Cover Company: Smart Chemical Solutions, LLC

Date: 11/19/2021

Project/Permit: 146921

## Permits by Rule General Facilities Workbook

TCEQ Document No. 20896 Version 2.0 - Workbook for single project

This workbook is a tool available to assist with projects being authorized under Permits by Rule (PBR) 30 TAC §§ 106.261 and/or 106.262.

### Instructions:

This workbook is required for all PBR applications submitted under these rules. Please answer the questions and fill in emissions data in the yellow cells.

Please check our website to be sure you use the latest version of the workbook for all the features and accurate information. Also, please complete the workbook in the order of the sheets.

Questions? Contact the Air Permits Division at (512) 239-1250

For rule language of §§106.261 and 106.262, please visit the Texas Secretary of State (SOS) website: https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac\_view=5&ti=30&pt=1&ch=106&sch=K&rl=Y

### How to Submit:

After this workbook has been completed, it should be combined with the non-confidential information of the application and submitted as an attachment through the STEERS ePermits system:

https://www3.tceq.texas.gov/steers/

Any confidential information should be submitted as an attachment separate from the non-confidential attachment in the STEERS ePermits system. THSC §382.041 requires us not to disclose any information related to manufacturing processes that is marked Confidential. Mark any information related to secret or proprietary processes or methods of manufacture Confidential if you do not want this information in the public file. All confidential information should be separated from the application and submitted as a separate file. Additional information regarding confidential information can be found at:

https://www.tceq.texas.gov/permitting/air/confidential.html

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Click here to go to the General Information sheet.

# General Information on for both General Facility PBR

I. Project Information			
Company	MP Magnetics LLC		
Site Description	Greenfield Magnets Manufacturing Facility in Fort Worth, TX.		
Project Name Description	PBR Registration		
attachments. Ex the TCEQ appli	that I am submitting an authorized TCEQ workbook and any necessary scept for inputting the requested data and adjusting row height, I have not changed cation workbook in any way, including but not limited to changing formulas,	I agree	
Please indicate	which rule, or both, are applicable to this project:	Both	
Does this project authorize a new facility, modify an New Source Review (NSR) Case-by-Case existing permitted facility, or both?		New Facility	
Is this site only	s this site only authorized under Permits by Rule?  Yes		
Is this located at an NSR major source?			
Is there an asso	s there an associated NSR permit?		
Please enter the	Please enter the associated NSR permit(s):		

II. General Rule Requirements for §106.261 and/or §106.262			
Yes			
No			
No			
Yes			
No			
No			
to this			

egistration: now the equipment operates, and the control entientry achieves.

A combination of cyclone and baghouse system and a multi-stage scrubber (dry and wet scrubbers) will be used to control particulate matter and hydrogen fluoride emissions. The equipment will be operated per manufacturer recommended procedures in order to achieve the guaranteed/design control efficiency.

III. Associated Emission Increases	
Is this project related to physical or operational changes to facilities authorized under an NSR Case-by-Case permit?	No
Any upstream and/or downstream actual emission increases that result from a project for which this claimed need to be authorized apportately. Any associated upstream and/or downstream emission as part of the PBR claim will need to be included as part of the total new or increased emissions, us emissions stay below current authorized emission limits: 2) there is not a change to any underlying authorizations for the applicable units associated with BACT, health and environmental impacts, or representations (i.e. orangement of the control of the properties of the applicable units associated with BACT, health and environmental impacts, or representations (i.e. orangement of the properties of the propert	ns authorized nless: 1) these air other es, etc.); and 3) and/or n and/or major new h the PBR
Please explain how all actual emission increases are authorized appropriately:	

IV. Hours of Operation			
Does this project include only annual increases for permitted facilities?	No		
Project emission increases associated with a change to a facility that only result in an annual emiss			
can be authorized as part of the PBR claim if the following information is mert: 1) the hourly emission helow current authorized emission limits; 2) there is not a change to any underlying air authorization applicable units associated with BACT or health and environmental impacts, and 3) this claim is our CERT. The annual emission increases associated with the PBR claim may not circumvent major no review remairments under 30 TAC Chapter 116.	ns for the rtified via PI-7-		
Please explain how the project meets the above:			

V. Federal Applicability				
Complete separate federal permitting application materials Prevention of Significant Deterioration (PSD) applicability, in Complete Separation (PSD) applicability, in Complete Separation (PSD) applicability, in Complete Separate (PSD) applicability (PSD)				
Please select the county that this project is located in.		Tarrant		
To search for your county, enter a keyword and then click on the drop-down for your results.				
County attainment status as of September 23, 2019:	This county has a nonattainment of	designation for		
If applicable, is this facility located within the portion of the county that is in nonattainment?				
PSD Applicability Summary				
r 30 Applicable	nty Julilliary			

Is this a named source?						
Please select the source category: Chemical process plants (other than ethanol by fer						
Is netting required for the PSD Analysis for this project?						
If yes, the project increases listed below should be after netting has been performed. Attach the netting information						

to the application

Pollutant	Project Increase	Threshold	PSD Review Required?
co	1.39	250	No
NO <sub>x</sub>	0.21	250	No
PM	1.74	250	No
PM <sub>10</sub>	0.87	250	No
PM <sub>2.5</sub>	0.01	250	No
SO <sub>2</sub>	0.69	250	No
Ozone (as VOC)	0	250	No
Ozone (as NO <sub>x</sub> )	0	250	No
Pb			
H <sub>2</sub> S			
TRS			
Reduced sulfur compounds (including H <sub>2</sub> S)			
H <sub>2</sub> SO <sub>4</sub>			
Fluoride (excluding HF)	0.001	3	No
CO <sub>2</sub> e			

PM <sub>10</sub> PM <sub>25</sub> SO <sub>2</sub> Ozone (as VOC)	0.87 0.01 0.69	250 250 250	No No No
SO <sub>2</sub> Ozone (as VOC)	0.69		
Ozone (as VOC)		250	No
	^		
	U	250	No
Ozone (as NO <sub>x</sub> )	0	250	No
Pb			
H <sub>2</sub> S			
TRS			
Reduced sulfur compounds (including H <sub>2</sub> S)			
H <sub>2</sub> SO <sub>4</sub>			
Fluoride (excluding HF)	0.001	3	No
CO <sub>2</sub> e			

s netting required for the nonattainment analysis for this project?

No

If yes, the project increases listed below should be after netting has been performed. Attach the netting information to the application.

and the second					
Pollutant	Project Increase	Threshold	NA Review Required?		
PM <sub>10</sub>					
SO₂					
Ozone (as VOC)	0	50	No		
Ozone (as NOx)	0	50	No		

Click here to go to the §106.261 Checklist sheet.

Date: 11/19/2021 Project/Permit: 146921 Company: Smart Chemical Solutions, LLC

30 TAC §106.261 Checklist			
This sheet provides compliance demonstration and emission limits for 30 TAC §106.261.			
Are emission increases being authorized under §106.261 five tons per year or greater?  No			
Submit a notification by March 31 of the following year summarizing all uses of this permit by rule in the previous calendar year.			
s this project an annual notification?	No		

	I 810	06.261(a)(2)			
Are there new or increased emissions lis			dina fuaitives le	ess than or	Yes
equal to 6.0 pounds per hour (lb/hr) and ten tons per year?					
Please select chemical and enter emi		li-1	-1		
To search for contaminants, enter a key	wora ana tnen c	иск on tne arop-	aown for your re	esuits.	
Chemical	Emission Limit (lb/hr)	Emission Limit tpy	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Meets Limit?
carbon monoxide	6.00	10.00	3.80E-01	1.39E+00	Yes
oxides of nitrogen	6.00	10.00	6.00E-02	2.10E-01	Yes
sulfur dioxide	6.00	10.00	1.90E-01	6.90E-01	Yes
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
	6.00	10.00			
Are there new or increased emissions, in chemical having a limit value (L) greater referenced in Table 262 of 30 TAC § 100 Limitoticas)?	than 200 milligr 5.262 (relating to	ams per cubic m Facilities (Emis	neter (mg/m3 ) a ssion and Distar	is listed and nce	Yes
Are there new or increased emissions, including fugitives, less than or equal to 1.0 lb/hr of any chemical not listed or referenced in Table 262?					
Please enter the chemical name, L va If there is no L value available for the ch			lank.		
Chemical	L value (mg/m3)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Is the L value greater than 200 mg/m³?	Meets Limit?
Neodymium(III) fluoride		6.56E-04	2.36E-03	N/A	Yes

Chemical	L value (mg/m3)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Is the L value greater than 200 mg/m³?	Meets Limit?
Neodymium(III) fluoride		6.56E-04	2.36E-03	N/A	Yes
Praseodymium(III) fluoride		2.92E-05	1.05E-04	N/A	Yes
Carbon tetrafluoride		5.81E-03	2.09E-02	N/A	Yes
Hexafluoroethane		1.14E-03	4.10E-03	N/A	Yes
Perfluoropropane		3.84E-05	1.38E-04	N/A	Yes
				N/A	

Click here to go to the §106.262 Checklist sheet.

### 30 TAC §106.262 Checklist

This sheet provides compliance demonstration and emission limits for 30 TAC §106.262

I. §106.262(a)(2)				
New or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than E as determined using the equation $E = L/K$ .				
Distance to nearest off-plant receptor (feet)	310			
K value	135.5			
Are the chemicals being registered included in Table 262 of 30 TAC §106.262(a)(2)?	Yes			
Chemicals listed in the 1997 Edition of the ACGIH TLV and BEI Guide are available in this worksheet be	eginning on Ro			

Please select applicable chemicals from dropdown, and enter emission rates: To search for contaminants, enter a keyword and then click on the drop-down for your results.

Chemical	L Value (mg/m3)	E, maximum Hourly Emission Limit (lb/hr)	Annual Emission Limit (tpy)	Actual Hourly Increases (lb/hr)	Actual Annual Increase (tpv)	Meets Limit?
Hydrogen Fluoride	0.5	3.69E-03	1.62E-02	2.99E-04	1.08E-03	Yes
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			

Are the chemicals being registered not listed in Table 262, but have a published TLV in the 1997 Edition of the ACGIH TLV and BEI Guide?

Please select applicable chemicals from dropdown, and enter emission rates: To search for contaminants, enter a keyword and then click on the drop-down for your results.

Chemical	L Value (mg/m3	E, maximum Hourly Emission Limit (lb/hr)	Annual Emission Limit (tpy)	Actual Hourly Increases (lb/hr)	Actual Annual Increase (tpy)	Meets Limit?
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			
	0	0.00E+00	0.00E+00			

NOTE: The time weighted average (TWA) Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs quide

II. §106.262(a)(3)-(a)(4)	
Notification must be provided using Form PI-7 within ten days following the installation or modification of the facilities.	I agree
Are one or more of the following chemicals is handled for this registration?	No
acrolein, allyl chloride, ammonia (anhydrous), arsine, boron trifluoride, bromine, carbon disulfide, chlorin dioxide, chlorine trifluoride, chloroacetaldehyde, chloropicrin, chloroprene, diazomethane, diborane, digl dimethylhydrazine, ethyleneimine, ethyl mercaptan, fluorine, formaldehyde (anhydrous), hydrogen brom chloride, hydrogen cyanide, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, ketene, methylabromide, methyl hydrazine, methyl socyanate, methyl mercaptan, nickel carbonyl, nitric ackid dioxide, oxygen difluoride, ozone, pentaborane, perchloromethyl mercaptan, perchloryl fluoride, phosge phosphorus trichloride, selenium hexafluoride, stibine, liquified sulfur dioxide, sulfur pentafluoride, and te hexafluoride.	ycidyl ether, ide, hydrogen ne, methyl e, nitrogen ne, phosphine, ellurium
These chemicals shall be handled at least 300 feet from the nearest property line and 600 feet from any eceptor, and the cumulative amount of any of these chemicals resulting from one or more authorization section (but not including permit authorizations) shall not exceed 500 pounds on the plant property and chemicals shall be handled only in unheated containers operated in compliance with the United States I Transportation regulations (49 Code of Federal Regulations, Parts 171-178).	s under this all listed
Distance to property line (feet):	

Distance to any off-plant receptor (feet): Cumulative amount of the above listed chemicals authorized under this section (pounds) Containers of these chemicals may not be vented or opened directly to the atmosphere at any time:

Click here to go to the Rule Summary sheet.

Date: 11/19/2021 Project/Permit: 146921 Company: Smart Chemical Solutions, LLC

## **Rule Summary**

This sheet provide the emissions summary from chemicals authorized under §106.261 and/or §106.262.

#### Instructions

f the company is representing a different method to demonstrate compliance, please include a note next to the applicable chemical and attach additional sheets to the application.

§106.261(a)(2)					
Chemical	Actual lb/hr	Actual tpy	/leets Limits?	Notes	
carbon monoxide	0.38	1.39	Yes		
oxides of nitrogen	0.06	0.21	Yes		
sulfur dioxide	0.19	0.69	Yes		

§106.262(a)(2) Table 262					
Chemical	Actual lb/hr	Actual tpy	/leets Limits	Notes	
Hydrogen Fluoride	0.00	0.00	Yes		

§106.261(a)(3)					
Chemical	Actual lb/hr	Actual tpy	leets Limits?	Notes	
N <del>eouymium(m)</del> fluorido	0.00	0.00	Yes		
Praseodymium(III) fluoride	0.00	0.00	Yes		
Hexafluoroethane	0.00	0.00	Yes		
Perfluoropropane	0.00	0.00	Yes		

§106.262(a)(2) 1997 ACGIH Guide					
Chemical	Actual lb/hr	Actual tpy	/leets Limits	Notes	