Hexamethylene-1,6-diisocyanate	822060	0.6		
Hexamethylphosphoramide	680319	0.005		
Hexane	110543	20,000		
Hydrazine	302012	0.02		
Hydrochloric acid (Hydrogen chloride)	7647010	700		
Hydrogen bromide	10035106	2,000		
Hydrogen cyanide	74908	100		
Hydrogen sulfide	7783064	10		
Hydroquinone	123319	500		
Isophorone	78591	2,000		
Isopropanol	67630	1,000		
Lead & compounds ^a , inorganic		0.9		
Lead - tetraethyl lead	78002	0.0009		
Maleic anhydride	108316	4		
Manganese & compounds ^a		0.2		
Mercury & compounds ^a – elemental & inorganic		0.7		
Mercury – Methyl mercury	22967926	0.3		

**TABLE III
 MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)**

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Methanol	67561	10,000		
Methoxychlor	72435	60		
Methyl bromide (Bromomethane)	74839	70		
Methyl chloride (Chloromethane)	74873	400		
Methyl chloroform (1,1,1-Trichloroethane)	71556	3,000		
4,4-Methylene bis (2-chloroaniline)	101144	0.2		
Methylene chloride (Dichloromethane)	75092	200		
4,4-Methylenedianiline	101779	0.2		
Methylene diphenyl diisocyanate	101688	70		
Methyl ethyl ketone (2-Butanone)	78933	4,000		
Methyl hydrazine	60344	0.04		
Methyl iodide (Iodomethane)	74884	3,000		
Methyl isobutyl ketone (Hexanone)	108101	9,000		
Methyl isocyanate	624839	100		
Methyl methacrylate	80626	2,000		
Methyl tert butyl ether (MTBE)	1634044	3,000		
Michler's ketone (4,4'-Bis (dimethylamino) benzophenone)	90948	0.4		
Fine mineral fibers ^c		2,000		
Molybdenum and compounds ^a		60		
Naphthalene	91203	3		
Nickel and compounds ^a , except Nickel subsulfide		0.4		
Nickel subsulfide	12035722	0.2		
Nitric acid	7697372	30		
Nitrobenzene	98953	200		
4-Nitrobiphenyl	92933	0.002		
4-Nitrophenol	100027	10		
2-Nitropropane	79469	10		
N-Nitrosodi-n-butylamine	924163	0.07		
N-Nitrosodiethylamine	55185	0.002		
N-Nitrosodimethylamine	62759	0.008		
N-Nitrosodiphenylamine	86306	40		
N-Nitrosdi-n-propylamine	621647	0.05		
N-Nitroso-n-methylethylamine	10595956	0.02		
N-Nitroso-n-methylurea	684935	0.003		
N-Nitrosomorpholine	59892	0.05		
N-Nitrosopiperidine	100754	0.04		
N-Nitrosopyrrolidine	930552	0.2		
Parathion	56382	10		
Pentachloronitrobenzene (Quintozene)	82688	30		
Pentachlorophenol	87865	7		
Phenol	108952	30		
p-Phenylenediamine	106503	20		

TABLE III
MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
Phosgene	75445	0.9		
Phosphine	7803512	30		
Phosphoric acid	7664382	800		
Phosphorus, white	7723140	0.2		
Phthalic anhydride	85449	2,000		
Polychlorinated biphenyls (PCBs), except Aroclor 1254	1336363	0.1		
PCBs- Aroclor 1254	11097691	0.2		
Polychlorinated dibenzo dioxins (PCDDs), polychlorinated dibenzo furans (PCDFs) and dioxin-like polychlorinated biphenyls (PCBs)		3 X 10 ^{-7d}		
Polycyclic Organic Matter		0.01 ^e		
1,3-Propane sultone	1120714	0.1		
beta-Propiolactone	57578	0.02		
Propionaldehyde	123386	20		
Propoxur (Baygon)	114261	10		
n-Propyl bromide (1-Bromopropane)	106945	10,000		
Propylene	115071	36,500		
Propylene dichloride (1,2-Dichloropropane)	78875	10		
Propylene glycol monomethyl ether (PGME)	107982	36,500		
Propylene oxide	75569	30		
1,2-Propylenimine (2-Methyl aziridine)	75558	0.01		
Quinoline	91225	0.1		
Quinone	106514	100		
Selenium & compounds ^a except Hydrogen selenide and Selenium sulfide	7782492	2,000		
Selenium – Hydrogen selenide		2		
Selenium sulfide	7446346	20		
Sodium hydroxide	1310732	3		
Styrene	100425	3,000		
Styrene oxide	96093	2		
Sulfates ^f		40		
Sulfuric acid and Oleum ^g		40		
1,1,1,2-Tetrachloroethane	630206	300		
1,1,2,2-Tetrachloroethane	79345	6,000		
Tetrachloroethylene (Perchloroethylene)	127184	20		
Tetrachlorophenols	25167833	10,000		
1,1,1,2-Tetrafluoroethane	811972	36,500		
Thioacetamide	62555	0.07		
Titanium tetrachloride	7550450	10		
Toluene	108883	1,000		
2,4-Toluene diamine (2,4-Diaminotoluene)	95807	0.1		
2,4-and 2,6-Toluene diisocyanate ^h	26471625	8		
o-Toluidine	95534	2		
Toxaphene (Chlorinated camphene)	8001352	0.03		

**TABLE III
 MINIMUM QUANTITIES (MQ) IN POUNDS PER YEAR (lbs/yr)**

<u>Substance</u>	<u>CAS Number</u>	<u>Minimum Quantity</u>	<u>Amount Emitted</u>	<u>Is amount Emitted ≥MQ</u>
1,2,4-Trichlorobenzene	120821	90		
1,1,2-Trichloroethane	79005	30		
Trichloroethylene	79016	50		
Trichlorofluoromethane	75694	3,000		
2,4,5-Trichlorophenol	95954	900		
2,4,6-Trichlorophenol	88062	30		
Triethylamine	121448	800		
Trifluralin	1582098	90		
2,2,4-Trimethylpentane	540841	20,000		
Vanadium and compounds ^a		0.07		
Vinyl acetate	108054	600		
Vinyl bromide	593602	0.5		
Vinyl chloride	75014	20		
Vinylidene chloride (1,1-Dichloroethylene)	75354	600		
Xylenes, isomers and mixtures	1330207	3,000		
Zinc and compounds ^a		3,000		

^aFor metal compounds, Minimum Quantities apply to the metal portion of the compound.

^bAsbestos units are fibers/year.

^cFine mineral fibers are mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers or other mineral derived fibers of average diameter 1 micrometer (µm) or less.

^dPCDD Minimum Quantity is in terms of 2,3,7,8-tetrachlorodibenzodioxin equivalents, calculated as specified in the Rhode Island Air Toxics Guideline.

^ePolycyclic Organic Matter Minimum Quantity is in terms of benzo(a)pyrene equivalents, calculated as specified in the Rhode Island Air Toxics Guideline.

^fSulfates MQ applies to ammonium bisulfate [(NH₄)HSO₄, CAS 7803-63-6], ammonium sulfate [(NH₄)₂SO₄, CAS 7783-20-2], ferric sulfate [Fe(SO₄)₃, CAS 10028-22-5] and sodium sulfate [Na₂SO₄, CAS 7757-82-6]

^gSulfuric acid and oleum MQ applies to sulfuric acid (H₂SO₄, CAS 7664-03-9), sulfur trioxide (SO₃, CAS 7446-71-9) and oleum (H₂SO₄ + SO₃, CAS 8014-95-7)

^hIncludes 2,4-TDI (CAS 584849), 2,6-TDI (CAS 91087) and 2,4/2,6 mixtures (CAS 26471625)

ⁱXCN where X equals any group other than H where a formal dissociation may occur, such as KCN or Ca(CN)₂.

^jFor bromine, cyanide and fluoride compounds, MQs apply to the bromine, cyanide or fluoride portion of the compound



Section 7 - Guidance For Completing Air Toxics Operating Permit Application

Please feel free to contact the Office of Air Resources (222-2808) if you have any questions or otherwise need assistance. A source may elect to substitute its own spreadsheet or modify these forms as long as all essential information is included.

Section 1. General Information

Most of this information is self-explanatory. **Facility Name** should be company or organization's actual legal name. **Location** is address of emission unit(s) of concern. If mailing address of facility contact(s) is different; please indicate that and attach additional sheets if necessary.

Facility contacts should be both a **Technical Contact** able to answer technical questions during the review of the application and the **Official Responsible for Compliance**, who is the point of contact for legal or administrative issues. This may be the same person, if so indicate by writing "Same."

This application package contains an optional Table III (from Air Pollution Control Reg. No. 22) check off which may be helpful to facilities using multiple listed substances. To use, check off any of the listed substances used by your facility; then determine any that are emitted above the minimum quantity (MQ) in Table III for that chemical. For each chemical emitted above the MQ; pollutant specific information must be submitted.

Section 3. Pollutant Specific Information

This section is designed to utilize information you have already submitted on Air Pollution Inventory FORM J. The purpose of Section 1 is to identify the chemical, verify whether its use exceeds the minimum quantity (MQ) threshold in APC Regulation No. 22 and establish the general usage trend for the last few years. If a substance is used within 10% of the threshold amount, it is important to project whether your company may exceed this amount for review so that the permit issued will not be overly restrictive and impact of operations.

If an emission control device or system is employed; identify it by ID No., type, permit number, and efficiency. Air pollution control devices have been required to have a permit since 1971. If device was installed before 1971, indicate the year. **Control efficiency (%)** is preferably obtained from emission testing but may be estimated using standard HVAC calculations. You should identify where your value for control efficiency was obtained.

The complexity of determining emission rates is directly related to the complexity of your facility's process and control systems. The simplest calculation of **actual annual emission** is *amount used minus amount retained in product* (if any) **multiplied by** *(1 - capture efficiency)* **multiplied by** *(1 - control efficiency)*. If either capture efficiency or control efficiency is unknown use 1.0. If your facility employs multiple process lines with different control systems or emission points; you should calculate emissions for each process line and sum the results.

If process is continuous or regular, **peak 1 hour** equals *actual annual emission divided by 8760* and **Peak 24 hour** equals *peak 1 hour multiplied by 24*. If process variables are such that emissions are not distributed evenly over the course of days or hours, you will have to devise a customized equation. Examples of nonstandard distribution might include: products manufactured only during a particular season or on a particular shift, products with different rates of pollutant retention or process lines that cannot be operated simultaneously due to structural or personnel reasons.

Include copies of your equations and the source of any data input values.