# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

December 22, 2008

# PERMIT TO INSTALL

No. 304-87B



# STATE REGISTRATION NUMBER B6643

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

# 10/23/2008 DATE PERMIT TO INSTALL APPROVED: SIGNATURE: 12/22/2008 SIGNATURE: DATE PERMIT VOIDED: SIGNATURE: DATE PERMIT REVOKED: SIGNATURE:

# PERMIT TO INSTALL

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#### **Common Abbreviations / Acronyms**

Common Acronyms			Pollutant/Measurement Abbreviations		
AQD	Air Quality Division	BTU	British Thermal Unit		
ANSI	American National Standards Institute	°C	Degrees Celsius		
BACT	Best Available Control Technology	со	Carbon Monoxide		
CAA	Clean Air Act	dscf	Dry standard cubic foot		
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter		
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit		
COM	Continuous Opacity Monitoring	gr	Grains		
EPA	Environmental Protection Agency	Hg	Mercury		
EU	Emission Unit	hr	Hour		
FG	Flexible Group	$H_2S$	Hydrogen Sulfide		
GACS	Gallon of Applied Coating Solids	hp	Horsepower		
GC	General Condition	lb	Pound		
HAP	Hazardous Air Pollutant	m	Meter		
HVLP	High Volume Low Pressure *	mg	Milligram		
ID	Identification	mm	Millimeter		
LAER	Lowest Achievable Emission Rate	MM	Million		
MACT	Maximum Achievable Control Technology	MW	Megawatts		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	NOx	Oxides of Nitrogen		
MDEQ	Michigan Department of Environmental Quality	PM	Particulate Matter		
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than 10 microns diameter		
MSDS	Material Safety Data Sheet	PM2.5	PM less than 2.5 microns diameter		
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour		
NSPS	New Source Performance Standards	ppm	Parts per million		
NSR	New Source Review	ppmv	Parts per million by volume		
PS	Performance Specification	ppmw	Parts per million by weight		
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge		
PTI	Permit to Install	scf	Standard cubic feet		
RACT	Reasonably Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide		
SC	Special Condition	THC	Total Hydrocarbons		
SCR	Selective Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds		
TEQ	Toxicity Equivalence Quotient	yr	Year		
VE	Visible Emissions				
		1			

\* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

#### GENERAL CONDITIONS

- The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (**R 336.1901**)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

#### SPECIAL CONDITIONS

#### **EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID			
EU-MP#2 East	Equipment located in the MP#2 Building East of the column line #5, venting to either scrubber (D-4301 or D-85000) and/or the dust collector (I-70000).	FG-Multipurpose2			
EU-MP#2 West	Equipment located in the MP#2 Building West of the column line #5, venting to either scrubber (D-4301 or D-85000) and/or the dust collector (I-70000).	FG-Multipurpose2			
EU-Tk4114	Storage tank with conservation vent and vapor balance and vent to scrubber.	FG-Multipurpose2, FG-Multipur2Tks			
EU-Tk4115	Storage tank with conservation vent and vapor balance and vent to scrubber.	FG-Multipurpose2, FG-Multipur2Tks			
EU-Tk4116	Storage tank with a nitrogen blanket and conservation vent and vapor balance.	FG-Multipurpose2, FG-Multipur2Tks			
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.					

# FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
	Process equipment in and associated with "Multipurpose	EU-MP#2 East,
FG-Multipurpose2	Building 2," including EU-MP#2 East, EU-MP#2 West,	EU-MP#2 West, EU-Tk4114,
	EU-Tk4114, EU-Tk4115, and EU-Tk4116	EU-Tk4115, EU-Tk4116
EC Multipur2Tkg	Storage tanks associated with "Multipurpose Building 2"	EU-Tk4114, EU-Tk4115,
FG-Multipurz I KS	Storage tanks associated with Multipurpose Building 2	EU-Tk4116

#### The following conditions apply to: FG-Multipurpose2

**DESCRIPTION:** Process equipment in and associated with "Multipurpose Building 2," including EU-MP#2 East, EU-MP#2 West, EU-Tk4114, EU-Tk4115, and EU-Tk4116

Emission Units: EU-MP#2 East, EU-MP#2 West, EU-Tk4114, EU-Tk4115, EU-Tk4116

POLLUTION CONTROL EQUIPMENT: Scrubber D-4301 or D-85000 and/or dust collector I-70000

# I. EMISSION LIMITS

Toxic Ai	r Contaminants	s (TACs) with a screen	ing level based or	n an annual aver	aging time
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
TAC emissi	on limits for S	/-70090 operations*			
1.a Each Category 1 TAC	4.2×10 <sup>-5</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.b Each Category 2 TAC	2.1×10 <sup>-4</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.c Each Category 3 TAC	0.0021 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.d Each Category 4 TAC	0.021 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.e Each Category 5 TAC	0.21 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.f Each Category 6 TAC	2.1 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.g Each Category 7 TAC	21 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
1.h Each Category 8 TAC	21 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
TAC emissi	on limits for S	/-85090 operations*	I	,	
1.i Each Category 1 TAC	1.2×10 <sup>-5</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.j Each Category 2 TAC	6.1×10 <sup>-5</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.k Each Category 3 TAC	6.1×10 <sup>-4</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.I Each Category 4 TAC	0.0061 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.m Each Category 5 TAC	0.061 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.n Each Category 6 TAC	0.61 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.o Each Category 7 TAC	6.1 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.p Each Category 8 TAC	21 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
TAC emissi	on limits for SV	/-4301 operations*	·		
1.q Each Category 1 TAC	1.4×10 <sup>-5</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.r Each Category 2 TAC	7.1×10 <sup>-5</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.s Each Category 3 TAC	7.1×10 <sup>-4</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.t Each Category 4 TAC	0.0071 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.u Each Category 5 TAC	0.071 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.v Each Category 6 TAC	0.71 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.w Each Category 7 TAC	7.1 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
1.x Each Category 8 TAC	21 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225

Toxic Ai	Toxic Air Contaminants (TACs) with a screening level based on an annual averaging time					
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements	
A. For the purpose	A. For the purposes of this permit, Category 1 pollutants are all TACs with a screening level+ of 0.0002 to					
< 0.001, Categ	ory 2 pollutants	are all TACs with a scr	eening level of 0.00	1 to < 0.01, Cate	gory 3 pollutants	
are all TACs w	ith a screening le	evel of 0.01 to < 0.1, Ca	ategory 4 pollutants	are all TACs with	h a screening level	
of 0.1 to < 1, C	ategory 5 polluta	ants are all TACs with a	a screening level of	1 to < 10, Catego	ory 6 pollutants are	
all TACs with a	screening level	of 10 to < 100, Catego	ory 7 pollutants are a	all TACs with a so	creening level of	
100 to < 1000,	and Category 8	pollutants are all TACs	with a screening le	vel of ≥ 1000. Se	creening levels and	
category criteri	a are in microgra	ams per cubic meter.				
B. Each emission	B. Each emission limit applies to process vents only and does not include fugitive emissions from the process.					
* "SV-70090 operations" means operations in FG-Multipurpose2 that exhaust through SV-70090. "SV-85090						
operations" me	ans operations i	in FG-Multipurpose2 th	at exhaust through	SV-85090. "SV-4	4301 operations"	
means operation	ons in FG-Multip	urpose2 that exhaust t	hrough SV-4301.			

Screening levels (SLs) shall be determined according to Rules 231 and 232 (R 336.1231 and R 336.1232).
 For each toxic air contaminant emitted, permittee shall use SLs determined and listed by the AQD, unless none is listed.

Toxic Ai	r Contaminants	s (TACs) with a screer	ning level based o	n a 24-hour aver	aging time			
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements			
TAC emission	TAC emission limits for SV-70090 operations*							
2.a Each Category 1 TAC	8.4×10 <sup>-6</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.b Each Category 2 TAC	4.2×10 <sup>-5</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.c Each Category 3 TAC	4.2×10 <sup>-4</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.d Each Category 4 TAC	0.0042 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.e Each Category 5 TAC	0.042 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.f Each Category 6 TAC	0.42 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.g Each Category 7 TAC	4.2 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
2.h Each Category 8 TAC	21 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225			
TAC emission	on limits for SV	-85090 operations*						
2.i Each Category 1 TAC	2.4×10 <sup>-6</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.j Each Category 2 TAC	1.2×10 <sup>-5</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.k Each Category 3 TAC	1.2×10 <sup>-4</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.I Each Category 4 TAC	0.0012 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.m Each Category 5 TAC	0.012 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.n Each Category 6 TAC	0.12 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			
2.o Each Category 7 TAC	1.2 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225			

Toxic Air Contaminants (TACs) with a screening level based on a $24$ -hour averaging time					
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
2.p Each Category 8 TAC	12 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
TAC emission	on limits for SV	/-4301 operations*	·		
2.q Each Category 1 TAC	2.8×10 <sup>-6</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.r Each Category 2 TAC	1.4×10 <sup>-5</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.s Each Category 3 TAC	1.4×10 <sup>-4</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.t Each Category 4 TAC	0.0014 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.u Each Category 5 TAC	0.014 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.v Each Category 6 TAC	0.14 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.w Each Category 7 TAC	1.4 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
2.x Each Category 8 TAC	14 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225

A. For the purposes of this permit, Category 1 pollutants are all TACs with a screening level+ of 0.0002 to < 0.001, Category 2 pollutants are all TACs with a screening level of 0.001 to < 0.01, Category 3 pollutants are all TACs with a screening level of 0.001 to < 0.01, Category 3 pollutants are all TACs with a screening level of 0.1 to < 0.1, Category 4 pollutants are all TACs with a screening level of 0.1 to < 1, Category 5 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 10 to < 100, Category 7 pollutants are all TACs with a screening level of 100 to < 1000, and Category 8 pollutants are all TACs with a screening level of ≥ 1000. Screening levels and category criteria are in micrograms per cubic meter.

B. Each emission limit applies to process vents only and does not include fugitive emissions from the process.
 "SV-70090 operations" means operations in FG-Multipurpose2 that exhaust through SV-70090. "SV-85090 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090. "SV-4301 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090. "SV-4301 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090.

Screening levels (SLs) shall be determined according to Rules 231 and 232 (R 336.1231 and R 336.1232).
 For each toxic air contaminant emitted, permittee shall use SLs determined and listed by the AQD, unless none is listed.

Toxic Air Contaminants (TACs) with a screening level based on an 8-hour averaging time						
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements	
TAC emission	on limits for SV	/-70090 operations*				
3.a Each Category 1 TAC	4.8×10 <sup>-6</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	
3.b Each Category 2 TAC	2.4×10 <sup>-5</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	
3.c Each Category 3 TAC	2.4×10 <sup>-4</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	
3.d Each Category 4 TAC	0.0024 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	
3.e Each Category 5 TAC	0.024 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	
3.f Each Category 6 TAC	0.24 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225	

3.g Each Category 7 TAC	2.4 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
3.h Each Category 8 TAC	21 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225
TAC emissi	on limits for SV	/-85090 operations*	•	, ,	
3.i Each Category 1 TAC	1.4×10 <sup>-6</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.j Each Category 2 TAC	7.0×10 <sup>-6</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.k Each Category 3 TAC	7.0×10 <sup>-5</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.I Each Category 4 TAC	7.0×10 <sup>-4</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.m Each Category 5 TAC	0.0070 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.n Each Category 6 TAC	0.070 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.o Each Category 7 TAC	0.70 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.p Each Category 8 TAC	7.0 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
TAC emission	on limits for SV	-4301 operations*		- <b>·</b> · · ·	
3.q Each Category 1 TAC	1.6×10 <sup>-6</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.r Each Category 2 TAC	8.1×10 <sup>-6</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.s Each Category 3 TAC	8.1×10 <sup>-5</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.t Each Category 4 TAC	8.1×10 <sup>-4</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.u Each Category 5 TAC	0.0081 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.v Each Category 6 TAC	0.081 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.w Each Category 7 TAC	0.81 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225
3.x Each	8.1 pph	According to method	SV-4301	GC 13; SC III.1,	R 336.1225

 Category 8 TAC
 8.1 pph
 According to method
 operations\*
 IV.1, VI.5
 R 336.1225

 A. For the purposes of this permit, Category 1 pollutants are all TACs with a screening level+ of 0.0002 to < 0.001, Category 2 pollutants are all TACs with a screening level of 0.001 to < 0.01, Category 3 pollutants are all TACs with a screening level of 0.01 to < 0.1, Category 4 pollutants are all TACs with a screening level of 0.1 to < 1, Category 5 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 1 to < 100, Category 7 pollutants are all TACs with a screening level of 100 to < 1000, and Category 8 pollutants are all TACs with a screening level of 2 1000. Screening levels and category criteria are in micrograms per cubic meter.</td>

B. Each emission limit applies to process vents only and does not include fugitive emissions from the process.
 "SV-70090 operations" means operations in FG-Multipurpose2 that exhaust through SV-70090. "SV-85090 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090. "SV-4301 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090. "SV-4301 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090.

Screening levels (SLs) shall be determined according to Rules 231 and 232 (R 336.1231 and R 336.1232).
 For each toxic air contaminant emitted, permittee shall use SLs determined and listed by the AQD, unless none is listed.

Toxic Air	Toxic Air Contaminants (TACs) with a screening level based on a one-hour averaging time						
Pollutant <sup>A</sup>	Limit <sup>B</sup>	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements		
TAC emission	on limits for SV	70090 operations*		1			
4.a Each Category 1 TAC	3.3×10 <sup>-6</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.b Each Category 2 TAC	1.6×10 <sup>-5</sup> pph	According to method	SV-70090	GC 13; SC III.1,	R 336.1225		
4.c Each Category 3 TAC	1.6×10 <sup>-4</sup> pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.d Each Category 4 TAC	0.0016 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.e Each Category 5 TAC	0.016 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.f Each Category 6 TAC	0.16 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.g Each Category 7 TAC	1.6 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
4.h Each Category 8 TAC	16 pph	According to method	SV-70090 operations*	GC 13; SC III.1, IV.2, VI.5	R 336.1225		
TAC emission	on limits for SV	-85090 operations*					
4.i Each Category 1 TAC	9.8×10 <sup>-7</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.j Each Category 2 TAC	4.9×10 <sup>-6</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.k Each Category 3 TAC	4.9×10 <sup>-5</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.I Each Category 4 TAC	4.9×10 <sup>-4</sup> pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.m Each Category 5 TAC	0.0049 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.n Each Category 6 TAC	0.049 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.o Each Category 7 TAC	0.49 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.p Each Category 8 TAC	4.9 pph	According to method	SV-85090 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
TAC emission	on limits for SV	-4301 operations*					
4.q Each Category 1 TAC	1.1×10 <sup>-6</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.r Each Category 2 TAC	5.7×10 <sup>-6</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.s Each Category 3 TAC	5.7×10 <sup>-5</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.t Each Category 4 TAC	5.7×10 <sup>-4</sup> pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.u Each Category 5 TAC	0.0057 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.v Each Category 6 TAC	0.057 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.w Each Category 7 TAC	0.57 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
4.x Each Category 8 TAC	5.7 pph	According to method	SV-4301 operations*	GC 13; SC III.1, IV.1, VI.5	R 336.1225		
A. For the purpose < 0.001, Catego	es of this permit ory 2 pollutants	, Category 1 pollutants are all TACs with a scre	are all TACs with a eening level of 0.00	screening level+ 1 to < 0.01, Categ	of 0.0002 to gory 3 pollutants		

are all TACs with a screening level of 0.01 to < 0.1, Category 4 pollutants are all TACs with a screening level of 0.1 to < 1, Category 5 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 1 to < 10, Category 6 pollutants are all TACs with a screening level of 10 to < 100, Category 7 pollutants are all TACs with a screening level of 100 to < 1000, and Category 8 pollutants are all TACs with a screening level of  $\geq$  1000. Screening levels and category criteria are in micrograms per cubic meter.

- B. Each emission limit applies to process vents only and does not include fugitive emissions from the process.
   \* "SV-70090 operations" means operations in FG-Multipurpose2 that exhaust through SV-70090. "SV-85090 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090. "SV-4301 operations" means operations in FG-Multipurpose2 that exhaust through SV-85090.
- Screening levels (SLs) shall be determined according to Rules 231 and 232 (R 336.1231 and R 336.1232).
   For each toxic air contaminant emitted, permittee shall use SLs determined and listed by the AQD, unless none is listed.

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
5.a Volatile organic compounds (VOCs)+	10.0 tons	12-month rolling ++	FG-Multipurpose2	SC III.1, IV.1, VI.7	R 336.1702(a)
5.b Organic compounds that are "volatile" but are not "VOCs"+	10.0 tons <sup>1</sup>	12-month rolling ++	FG-Multipurpose2	SC III.1, IV.1, VI.7	R 336.1224
5.c Particulate matter	0.90 lb/hr	According to method	FG-Multipurpose2	GC 13; SC III.1, IV.2	R 336.1224, R 336.1225, R 336.1331
<ul> <li>"Volatile organic compound" is a regulatory term defined in Rule 122 (R 336.1122). Acetone is an example of an organic compound that is both organic and volatile in the general chemical sense, but that Rule 122 identifies as not a VOC. Each of these emission limits (SC I.5.a and I.5.b) applies to the total of all</li> </ul>					

compounds fitting the description.

6. For each pollutant that is emitted at the same time from more than one of SV-70090 operations, SV-85090 operations, and SV-4301 operations, emissions of that pollutant must comply with the following equation for each averaging time for which the pollutant has a screening level, as well as with all applicable emission limits in FG-Multipurpose2 SC I.1.a through I.5.c. For this equation, "from SV70090" means "from SV-70090 operations," and "from SV4301" means "from SV-4301 operations," as used in SC I.1.a through I.4.x. <sup>1</sup> (R 336.1225)

Emissions from SV70090	Emissions from SV85090	Emissions from SV4301	< 1.0
Allowed emissions from SV70090	Allowed emissions from SV85090	Allowed emissions from SV4301	< 1.0

# II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA					

#### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FG-Multipurpose2 unless an amended malfunction abatement plan (MAP) as described in Rule 911(2), for all operations conducted in FG-Multipurpose2, has been submitted within

<sup>++</sup> Based on a rolling 12-month time period as determined at the end of each calendar month.

180 days of permit issuance, and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1224, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)

#### IV. DESIGN/EQUIPMENT PARAMETERS

- The permittee shall not operate process steps in FG-Multipurpose2 vented to a scrubber unless the scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining operating parameters within the boundaries identified in the approved MAP. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)
- The permittee shall not operate process steps in FG-Multipurpose2 vented to the dust collector unless the dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining operating parameters within the boundaries identified in the approved MAP. (R 336.1224, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)
- 3. The permittee shall equip and maintain each scrubber with equipment to indicate the total liquid flow rate to the scrubber. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)
- 4. The permittee shall equip and maintain the dust collector with equipment to indicate the pressure drop across the filter medium. (R 336.1224, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. For each scrubber, the permittee shall monitor, in a satisfactory manner, the total liquid flow rate to the scrubber once each shift that the scrubber operates. (R 336.1910)
- 2. The permittee shall monitor, in a satisfactory manner, the pressure drop across the dust collector's filter medium once each shift that the dust collector operates. (R 336.1910)
- 3. The permittee shall keep, in a satisfactory manner, all per-shift-of-operation liquid flow rate records for each scrubber, as required by FG-Multipurpose2 SC VI.1, on file at the facility and make them available to the Department upon request. (R 336.1910)
- 4. The permittee shall keep, in a satisfactory manner, all per-shift-of-operation pressure drop records for the dust collector, as required by FG-Multipurpose2 SC VI.2, on file at the facility and make them available to the Department upon request. **(R 336.1910)**
- 5. The permittee shall keep, in a satisfactory manner, a description of each process carried out in FG-Multipurpose2. The description for each process shall include raw materials used; products, byproducts, and wastes generated; process step descriptions; process operating variable set points; emission calculations; and other information needed to demonstrate how emissions from the process comply with the emission limits in FG-Multipurpose2 SC I.1.a through I.6. The permittee shall keep all

descriptions on file at the facility and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a))

- The permittee shall keep, in a satisfactory manner, monthly records of all processes carried out in FG-Multipurpose2. The permittee shall cross-reference these records with the process-specific emission demonstration required by FG-Multipurpose2 SC VI.5. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a))
- 7. The permittee shall calculate the emission rate from FG-Multipurpose2 of the air contaminants listed below monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1224, R 336.1702(a))
  - a. VOCs, compared to the limit in FG-Multipurpose2 SC I.5.a (R 336.1702(a))
  - b. All organic compounds that are "volatile" but are not "VOCs," compared to the limit in FG-Multipurpose2 SC I.5.b<sup>1</sup> (R 336.1224)

#### VII. <u>REPORTING</u>

NA

#### VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-70090	10 <sup>1</sup>	66.6 <sup>1</sup>	R 336.1225
2. SV-85090	8 <sup>1</sup>	60.5 <sup>1</sup>	R 336.1225
3. SV-4301	8.6 <sup>1</sup>	60.5 <sup>1</sup>	R 336.1225

# IX. OTHER REQUIREMENTS

NA

#### Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

#### The following conditions apply to: FG-Multipur2Tks

**DESCRIPTION:** Storage tanks associated with "Multipurpose Building 2"

Emission Units: EU-Tk4114, EU-Tk4115, EU-Tk4116

#### POLLUTION CONTROL EQUIPMENT:

All tanks: conservation vents. For transfers to the tanks: either vapor balance or a scrubber. EU-Tk4116: nitrogen blanket.

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA					

#### II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA					

#### III. PROCESS/OPERATIONAL RESTRICTIONS

NA

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not transfer material to any tank in FG-Multipur2Tks unless the vapor balance system is installed, maintained, and operated in a satisfactory manner or, if the material being transferred is water soluble or is effectively treated in the scrubber, the tank may be vented to scrubber if the scrubber is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1702)
- 2. The permittee shall not operate EU-Tk4114 or EU-Tk4115 unless it is vented to a scrubber and the scrubber is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1702)
- 3. The permittee shall equip and maintain each tank in FG-Multipur2Tks with a conservation vent. (R 336.1224, R 336.1225, R 336.1702)
- 4. The permittee shall equip and maintain EU-Tk4116 with a nitrogen blanket. (R 336.1224, R 336.1225, R 336.1702)

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

#### VII. <u>REPORTING</u>

NA

# VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust	Minimum Height	Underlying Applicable
	Dimensions (inches)	Above Ground (feet)	Requirements
NA			

# IX. OTHER REQUIREMENTS

NA

#### Footnotes:

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).