Troy Chemical Corp (05459)

Date: 8/12/2024

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: PCP **Number:** 170004

Description of Modifications:

Troy Chemical is submitting this application to modify its PCP170004 to merge mutliple permits covering operations within Building 71 into a single permit to elminiate pre-1996 permits per the Department's request, streamline monitoring and record keeping at the site and to ensure its permits match operations as they are currently occuring at the Newark site.

Once this permit is issued, the following permits should be cancelled as all equipment on each permit will be part of the new permit anticipated to be PCP240001: PCP000001, PCP110001, PCP960030, PCP960043, PCP960052, PCP960053, and PCP970003.

Please remove equipment E23 and all other associated operating scenarios as the 24" fractionator is no longer present on the Newark site.

As part of this revision, please update the following nomenclature to better reflect site data:
1. For E20, update equipment number from "E20" to "E7101"
2. For E21, update equipment number from "E21" to "E7102"
3. For E24, update equipment number from "E24" to "E7124", facility designation from "36" fractionator" to "CL-7160" and update description from "36" Fractionator normal operation" to "CL-7160 Methanol Recovery Column".
4. For E26, update equipment number from "E26" to "E7126".
5. For E27, update equipment number from "E27" to "E7127".
6. For E28, update equipment number from "E28" to "E7128".
7. For E30, update equipment number from "E30" to "E7130".
8. For E31, update equipment number from "E31" to "E7131"
9. For E32, update equipment number from "E32" to "E7132"
10. For E33, update equipment number from "E33" to "E7133"
11. For OS5, update facility designation from "36" fractionator" to "CL-7160" and update description from "36" Fractionator normal operation" to "CL-7160 Methanol Recovery Column".

This application will remove 1 piece of equipment, add 24 pieces of equipment, add 3 control devices, add 3 emission points, remove 1 operating scenario and add 24 operating scenarios.

Troy Chemical wishes to have a combined methanol throughput total for operating scenarios 1 and 2 be less than or equal to 4 million gallons to allow for the flexibility of using either raw or recycled methanol in its processes.

Attached to this application are calculations for all new/changed operating scenarios. All HAPs remain below reporting thresholds.

It should be noted that while emissions for this permit are increasing in volume, overall site wide emissions will be reduced based on various permit cancellations and consolidations.

Troy anticipates that the processing fee for this permit revision will be $21,370, consisting of the first piece of equipment at $2,740 and 27 additional pieces of equipment at $690

New Jersey Department of Environmental Protection
Reason for Application

each. If there are any questions regarding this application, please contact the facility's consultant, Thomas Perez of Baron Environmental Associates at thomas.perez@baronenv.com or (908) 508-9000.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Troy Chemical Corp

Facility ID (AIMS): 05459

Street Address: ONE AVE L
NEWARK, NJ 07105

Mailing Address: ONE AVE L
NEWARK, NJ 07105

State Plane Coordinates:

X-Coordinate:	570
Y-Coordinate:	4,507
Units:	Other
Datum:	Unknown
Source Org.:	Other/Unknown
Source Type:	Other/Unknown

County: Essex

Location Description:

Industry:

Primary SIC:	
Secondary SIC:	
NAICS:	325510

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Air Permit Information Contact

Organization: Troy Chemical Corp.
Name: Harry Chen
Title: EH&S Specialist
Phone: (973) 589-2500 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: harry.chen@arxada.com

Org. Type: Private
NJ EIN: 22230683000
Mailing Address: One Avenue L
Newark, NJ 07105

Contact Type: Fees/Billing Contact

Organization: Troy Chemical Corp.
Name: Harry Chen
Title: EH&S Specialist
Phone: (973) 589-2500 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: harry.chen@arxada.com

Org. Type: Private
NJ EIN: 22230683000
Mailing Address: One Avenue L
Newark, NJ 07105

Contact Type: Responsible Official

Organization: Troy Chemical Corp
Name: Agib Pierre Louis
Title: Site Director
Phone: (973) 589-2500 x
Fax: ( ) - x
Other: ( ) - x
Type:
Email: agib.pierrelouis@arxada.com

Org. Type: Private
NJ EIN: 22230683000
Mailing Address: One Avenue L
Newark, NJ 07105

New Jersey Department of Environmental Protection
Facility Profile (Permitting)

1. Is this facility classified as a small business by the USEPA?	No
2. Is this facility subject to N.J.A.C. 7:27-22?	No
3. Are you voluntarily subjecting this facility to the requirements of Subchapter 22?	No
4. Has a copy of this application been sent to the USEPA?	No
5. If not, has the EPA waived the requirement?	No
6. Are you claiming any portion of this application to be confidential?	No
7. Is the facility an existing major facility?	No
8. Have you submitted a netting analysis?	No
9. Are emissions of any pollutant above the SOTA threshold?	No
10. Have you submitted a SOTA analysis?	No
11. If you answered "Yes" to Question 9 and "No" to Question 10, explain why a SOTA analysis was not required	
12. Have you provided, or are you planning to provide air contaminant modeling?	No

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E20			Storage Vessel					
E21			Storage Vessel					
E31			Manufacturing and Materials Handling Equipment					
E33			Manufacturing and Materials Handling Equipment					
E7103	DrumUnload	Drum Unloading Shed	Manufacturing and Materials Handling Equipment					
E7104	R-7101	R-7101 1,100 gallon reactor	Manufacturing and Materials Handling Equipment					
E7105	F-7141	F-7141 Larox Filter	Manufacturing and Materials Handling Equipment					
E7106	H-7142A	H-7142A Hopper	Manufacturing and Materials Handling Equipment					
E7107	H-7142B	H-7142B Hopper	Manufacturing and Materials Handling Equipment					
E7108	C-7142System	C-7142 Conveyor System including C-7142, C-7146A and C-7146B	Manufacturing and Materials Handling Equipment					

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E7109	S-7142	S-7142 Scale	Manufacturing and Materials Handling Equipment					
E7111	T-7141E	T-7141E Cyclone	Manufacturing and Materials Handling Equipment					
E7112	R-7148	R-7148 Reactor	Manufacturing and Materials Handling Equipment					
E7113	T-7105	T-7105 Blending Tank	Manufacturing and Materials Handling Equipment					
E7114	T-7106	T-7106 Blending Tank	Manufacturing and Materials Handling Equipment					
E7115	S-7105	S-7105 Scale	Manufacturing and Materials Handling Equipment					
E7116	S-7106	S-7106 Scale	Manufacturing and Materials Handling Equipment					
E7118	H-7147	H-7147 Hopper	Manufacturing and Materials Handling Equipment					
E7119	C-7147System	C-7147 Conveyor System including C-7147, C-7108 and C-7109	Manufacturing and Materials Handling Equipment					

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E7122	D-7108	D-7108 Dryer	Manufacturing and Materials Handling Equipment					
E7123	D-7109	D-7109 Dryer	Manufacturing and Materials Handling Equipment					
E7130	H-7149	H-7149 Iodine Hiopper	Manufacturing and Materials Handling Equipment					
E7134	SF-7108	SF-7108 Sifter	Manufacturing and Materials Handling Equipment					
E7135	SF-7109	SF-7109 Sifter	Manufacturing and Materials Handling Equipment					
E7136	S-7108	S-7108 Scale	Manufacturing and Materials Handling Equipment					
E7137	S-7109	S-7109 Scale	Manufacturing and Materials Handling Equipment					
E7138	S-7102	S-7102 Scale	Manufacturing and Materials Handling Equipment					
E7139	S-7148	S-7148 Scale	Manufacturing and Materials Handling Equipment					

Troy Chemical Corp (05459) Date: 8/12/2024

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD3			Scrubber (Packed Tower)				
CD5	SC-7131	SC-7131 Scrubber	Scrubber (Packed Tower)				
CD6	71-DST-11	71-DST-11 Dust Collector	Particulate Filter (Baghouse)				
CD7	71-DST-12	71-DST-12 Dust Collector	Particulate Filter (Baghouse)				

Troy Chemical Corp (05459)

Date: 8/12/2024

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT3														
PT4														
PT5	SC-7131	SC-7131 Scrubber	Round	6	20	50	80.0	40.0	130.0	300.0	0.0	450.0	Up	
PT6	71-DST-11	71-DST-11 Dust Collector	Round	18	40	25	80.0	50.0	150.0	3,000.0	0.0	4,000.0	Up	
PT7	71-DST-12	71-DST-12 Dust Collector	Round	18	20	30	80.0	50.0	150.0	3,000.0	0.0	4,000.0	Up	
PT8	T-7105	T-7105 PT	Round	4	40	60	70.0	40.0	100.0	10.0	0.0	20.0	Down	
PT9	Cyclone	Cyclone PT	Round	18	45	160	70.0	40.0	100.0	280.0	0.0		Up	
PT10	Wet Cake	Wet Cake PT	Round	4	45	160	70.0	40.0	100.0	10.0	0.0	20.0	Up	
PT11	R7148	R7148 PT	Rectangle	6	45	60	70.0	40.0	100.0	100.0	0.0	250.0	Up	

Troy Chemical Corp (05459)

Date: 8/12/2024

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 2 MEOHScrubber Methanol Scrubber

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	T-203	T-203 Storage of Fresh Methanol	Normal - Steady State	E20	CD3 (P)	PT3	3-01-014-04	0.0	8,760.0		0.0	10.0	0.0	50.0
OS2	T-206	T-206 Storage of Recycled Methanol	Normal - Steady State	E21	CD3 (P)	PT3	3-01-014-04	0.0	8,760.0		0.0	10.0	0.0	50.0
OS6	T-7152B	T-7152B Slurry Tank Normal Operation	Normal - Steady State	E33	CD3 (P)	PT3	3-01-014-50	0.0	8,760.0	A	0.0	100.0	0.0	40.0
OS12	R-7102	R-7102 Reactor 1,500gal normal operation	Normal - Steady State	E31		PT3	3-01-014-50	0.0	8,760.0	B	0.0	3.7	0.0	80.0
OS13	DrumUnload	Drum Unloading System	Normal - Steady State	E7103	CD5 (P)	PT5	3-01-810-03	0.0	8,760.0		0.0	450.0	40.0	130.0
OS14	R-7101	R-7101 Reactor	Normal - Steady State	E7104	CD5 (P)	PT5	3-01-014-50	0.0	8,760.0		0.0	450.0	40.0	130.0
OS15	F-7141	F-7141 Larox Filter	Normal - Steady State	E7105		PT9	3-01-014-50	0.0	8,760.0	A	0.0	1,000.0	40.0	130.0
OS16	H-7142A	H-4172A Hopper	Normal - Steady State	E7106	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	15.0	40.0	130.0
OS17	H-7142B	H-7142B Hopper	Normal - Steady State	E7107	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	15.0	60.0	130.0
OS18	C-7142System	C-7142 Conveyor System including C-7142, C-7146A and C-7146B	Normal - Steady State	E7108	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	200.0	60.0	130.0
OS19	S-7142	S-7142 Scale	Normal - Steady State	E7109	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	200.0	60.0	130.0
OS20	T-7141E	T-7141E Cyclone	Normal - Steady State	E7111		PT9	3-01-014-50	0.0	8,760.0	A	0.0	280.0	60.0	130.0
OS21	R-7148	R-7148 Reactor	Normal - Steady State	E7112		PT11	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS22	T-7105	T-7105 Blending Tank	Normal - Steady State	E7113		PT8	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS23	T-7106	T-7106 Blending Tank	Normal - Steady State	E7114		PT8	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS24	S-7105	S-7105 Scale	Normal - Steady State	E7115	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0

Troy Chemical Corp (05459)

Date: 8/12/2024

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 2 MEOHScrubber Methanol Scrubber

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS25	S-7106	S-7106 Scale	Normal - Steady State	E7116	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS26	H-7147	H-7147 Hopper	Normal - Steady State	E7118	CD6 (P)	PT6	3-01-014-01	9.0	8,760.0		0.0		60.0	130.0
OS27	C-7147System	C-7147 Conveyor System including C-7147, C-7108 and C-7109	Normal - Steady State	E7119	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS28	D-7108	D-7108 Dryer	Normal - Steady State	E7122	CD6 (P)	PT6	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS29	D-7109	D-7109 Dryer	Normal - Steady State	E7123	CD7 (P)	PT7	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS30	SF-7108	SF-7108 Sifter	Normal - Steady State	E7134	CD6 (P)	PT6	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS31	SF-7109	SF-7109 Sifter	Normal - Steady State	E7135	CD7 (P)	PT7	3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS32	S-7108	S-7108 Scale	Normal - Steady State	E7136	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS33	S-7109	S-7109 Scale	Normal - Steady State	E7137	CD7 (P)	PT7	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS34	S-7102	S-7102 Scale	Normal - Steady State	E7138	CD7 (P)	PT7	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS35	S-7148	S-7148 Scale	Normal - Steady State	E7139	CD7 (P)	PT7	3-01-014-01	0.0	8,760.0		0.0		60.0	130.0

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)			D	D	tons/yr	No
PM-10 (Total)			D	D	tons/yr	No
VOC (Total)			2.67500000	2.67500000	tons/yr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS1

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No
Methyl alcohol (Methanol)		0.11000000	0.11000000	0.11000000	lb/hr	No
VOC (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS2

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No
Methyl alcohol (Methanol)		0.11000000	0.11000000	0.11000000	lb/hr	No
VOC (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS6**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		20.97000000	0.21000000	0.21000000	lb/hr	No
Methyl alcohol (Methanol)		20.97000000	0.21000000	0.21000000	lb/hr	No
VOC (Total)		20.97000000	0.21000000	0.21000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS12**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)		0.00000000	0.00000000	0.00000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS13**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
VOC (Total)		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS14**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS15**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No
VOC (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS16**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS17**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS18**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS19**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS20**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No
VOC (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS21**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS22**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS23**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS24**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS25**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS26**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS27**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS28**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS29**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS30**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS31**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS32**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS33**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS34**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS35**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

000000 E7103 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Unloading Station
Capacity:	3.00E+01
Units:	other units
Description (if other):	drums
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7104 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Reactor
Capacity:	1.10E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7105 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Outotec
Manufacturer:	Outotec
Model:	PF-12
Type of Manufacturing and Materials Handling Equipment:	Filter Press
Capacity:	4.00E+01
Units:	other units
Description (if other):	gallons/minute
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7106 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7107 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7108 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Conveyor System
Capacity:	2.00E+00
Units:	other units
Description (if other):	h.p.
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Includes 3 conveyors: C-7142, C-7146A and C-7146B

000000 E7109 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7111 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Larox
Manufacturer:	Larox
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Cyclone
Capacity:	2.80E+02
Units:	other units
Description (if other):	ACFM
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7112 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Separation Tank
Capacity:	3.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7113 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Tolan
Manufacturer:	Tolan
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Blending Tank
Capacity:	1.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7114 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Tolan
Manufacturer:	Tolan
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Blending Tank
Capacity:	1.90E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7115 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7116 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7118 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7119 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Conveyor System
Capacity:	2.00E+00
Units:	other units
Description (if other):	h.p.
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Includes 3 conveyors: C-7147, C-7108 and C-7109

000000 E7122 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Wyssmont
Manufacturer:	Wyssmont
Model:	N-18
Type of Manufacturing and Materials Handling Equipment:	Tray dryer
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7123 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Wyssmont
Manufacturer:	Wyssmont
Model:	N-18
Type of Manufacturing and Materials Handling Equipment:	Tray dryer
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7130 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Ruben Mfg.
Manufacturer:	Ruben Mfg.
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry Material Hopper
Capacity:	3.60E+02
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7134 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Mechanical sifter
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7135 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Mechanical sifter
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7136 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7137 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7138 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7139 (Manufacturing and Materials Handling Equipment)
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 CD6 (Particulate Filter (Baghouse))
Print Date: 8/12/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Number of Bags:	
Size of Bags (ft²):	
Total Bag Area (ft²):	
Bag Fabric:	
Fabric Weight (oz/ft²):	
Fabric Weave:	
Fabric Finish:	
Maximum Design Temperature Capability (°F):	
Maximum Design Air Flow Rate (acfm):	
Draft Type:	
Maximum Air Flow Rate to Cloth Area Ratio:	
Minimum Operating Pressure Drop (in. H2O):	0.25
Maximum Operating Pressure Drop (in. H2O):	12.00
Method of Monitoring Pressure Drop:	Visual
Maximum Inlet Temperature (°F):	150.0
Minimum Inlet Temperature (°F):	50.0
Dew Point of Gas Stream Maximum Inlet Temperature (°F):	
Maximum Operating Exhuast Gas Flow Rate (acfm):	4,000.0
Maximum Inlet Gas Stream Moisture Content (%):	
Method for Determining When Bag Replacement is Required:	
Method for Determining When Cleaning is Required:	
Method of Bag Cleaning:	
Description:	
Is Bag Cleaning Conducted On-Line?	○ Yes ● No
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	40
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached a Particle Size Distribution Analysis?	○ Yes ● No

000000 CD6 (Particulate Filter (Baghouse))
Print Date: 8/12/2024

Have you attached data from recent performance testing?

○ Yes ● No

Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?

○ Yes ● No

Have you attached a diagram showing the location and/or configuration of this control apparatus?

○ Yes ● No

Comments:

05459 Troy Chemical Corp PCP000000 U2 OS1 (Storage Vessel Content)
Print Date: 8/12/2024

Content Name:	Methyl alcohol (Methanol)
CAS Number:	00067-56-1
Is the Content Under Pressure?	
Pressure (PSIG):	
Physical State:	Liquid
Estimated Average Working Volume:	9,000
Units:	gallons
Density of Contents:	
Units:	lb/gal
Estimated Minimum Storage Temperature (deg F):	0.000
Estimated Maximum Storage Temperature (deg F):	50.000
Estimated Average Storage Temperature (deg F):	40.000
Does the Content Contain VOCs?:	Yes
Organic Density:	
Units:	lb/gal
Molecular Weight (Lbs/Lbs-Mole):	32.040
Vapor Pressure at Average Storage Temperature (PSIA):	
Vapor Pressure at 70 deg F (mmHg):	
Estimated Average Annual Throughput:	
Units:	
Estimated Maximum Annual Throughput:	4,000,000.0000
Units:	gallons

05459 Troy Chemical Corp PCP000000 U2 OS2 (Storage Vessel Content)
Print Date: 8/12/2024

Content Name:	Methyl alcohol (Methanol)
CAS Number:	00067-56-1
Is the Content Under Pressure?	
Pressure (PSIG):	
Physical State:	Liquid
Estimated Average Working Volume:	12,000
Units:	gallons
Density of Contents:	
Units:	lb/gal
Estimated Minimum Storage Temperature (deg F):	0.000
Estimated Maximum Storage Temperature (deg F):	50.000
Estimated Average Storage Temperature (deg F):	40.000
Does the Content Contain VOCs?:	Yes
Organic Density:	
Units:	lb/gal
Molecular Weight (Lbs/Lbs-Mole):	32.040
Vapor Pressure at Average Storage Temperature (PSIA):	
Vapor Pressure at 70 deg F (mmHg):	
Estimated Average Annual Throughput:	
Units:	
Estimated Maximum Annual Throughput:	4,000,000.0000
Units:	gallons

05459 Troy Chemical Corp PCP000000 U2 OS6 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS6 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):

05459 Troy Chemical Corp PCP000000 U2 OS12 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS13 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP VOC		Liquid		Yes				lb/gal

05459 Troy Chemical Corp PCP000000 U2 OS13 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	450.00

05459 Troy Chemical Corp PCP000000 U2 OS14 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	450.00

05459 Troy Chemical Corp PCP000000 U2 OS14 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP VOC		Liquid		Yes				lb/gal

05459 Troy Chemical Corp PCP000000 U2 OS15 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	1,000.00

05459 Troy Chemical Corp PCP000000 U2 OS15 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS16 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS16 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS16 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS17 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS17 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid						

05459 Troy Chemical Corp PCP000000 U2 OS17 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS18 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS18 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	200.00

05459 Troy Chemical Corp PCP000000 U2 OS18 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS19 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS19 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	200.00

05459 Troy Chemical Corp PCP000000 U2 OS19 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS20 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	280.00

05459 Troy Chemical Corp PCP000000 U2 OS20 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
Salts		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS21 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP solids		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS21 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	100.00

05459 Troy Chemical Corp PCP000000 U2 OS22 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS22 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS23 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS23 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS24 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS24 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS24 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS25 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS26 (Gas Flow)
Print Date: 8/12/2024

Volume of Gas Discharged from this source (acfm):	15.00

05459 Troy Chemical Corp PCP000000 U2 OS26 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS26 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS27 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particluate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS27 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS28 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS28 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS29 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
Water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS29 (Efficiency Table - CD7)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS30 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS30 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS31 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS31 (Efficiency Table - CD7)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS32 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS32 (Efficiency Table - CD6)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS33 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS33 (Efficiency Table - CD7)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS34 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

05459 Troy Chemical Corp PCP000000 U2 OS34 (Efficiency Table - CD7)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

05459 Troy Chemical Corp PCP000000 U2 OS35 (Raw Materials)
Print Date: 8/12/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP solids		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
water		Liquid		No				

05459 Troy Chemical Corp PCP000000 U2 OS35 (Efficiency Table - CD7)
Print Date: 8/12/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10	100.00	99.00	99.00
PM-2.5	100.00	99.00	99.00
SO2			
TSP	100.00	99.00	99.00
VOC (Total)			

Troy Chemical Corp (05459)

Date: 4/22/2024

New Jersey Department of Environmental Protection
Reason for Application

Permit Being Modified

Permit Class: PCP **Number:** 170004

Description of Modifications: Troy Chemical is submitting this application to modify its PCP170004 to merge mutliple permits covering operations within Building 71 into a single permit to elminiate pre-1996 permits per the Department's request, streamline monitoring and record keeping at the site and to ensure its permits match operations as they are currently occuring at the Newark site.

Once this permit is issued, the following permits should be cancelled as all equipment on each permit will be part of the new permit anticipated to be PCP240001: PCP000001, PCP110001, PCP960030, PCP960043, PCP960052, PCP960053, and PCP970003.

Please remove equipment E23 and all other associated operating scenarios as the 24" fractionator is no longer present on the Newark site.

As part of this revision, please update the following nomenclature to better reflect site data:
1. For E20, update equipment number from "E20" to "E7101"
2. For E21, update equipment number from "E21" to "E7102"
3. For E24, update equipment number from "E24" to "E7124", facility designation from "36" fractionator" to "CL-7160" and update description from "36" Fractionator normal operation" to "CL-7160 Methanol Recovery Column".
4. For E26, update equipment number from "E26" to "E7126".
5. For E27, update equipment number from "E27" to "E7127".
6. For E28, update equipment number from "E28" to "E7128".
7. For E30, update equipment number from "E30" to "E7130".
8. For E31, update equipment number from "E31" to "E7131"
9. For E32, update equipment number from "E32" to "E7132"
10. For E33, update equipment number from "E33" to "E7133"
11. For OS5, update facility designation from "36" fractionator" to "CL-7160" and update description from "36" Fractionator normal operation" to "CL-7160 Methanol Recovery Column".

This application will remove 1 piece of equipment, add 24 pieces of equipment, add 3 control devices, add 3 emission points, remove 1 operating scenario and add 24 operating scenarios.

Troy Chemical wishes to have a combined methanol throughput total for operating scenarios 1 and 2 be less than or equal to 4 million gallons to allow for the flexibility of using either raw or recycled methanol in its processes.

Attached to this application are calculations for all new/changed operating scenarios. All HAPs remain below reporting thresholds.

It should be noted that while emissions for this permit are increasing in volume, overall site wide emissions will be reduced based on various permit cancellations and consolidations.

Troy anticipates that the processing fee for this permit revision will be $21,370, consisting of the first piece of equipment at $2,740 and 27 additional pieces of equipment at $690 each. If there are any questions regarding this application, please contact the facility's consultant, Thomas Perez of Baron Environmental Associates at thomas.perez@baronenv.com or (908) 508-9000.

New Jersey Department of Environmental Protection
Reason for Application

Troy Nomenclature	Description	Previous Permit	Previous NJID # (under PCP170004)	New NJID #	U2 OS #	Permit Change/ Contaminent	Raw Materials / Contents
T-203	T-203 Fresh Methanol Storage Tank 9,000 gallon	PCP170004	E20	E7101	1	VOC/HAP	Contents: MeOH
T-206	T-206 Recovered Methanol Storage Tank	PCP170004	E21	E7102	2	VOC/HAP	Contents: recovered MeOH
Drum Shed	Drum Unloading Shed	PCP110001		E7103	13	VOC	
R-7101	R-7101 Reactor 1,100 gallons	PCP110001		E7104	14	VOC	Reaction of PBC & PPA
T-7151	1,200 gallon PBC weigh tank	N/A			EXEMPT	N/A	Contents: PBC, - EXEMPT tank
H-7149	H-7149 Iodine Hopper	PCP170004	E30	E7130	11	No change	
R-7149	R-7149 Reactor 8,400 gallons	PCP170004	E32	E7132	3	VOC/HAP	
T-7152	15,000 gallon slurry tank	PCP170004	E33	E7133	6	VOC/HAP	Contents: interim product with 27,600 pounds MeOH
F-7141	F-7141 Larox Filter	PCP960053		E7105	15	VOC/HAP	Contents: interim product with 27,600 pounds MeOH
H-7142A	H-7142A Hopper	PCP000001		E7106	16	PM	Contents: interim product wet solids
H-7142B	H-7142B Hopper	PCP000001		E7107	17	PM	Contents: interim product wet solids
C-7142	C-7142 Conveyor System: C-7142, C-7146A, C-7146B	N/A		E7108	18	PM	Contents: interim product wet solids
	S-7142 Scale	N/A		E7109	19	PM	Contents: interim product wet solids
T-7141E	Cylclone	PCP960052		E7111	20	VOC/HAP	Contents MeOH/water mix
T-7141D	1500 gallon mother liquor receiver	PCP170004	E28	E7128	9	No change	Contents: MeOH (mother liquor receiver)
T-7115	15,500 gallon mother liquor rinse water	PCP170004	E26	E7126	7	No change	Contents MeOH/water mix
T-7119	15,000 gallon mother liquor tank	PCP170004	E27	E7127	8	No change	Contents MeOH/water mix
CL-7160	CL-7160 Methanol Column	PCP170004	E24	E7124	5	No change	Contents MeOH/water mix
R-7148	R-7148 Reactor	PCP170004		E7112	21	VOC/HAP	IPBC, Modsol, water
T-7105	1,700 gallon blending tank	PCP960043		E7113	22	VOC/HAP	IPBC, Modsol, water, texanol, TPME
T-7106	1,900 gallon blending tank	Possibly from a PCP96?		E7114	23	VOC/HAP	IPBC, Modsol, water, texanol, TPME
	S-7105 Scale	N/A		E7115	24	PM	Interim/final dry product
	S-7106 Scale	N/A		E7116	25	PM	Interim/final dry product
H-7147	H-7147 Hopper	PCP000001		E7118	26	PM	Contents: interim/final dry product
C-7147	C-7147 Conveyor System: C-7147, C-7108, -7109	N/A		E7119	27	PM	Contents: interim/final dry product
D-7108	D-7108 Dryer	PCP000001		E7122	28	PM	Final product with high water content
D-7109	D-7109 Dryer	PCP000001		E7123	29	PM	Final product with high water content
SF-7108	SF-7108 Sifter	PCP000001		E7134	30	PM	Final product
SF-7109	SF-7109 Sifter	PCP000001		E7135	31	PM	Final product
	S-7108 Scale	N/A		E7136	32	PM	Final product
	S-7109 Scale	N/A		E7137	33	PM	Final product
R-7102	R-7102 Reactor	PCP170004 / PCP960030	E31	E7131	12	PM	Water, non-HAP particulate
	S-7102 Scale	N/A		E7138	34	PM	
	S-7148 Scale	N/A		E7139	35	VOC/HAP	IPBC, Modsol, water
T-7107	T-7107 Tank	PCP970003			EXEMPT	N/A	Water only

Troy Chemical
Newark, NJ
PID: 05459

U6101 Building 71 Total Emissions (OS0)

Annual VOC Emissions (TPY)	Previous Permit Limit (lb/hr)	Previous Permit Limit (TPY)	New lb/hr	New TPY	
OS1 - T-203	"D"		0.11	0.480	Combined OS1 & OS2
OS2 - T-206	"D"		0.11		
OS3 - No change R-7149	0.12	0.0504	0.12	0.050	
OS5 - No change CL-7160	"D"				"D"
OS6 - T-7152	0.12	0.0504	0.21	0.089	
OS7 - No change (T-7115)	"D"				"D"
OS8 - No change (T-7119)	"D"				"D"
OS9 - No change (T-7141D)					"D"
OS11 - No change (H-7149)					"D"
OS12 - R-7102	0.07	0.00175	0	0	
OS13 - Unload Shed	0.42	1.8396	0.03	0.010	"D"
OS14 - R-7101	0.07	0.038325	0.021		"D"
OS15 - Larox Filter	0.12	0.0504	0.50	0.938	
OS20 - Cyclone	0.12	0.0504	0.50	0.938	
OS21 - R-7148			1.69	0.042	
OS22 - T-7105			1.69	0.042	
OS23 - T-7106			1.69	0.042	
OS35 - Scale unloading R-7148			1.69	0.042	

VOC Total TPY **2.6750**

HAPS
Methanol **D**

Particulate Matter (PM-10, PM-2.5, TSP)	Previous Permit Limit (lb/hr)	Previous Permit Limit (TPY)	**New Permit Limit (lb/hr) After Control**	**New Permit Limit (TPY) After Control**	
OS12 - R-7102	0.11	0.00275	0.047		"D"
OS16 - H-7142A			0.001		"D"
OS17 - H-7142B			0.001		"D"
OS18 - C-7142, C-7146A, C-7146B			0.02		"D"
OS19 - S-7142			0.01		"D"
OS24 - S-7105			0.01		"D"
OS25 - S-7106			0.01		"D"
OS26 - H-7147			0.01		"D"
OS27 - C-7147 Conveyor System			0.02		"D"
OS28 - D-7108			0.02		"D"
OS29 - D-7109			0.02		"D"
OS30 - SF-7108			0.01		"D"
OS31 - SF-7109			0.01		"D"
OS32 - S-7108			0.01		"D"
OS33 - S-7109			0.01		"D"
OS34 - S-7102			0.01		"D"
OS11 - H-7149 - No change	0.24		0.24		

Previous Permit Totals	Previous Permit Limit (TPY)	Previous Permit Limit (lb/hr)
PCP170004 OS VOC	0.1	
PCP170004 OS PM	1.06	
PCP000001 OS PM	"D"	
PCP110001 OS VOC	2.15	
PCP110001 OS PM	"D"	
PCP960043 OS VOC	Not listed	
PCP960052 OS VOC	Not listed	
PCP960053 OS VOC	Not listed	
PCP960030 OS VOC	Not listed	
PCP960034 OS VOC	0.15	0.0344

Troy Chemical
Newark, NJ
PID: 05459

U7101 Buidling 71 - Particulate Emissions (OS35-OS43)

Data/Assumptions:

- Assume worst-case emissions occur during material transfer.
- AP-42 emission factor for crushed stone processing - screening selected to be conservative = 0.025 lbs/ton processed
- Raw materials processed by these pieces of equipment include IPBC and other non-HAP particulates
- Each source below is connected to a dust collecter with a DRE of 99%

Hourly and Annual Emission Calculations (for OS11 Iodine Hopper):

Iodine is the only material processed in this hopper. Maximum amount used 5,300 pounds/hour

TSP Calculations Before Control:
lbs/ hr = lbs/ hour * 1 ton/ 2,000 lbs * emission factor [lbs/ton processed]
lbs/hr = 5,300 lbs/hr * 1 ton/ 2,000 lbs * 0.025 lbs/ton processed
lbs/hr = 0.07

TSP Calculations After Control:
lbs/hr = lbs/hr before control * (1 - Removal Efficiency)
lbs/hr = 0.07 lbs/hr * (1 - 99%)
lbs/hr = 0.00066 **De minimis**

Hourly and Annual Emission Calculations E7106/E7107 (for OS16-17 Larox Bins):

IPBC is the only material processed in this hopper. Maximum amount used 12,390 pounds/hour between the bins

TSP Calculations Before Control:
lbs/ hr = lbs/ hour * 1 ton/ 2,000 lbs * emission factor [lbs/ton processed] / 2 bins
lbs/hr = 12,390 lbs/hr * 1 ton/ 2,000 lbs * 0.025 lbs/ton processed / 2 bins
lbs/hr = 0.08

TSP Calculations After Control:
lbs/hr = lbs/hr before control * (1 - Removal Efficiency)
lbs/hr = 0.08 lbs/hr * (1 - 99%)
lbs/hr = 0.00077 **De minimis**

Hourly and Annual Emission Calculations E7122/E7123 (for OS28-29 Wyssmont Dryers):

IPBC is the worst case particulate material processed by the Wyssmont Dryers. Maximum processing rate = 1200 lb/hour

TSP Calculations Before Control:
lbs/ hr = lbs/ hour * 1 ton/ 2,000 lbs * emission factor [lbs/ton processed]
lbs/hr = 1200 lbs/hr * 1 ton/ 2,000 lbs * 0.025 lbs/ton processed
lbs/hr = 0.02 **De minimis**

TSP Calculations After Control:
lbs/hr = lbs/hr before control * (1 - Removal Efficiency)
lbs/hr = 0.01 lbs/hr * (1 - 99%)
lbs/hr = 0.00015 **De minimis**

Troy Chemical
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Hourly and Annual Emission Calculations (for OS18-19, OS24-27, OS30-34 Sifters, Conveyors and Scales):

IPBC is the worst case particulate material processed by the associated conveyors, sifters and scales. Maximum processing rate = 400 lb/hour

TSP Calculations:

lbs/ hr = lbs/ hour * 1 ton/ 2,000 lbs * emission factor [lbs/ton processed]
lbs/hr =400 lbs/hr * 1 ton/ 2,000 lbs * 0.025 lbs/ton processed
lbs/hr = 0.005 **De minimis**

Note: For OS18 & OS27 which are conveyor systems of 3 total conveyors each, PTE is 3 times the above or 0.015 lb/hour.

Hourly and Annual Calculations R-7102 (for OS12):

Data/Assumptions:
- Assume worst-case emissions occur from material transfer.
- Maximum emissions are based on capacity of reactor.
- Assume all TSP = PM10 as a conservative measure.
- Assume U.S. EPA AP-42 emission factor of 0.18 lb/ton (9.9.1 grain elevators and processes), the worst case AP-42 emission factor within Table 9.9.1-1 Particulate Factors.
- Assume worst-case batch emissions equal to hourly emissions.
- Safety factor of 15% has been incorporated.
- Assume one batch per hour as a conservative measure.
- Maximum amount of powders per batch about 400lbs. Assume 450 lbs for purpose of calculation.
- Assume annual batches 50 batches in one year.
- This unit no longer uses VOC material, therefore VOC emissions in the permit are being changed to 0

Potential Hourly TSP/PM-10 Emission Calculations (Worst-case):

Hourly Emissions:

lb/hour TSP = (batch size [lbs]) * (AP-42 Factor) * (Ton/lb conversion) * (hours/batch conversion) * (safety factor)
lb/hour TSP = (450 lbs) * (0.18 lbs/ton processed) * (1 ton/2,000 lbs) * (1/1) * (1.15)
lb/hour TSP = **0.047 De minimis**

Troy Chemical
Newark, NJ
PID: 05459

U2 OS14 Hourly and Annual VOC Calculations:

Data/Assumptions:
- Assume worst-case VOC emissions for vessel occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- Molecular weight of propargyl alcohol (PPA) is 56.06, pure vp = 12 mmHg
- Molecular weight of triethylenediamine (DABCO) is 112; pure vp = 2.9 mmHg @ 50C
- Molecular weight of n-Butyl isocyanate (NBI) is 99.13; pure vp = 10.6 mmHg
- R-7101 is a 1,100 gallon reactor
- Maximum number of batches to be manufactured = 1,095 per year

Potential Emissions R-7101

Hourly Emission Calculations (Part 1 - worst case VOC emisisons):
Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (1100 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 147.039166 Cu. Ft./batch

Hourly Emission Calculations (Part I R-7101):

Mole Fraction and Partial Pressure Calculations for initial liquid fill:						
Constituent	%Wt	Mol. Wt. (lb/lb-mol)	lb mol per 100-lb	Mol Fraction	V.P. pure (mmHg)	Partial Press. Pi(mmHg)
Propargyl alcohol	35.80%	56.06	0.639	49.7%	12	5.96026
Triethlenediamine	0.62%	112	0.006	0.4%	2.9	0.012
n-Butyl isocyanate	63.60%	99.13	0.642	49.9%	10.6	5.289
				0.0%		0.000
	100%		1.286	100.0%		

Propargyl alcohol lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
PPA lb/batch = (147.039 Cu. Ft./batch) * (5.96 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (56.06 lb/lb-mol])
PPA lb/batch = 0.16704 lb/batch

DABCO lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
DABCO lb/batch = (147.039 Cu. Ft./batch) * (0.012 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (112.0 lb/lb-mol])
DABCO lb/batch = 0.0007 lb/batch

NBI lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
NBI lb/batch = (147.039 Cu. Ft./batch) * (5.289 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (99.13 lb/lb-mol])
NBI lb/batch = 0.2621 lb/batch

VOC lb/bbatch = PPA VOC lb/batch + DABCO VOC lb/batch + NBI VOC lb/batch
VOC lb/batch = 0.16704 lb/batch + 0.0007 lb/batch + 0.2621 lb/batch
VOC lb/batch = 0.430

After-Control VOC
VOC lb/batch = Before Control VOC lb/batch * (1 - 95% DRE)
VOC lb/batch = 0.430 lb/batch * (1-0.95)
VOC lb/batch = 0.0215 "D" deminimis

Annual VOC Emissions per vessel:

Before Control
Annual VOC lbs/yr = (VOC lb/batch after control * max batches/year)
Annual VOC lbs/yr = (0.0215 lbs/batch * 1095 max batches/year)
Annual VOC lbs/yr = 23.54
Annual VOC TPY = 0.012

Subchapter 16.16 Compliance
lb/hr VOC = 0.0215
Air Flow = 450 SCFM (from PT inventory)
Mol. Weight = 56.06

ppmVOC = ((0.0215 lb / hr) * (387) * (10^6)) / ((56.06 mol / lbmol) * (60 min) * (450 SCFM (vent flow SCFM)))
ppmVOC = 5.50

5.5 ppm VOC is **Range A**
Range A lbs/VOC per hour must be less than 3.5. This source satisfies Sub-16 requirements.

Troy Chemical
Newark, NJ
PID: 05459

U2 OS13 Hourly and Annual VOC Calculations:

Potential Emissions Drum Unloading

Data/Assumptions:
- Assume worst-case VOC emissions for vessel occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- Molecular weight of n-Butyl isocyanate (NBI) is 99.13; pure vp = 10.6 mmHg
- Maximum quantity unloaded per year = 625,000 gallons/year (includes 20% safety factor) = 846,000 gallons
- Maximum quantity unloaded per hour = 650 gallons/hour, used 1100 gallons/hour to be conservative

Hourly Emission Calculations (Drum Unloading - worst case VOC emisisons):
Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (1100 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 147.039166 Cu. Ft./batch

VOC lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/batch = (147.039 Cu. Ft./batch) * (10.6 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (99.13 lb/lb-mol])
VOC lb/batch = 0.5253 lb/batch

After Control
VOC lb/batch = VOC lb/batch before control * (1 - 95%)
VOC lb/batch = 0.5253 lb/batch * (1-0.95)
VOC lb/batch = 0.03 "D" deminimis

Annual VOC Emissions:
Displacement Air Flow (Cu. Ft./year) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./year) = (846,000 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./year) = 113,086 Cu. Ft./year

VOC lb/year = (Air Flow [Cu. Ft./year]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/year = (113086.5 Cu. Ft./year) * (10.6 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (99.13 lb/lb-mol])
VOC lb/year = 404.0147 lb/year

After Control
VOC lb/year = VOC lb/year before control * (1 - 95%)
VOC lb/year = 404.0147 lb/year * (1-0.95)
VOC lb/year = 20.20 "D" deminimis TPY = 0.0101

Subchapter 16.16 Compliance
lb/hr VOC = 0.03
Air Flow = 5SCFM (from PT inventory)
Mol. Weight = 99.13

ppmVOC = ((0.03 lb / hr) * (387) * (10^6)) / ((99.13 mol / lbmol) * (60 min) * (5 SCFM (vent flow SCFM)))
ppmVOC = 390.40

390.4 ppm VOC is **Range A**
Range A lbs/VOC per hour must be less than 3.5. This source satisfies Sub-16 requirements.

Troy Chemical
Newark, NJ
PID: 05459

U2 OS3 Hourly and Annual VOC/HAP Calculations:

Data/Assumptions:

- Assume worst-case VOC emissions for reactor occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- R-7149 is an 8,400 gallon reactor
- R-7152 is a 15,000 gallon reactor
- Maxmum of 850 batches manufactured per year
- 100% of VOC emissions are also HAP emisisons as methanol
-7149 process occurs below 70F, 7152 process occurs below 40F
- Methanol Vapor Pressure = 96 mmhg; Methanol Molecular Weight = 32.04 lb/lb-mol
- Scrubber has 99% DRE
- Emissions related to particulates are not changing from the already permitted values for these sources and are therefore not included within this document.

Worst Case Emissions R-7149 (OS3) for VOC and Methanol

Hourly Emission Calculations:
Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (8400 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 1122.845 Cu. Ft./batch

Before Control
VOC lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/batch = (1122.845 Cu. Ft./batch) * (96 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (32.04 lb/lb-mol])
VOC lb/batch = 11.7425 lb/batch VOC TPY = 4.99

Therefore Methanol lb/batch = 11.7425 lb/batch before control

After Control
VOC lb/batch = VOC lb/batch BC * (1-99%)
VOC lb/batch = 11.743 lb/batch * (1 - 0.99)
VOC lb/batch = 0.12 VOC TPY = 0.050

Worst Case Emissions T-7152 (OS6) for VOC and Methanol

Hourly Emission Calculations:
Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (15000 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 2005.08 Cu. Ft./batch

Before Control
VOC lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/batch = (2005.08 Cu. Ft./batch) * (96 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (32.04 lb/lb-mol])
VOC lb/batch = 20.9687 lb/batch VOC TPY = 8.91

Therefore Methanol lb/batch = 20.9687 lb/batch before control

After Control
VOC lb/batch = VOC lb/batch BC * (1-99%)
VOC lb/batch = 20.969 lb/batch * (1 - 0.99)
VOC lb/batch = 0.21 VOC TPY = 0.089

Troy Chemical
Newark, NJ
PID: 05459

U2 OS15 Larox Filter / OS20 Cyclone Hourly and Annual VOC/HAP Calculations:

Data/Assumptions:
- Assume worst-case VOC emissions for press occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- Larox Filter (F-7141) is filter measured at 40 gallons per minute of throughput, or 2,400 gallons per hour
- Maxmum throughput for these units is 9,000,000 gallons per year
- 100% of VOC emissions are also HAP emisisons as methanol
- Material enters as a mixture, therefore no emissions related to particulate are present.

Hourly Emission Calculations (Larox Filter):

Mole Fraction and Partial Pressure Calculations for initial liquid fill:						
Constituent	%Wt	Mol. Wt. (lb/lb-mol)	lb mol per 100-lb	Mol Fraction	V.P. pure (mmHg)	Partial Press.
Methanol	21.52%	32.04	0.672	14.9%	96	14.31705
Solids/Salts	11.06%	125	0.088	2.0%	0	0.000
Water	67.43%	18.015	3.743	83.1%	0	0.000
	100%		4.503	100.0%		

Hourly Emission Calculations:
Displacement Air Flow (Cu. Ft./hour) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./hour) = (2400 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./hour) = 320.8127 Cu. Ft./hour

VOC lb/hour = (Air Flow [Cu. Ft./hour]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/hour = (2400 Cu. Ft./hour) * (14.32 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (32.04 lb/lb-mol])
VOC lb/hour = 0.5003 lb/hour

Annual Emission Calculations:
Annual VOC TPY = gallons/year * lb VOC / hourly throughput
Annual VOC TPY = 9,000,000 gallons/year * 0.5003 lbs VOC/hr / 2,400 gallons/hr * 1 Ton / 2,000 lbs
Annual VOC TPY 0.938
As VOC emissions are equal to methanol emissions, **methanol remains below the reporting threshold of 1 TPY.**

Subchapter 16.16 Compliance
lb/hr VOC = 0.5003
Air Flow = 320.8 SCFM (from PT inventory)
Mol. Weight = 96

ppmVOC = ((0.5003lb / hr) * (387) * (10^6)) / ((96 mol / lbmol) * (60 min) * (320.8 SCFM))
ppmVOC = 104.79

104.81 ppmVOC is **Range A**
Range A lbs/VOC per hour must be less than 3.5. These sources satisfy Sub-16 requirements.

Troy Chemical
Newark, NJ
PID: 05459

U2 OS21, OS39 Hourly and Annual VOC Calculations:

Data/Assumptions:

- Assume worst-case VOC emissions for Tank occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- R-7148 is a 3,100 gallon reactor
- Maxmum of 50 batches manufactured per year
- Raw materials - water, IPBC solids, modsol
- Calculations assume vessel is loaded with 100% modsol to be conservative
- Molecular weight modsol = 120 g/mol, vapor pressure < 10 mmHg
- Note: solids emissions are unchanged from current permitted values and therefore not included within this application.

Worst Case Emissions R-7148/S-7148 (OS21, 39) for VOC

Potential Emissions

Hourly Emission Calculations:

Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (3100 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 414.3831 Cu. Ft./batch

VOC lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
VOC lb/batch = (414.383 Cu. Ft./batch) * (10 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (120 lb/lb-mol])
VOC lb/batch = 1.6907 lb/batch **<<-- Worst case formula for VOC emissions**

Annual Emission Calculations:

VOC TPY = Modsol lb/batch * batches/year * 1 ton / 2,000 pounds
VOC TPY = 1.69 lb/batch * 50 batches/year * 1 ton / 2,000 pounds
VOC TPY = 0.042

Worst Case Emissions R-7106/R-7105/S-7106/S-7105 (OS22 - OS25) for VOC

Assumptions:
- Assumed to be identical to R-7148 as same material is processed by these pieces of equipment.

Subchapter 16.16 Compliance

lb/hr VOC = 1.69
Air Flow = 50 SCFM (from PT inventory)
Mol. Weight = 120

ppmVOC = ((1.69lb / hr) * (387) * (10^6)) / ((120 mol / lbmol) * (60 min) * (50 SCFM (vent flow SCFM)))
ppmVOC = 1817.47

1817.47 ppmVOC is **Range B**
Range B lbs/VOC per hour must be less than 3.0. These sources satisfy Sub-16 requirements.

Troy Chemical
Newark, NJ
PID: 05459

U7101 OS22, 32, 33, 43, 44, 46 & 47 Drumming Systems/Scales Hourly and Annual VOC/HAP Calculations:

Data/Assumptions:
- Assume worst-case VOC emissions occur during filling.
- Assume worst-case hourly emission rate from saturated air displacement during filling.
- Assume hourly emisisons equal batch emissions to be conservative
- Assume worst case throughput is the equivalent of 36 drums or 1,980 gallons
- Maximum number of batches per year = 1095
- Maximum temperature of drumming system = 195F

Potential Emissions

Worst-Case VOC Emissions

Drumming of DIDM occurs at 195F

Mole Fraction and Partial Pressure Calculations:						
Constituent	%Wt	Mol. Wt. (lb/lb-mol)	lb mol per 100-lb	Mol Fraction	V.P. pure (mmHg)	Partial Press. Pi(mmHg)
DIDM	94.35%	396.00	0.238	87.2%		0.00000
Isodecanol	4.52%	158.3	0.029	10.5%	8.2	0.857
p toluene sulfonic	1.13%	172.2	0.007	2.4%		0.000
				0.0%		0.000
	100%		0.273	100.0%		

Hourly Emission Calculations (DIDM Drumming):
Displacement Air Flow (Cu. Ft./batch) = (max volume) * (1 cu. ft. / 7.481 gal) * (530/(460+temp))
Displacement Air Flow (Cu. Ft./batch) = (1980 gal) * (1 cu. ft. / 7.481 gal) * (530/530)
Displacement Air Flow (Cu. Ft./batch) = 264.7 Cu. Ft./batch

DIDM lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
DIDM lb/batch = (264.7 Cu. Ft./batch) * (0.00000 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (396 lb/lb-mol])
DIDM lb/batch = 0.000 lb/batch

Isodecanol lb/batch = (Air Flow [Cu. Ft./batch]) * (% Solvent in Air) * (lb-mol / 387 scf) * (Mol. Wt. [lb/lb-mol])
Isodecanol lb/batch = (264.7 Cu. Ft./batch) * (0.857 mm Hg / 760 mm Hg) * (lb-mol / 387 scf) * (158.3 lb/lb-mol])
Isodecanol lb/batch = 0.122 lb/batch

VOC lb/batch = Isodecanol VOC lb/batch
VOC lb/batch = 0.122 lb/batch
VOC lb/batch = 0.122 lbs VOC <<<--- Maximum VOC/batch

VOC lb/year = VOC lb/batch * 1,095 batches/year
VOC lb/year = 0.122 lb/batch * 1,095 batches/year
VOC lb/year = 133.67
VOC TPY = 0.067

Annual VOC Emissions Drumming System:

VOC lbs/yr = Worst Case VOC lb/batch * batches/yr
VOC lbs/yr = 0.122 lbs/batch * 1,095 batches/yr
VOC lbs/yr = 133.67
VOC TPY = 0.0668

Subchapter 16.16 Compliance
lb/hr VOC = 0.122
Air Flow = 50 SCFM (from PT inventory)
Mol. Weight = 158.3

ppmVOC = ((0.122 lb / hr) * (387) * (10^6)) / ((158.3 mol / lbmol) * (60 min) * (50 SCFM (vent flow SCFM)))
ppmVOC = 99.48

99.48 ppmVOC is **Range A**
Range A lbs/VOC per hour must be less than 3.5. These sources satisfy Sub-16 requirements.

New Jersey Department of Environmental Protection
Facility Profile (General)

Facility Name (AIMS): Troy Chemical Corp

Facility ID (AIMS): 05459

Street Address: ONE AVE L
NEWARK, NJ 07105

Mailing Address: ONE AVE L
NEWARK, NJ 07105

State Plane Coordinates:

X-Coordinate:	570
Y-Coordinate:	4,507
Units:	Other
Datum:	Unknown
Source Org.:	Other/Unknown
Source Type:	Other/Unknown

County: Essex

Location Description:

Industry:

Primary SIC:	
Secondary SIC:	
NAICS:	325510

New Jersey Department of Environmental Protection
Facility Profile (General)

Contact Type: Air Permit Information Contact

Organization: Troy Chemical Corp.
Org. Type: Private
Name: Harry Chen
NJ EIN: 22230683000
Title: EH&S Specialist
Phone: (973) 589-2500 x
Mailing Address: One Avenue L
Newark, NJ 07105
Fax: ( ) - x
Other: ( ) - x
Type:
Email: harry.chen@arxada.com

Contact Type: Fees/Billing Contact

Organization: Troy Chemical Corp.
Org. Type: Private
Name: Harry Chen
NJ EIN: 22230683000
Title: EH&S Specialist
Phone: (973) 589-2500 x
Mailing Address: One Avenue L
Newark, NJ 07105
Fax: ( ) - x
Other: ( ) - x
Type:
Email: harry.chen@arxada.com

Contact Type: Responsible Official

Organization: Troy Chemical Corp
Org. Type: Private
Name: Agib Pierre Louis
NJ EIN: 22230683000
Title: Site Director
Phone: (973) 589-2500 x
Mailing Address: One Avenue L
Newark, NJ 07105
Fax: ( ) - x
Other: ( ) - x
Type:
Email: agib.pierrelouis@arxada.com

New Jersey Department of Environmental Protection
Facility Profile (Permitting)

1. Is this facility classified as a small business by the USEPA?	No
2. Is this facility subject to N.J.A.C. 7:27-22?	No
3. Are you voluntarily subjecting this facility to the requirements of Subchapter 22?	No
4. Has a copy of this application been sent to the USEPA?	No
5. If not, has the EPA waived the requirement?	No
6. Are you claiming any portion of this application to be confidential?	No
7. Is the facility an existing major facility?	No
8. Have you submitted a netting analysis?	No
9. Are emissions of any pollutant above the SOTA threshold?	No
10. Have you submitted a SOTA analysis?	No
11. If you answered "Yes" to Question 9 and "No" to Question 10, explain why a SOTA analysis was not required	
12. Have you provided, or are you planning to provide air contaminant modeling?	No

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E20			Storage Vessel					
E21			Storage Vessel					
E31			Manufacturing and Materials Handling Equipment					
E33			Manufacturing and Materials Handling Equipment					
E7103	DrumUnload	Drum Unloading Shed	Manufacturing and Materials Handling Equipment					
E7104	R-7101	R-7101 1,100 gallon reactor	Manufacturing and Materials Handling Equipment					
E7105	F-7141	F-7141 Larox Filter	Manufacturing and Materials Handling Equipment					
E7106	H-7142A	H-7142A Hopper	Manufacturing and Materials Handling Equipment					
E7107	H-7142B	H-7142B Hopper	Manufacturing and Materials Handling Equipment					
E7108	C-7142System	C-7142 Conveyor System including C-7142, C-7146A and C-7146B	Manufacturing and Materials Handling Equipment					

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E7109	S-7142	S-7142 Scale	Manufacturing and Materials Handling Equipment					
E7111	T-7141E	T-7141E Cyclone	Manufacturing and Materials Handling Equipment					
E7112	R-7148	R-7148 Reactor	Manufacturing and Materials Handling Equipment					
E7113	T-7105	T-7105 Blending Tank	Manufacturing and Materials Handling Equipment					
E7114	T-7106	T-7106 Blending Tank	Manufacturing and Materials Handling Equipment					
E7115	S-7105	S-7105 Scale	Manufacturing and Materials Handling Equipment					
E7116	S-7106	S-7106 Scale	Manufacturing and Materials Handling Equipment					
E7118	H-7147	H-7147 Hopper	Manufacturing and Materials Handling Equipment					
E7119	C-7147System	C-7147 Conveyor System including C-7147, C-7108 and C-7109	Manufacturing and Materials Handling Equipment					

New Jersey Department of Environmental Protection
Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand-Fathered	Last Mod. (Since 1968)	Equip. Set ID
E7122	D-7108	D-7108 Dryer	Manufacturing and Materials Handling Equipment					
E7123	D-7109	D-7109 Dryer	Manufacturing and Materials Handling Equipment					
E7130	H-7149	H-7149 Iodine Hiopper	Manufacturing and Materials Handling Equipment					
E7134	SF-7108	SF-7108 Sifter	Manufacturing and Materials Handling Equipment					
E7135	SF-7109	SF-7109 Sifter	Manufacturing and Materials Handling Equipment					
E7136	S-7108	S-7108 Scale	Manufacturing and Materials Handling Equipment					
E7137	S-7109	S-7109 Scale	Manufacturing and Materials Handling Equipment					
E7138	S-7102	S-7102 Scale	Manufacturing and Materials Handling Equipment					
E7139	S-7148	S-7148 Scale	Manufacturing and Materials Handling Equipment					

000000 E7103 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Unloading Station
Capacity:	3.00E+01
Units:	other units
Description (if other):	drums
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7104 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Reactor
Capacity:	1.10E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7105 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Outotec
Manufacturer:	Outotec
Model:	PF-12
Type of Manufacturing and Materials Handling Equipment:	Filter Press
Capacity:	4.00E+01
Units:	other units
Description (if other):	gallons/minute
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7106 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7107 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7108 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Conveyor System
Capacity:	2.00E+00
Units:	other units
Description (if other):	h.p.
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Includes 3 conveyors: C-7142, C-7146A and C-7146B

000000 E7109 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7111 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Larox
Manufacturer:	Larox
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Cyclone
Capacity:	2.80E+02
Units:	other units
Description (if other):	ACFM
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7112 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Separation Tank
Capacity:	3.00E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7113 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Tolan
Manufacturer:	Tolan
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Blending Tank
Capacity:	1.70E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7114 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Tolan
Manufacturer:	Tolan
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Blending Tank
Capacity:	1.90E+03
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7115 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7115 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7116 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7118 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry material hopper
Capacity:	4.28E+02
Units:	ft^3
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7119 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Conveyor System
Capacity:	2.00E+00
Units:	other units
Description (if other):	h.p.
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	Includes 3 conveyors: C-7147, C-7108 and C-7109

000000 E7122 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Wyssmont
Manufacturer:	Wyssmont
Model:	N-18
Type of Manufacturing and Materials Handling Equipment:	Tray dryer
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7123 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Wyssmont
Manufacturer:	Wyssmont
Model:	N-18
Type of Manufacturing and Materials Handling Equipment:	Tray dryer
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7130 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Ruben Mfg.
Manufacturer:	Ruben Mfg.
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Dry Material Hopper
Capacity:	3.60E+02
Units:	gallons
Description (if other):	
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7134 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Mechanical sifter
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7135 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Mechanical sifter
Capacity:	3.00E+02
Units:	other units
Description (if other):	lb/hour
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7136 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7137 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7138 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilograms
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

000000 E7139 (Manufacturing and Materials Handling Equipment)
Print Date: 4/19/2024

Make:	Custom
Manufacturer:	Custom
Model:	Custom
Type of Manufacturing and Materials Handling Equipment:	Scale
Capacity:	5.00E+03
Units:	other units
Description (if other):	kilogram
Have you attached a diagram showing the location and/or the configuration of this equipment?	No
Have you attached any manuf.'s data or specifications to aid the Dept. in its review of this application?	No
Comments:	

Troy Chemical Corp (05459) Date: 4/19/2024

New Jersey Department of Environmental Protection
Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand-Fathered	Last Mod. (Since 1968)	CD Set ID
CD3			Scrubber (Packed Tower)				
CD5	SC-7131	SC-7131 Scrubber	Scrubber (Packed Tower)				
CD6	71-DST-11	71-DST-11 Dust Collector	Particulate Filter (Baghouse)				
CD7	71-DST-12	71-DST-12 Dust Collector	Particulate Filter (Baghouse)				

Troy Chemical Corp (05459)

Date: 4/19/2024

New Jersey Department of Environmental Protection
Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam. (in.)	Height (ft.)	Dist. to Prop. Line (ft)	Exhaust Temp. (deg. F)			Exhaust Vol. (acfm)			Discharge Direction	PT Set ID
							Avg.	Min.	Max.	Avg.	Min.	Max.		
PT3														
PT4														
PT5	SC-7131	SC-7131 Scrubber	Round	6	20	50	80.0	40.0	130.0	300.0	0.0	450.0	Up	
PT6	71-DST-11	71-DST-11 Dust Collector	Round	18	40	25	80.0	50.0	150.0	3,000.0	0.0	4,000.0	Up	
PT7	71-DST-12	71-DST-12 Dust Collector	Round	18	20	30	80.0	50.0	150.0	3,000.0	0.0	4,000.0	Up	

Troy Chemical Corp (05459)

Date: 4/19/2024

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 2 MEOHScrubber Methanol Scrubber

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS1	T-203	T-203 Storage of Fresh Methanol	Normal - Steady State	E20	CD3 (P)	PT3	3-01-014-04	0.0	8,760.0		0.0	10.0	0.0	50.0
OS2	T-206	T-206 Storage of Recycled Methanol	Normal - Steady State	E21	CD3 (P)	PT3	3-01-014-04	0.0	8,760.0		0.0	10.0	0.0	50.0
OS6	T-7152B	T-7152B Slurry Tank Normal Operation	Normal - Steady State	E33	CD3 (P)	PT3	3-01-014-50	0.0	8,760.0	A	0.0	100.0	0.0	40.0
OS12	R-7102	R-7102 Reactor 1,500gal normal operation	Normal - Steady State	E31			3-01-014-50	0.0	8,760.0	B	0.0	3.7	0.0	80.0
OS13	DrumUnload	Drum Unloading System	Normal - Steady State	E7103	CD5 (P)	PT5	3-01-810-03	0.0	8,760.0		0.0	450.0	40.0	130.0
OS14	R-7101	R-7101 Reactor	Normal - Steady State	E7104	CD5 (P)	PT5	3-01-014-50	0.0	8,760.0		0.0	450.0	40.0	130.0
OS15	F-7141	F-7141 Larox Filter	Normal - Steady State	E7105	CD3 (P)	PT3	3-01-014-50	0.0	8,760.0	A	0.0	1,000.0	40.0	130.0
OS16	H-7142A	H-4172A Hopper	Normal - Steady State	E7106	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	15.0	40.0	130.0
OS17	H-7142B	H-7142B Hopper	Normal - Steady State	E7107	CD6 (P)	PT6	3-01-014-01	0.0	8,760.0		0.0	15.0	60.0	130.0
OS18	C-7142System	C-7142 Conveyor System including C-7142, C-7146A and C-7146B	Normal - Steady State	E7108			3-01-014-01	0.0	8,760.0		0.0	200.0	60.0	130.0
OS19	S-7142	S-7142 Scale	Normal - Steady State	E7109			3-01-014-01	0.0	8,760.0		0.0	200.0	60.0	130.0
OS20	T-7141E	T-7141E Cyclone	Normal - Steady State	E7111			3-01-014-50	0.0	8,760.0	A	0.0	280.0	60.0	130.0
OS21	R-7148	R-7148 Reactor	Normal - Steady State	E7112			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS22	T-7105	T-7105 Blending Tank	Normal - Steady State	E7113			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS23	T-7106	T-7106 Blending Tank	Normal - Steady State	E7114			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0

Troy Chemical Corp (05459)

Date: 4/19/2024

New Jersey Department of Environmental Protection
Emission Unit/Batch Process Inventory

U 2 MEOHScrubber Methanol Scrubber

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours Min.	Annual Oper. Hours Max.	VOC Range	Flow (acfm) Min.	Flow (acfm) Max.	Temp. (deg F) Min.	Temp. (deg F) Max.
OS24	S-7105	S-7105 Scale	Normal - Steady State	E7115			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS25	S-7106	S-7106 Scale	Normal - Steady State	E7116			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS26	H-7147	H-7147 Hopper	Normal - Steady State	E7118			3-01-014-01	9.0	8,760.0		0.0		60.0	130.0
OS27	C-7147System	C-7147 Conveyor System including C-7147, C-7108 and C-7109	Normal - Steady State	E7119			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS28	D-7108	D-7108 Dryer	Normal - Steady State	E7122			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS29	D-7109	D-7109 Dryer	Normal - Steady State	E7123			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS30	SF-7108	SF-7108 Sifter	Normal - Steady State	E7134			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS31	SF-7109	SF-7109 Sifter	Normal - Steady State	E7135			3-01-014-50	0.0	8,760.0		0.0		60.0	130.0
OS32	S-7108	S-7108 Scale	Normal - Steady State	E7136			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS33	S-7109	S-7109 Scale	Normal - Steady State	E7137			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS34	S-7102	S-7102 Scale	Normal - Steady State	E7138			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0
OS35	S-7148	S-7148 Scale	Normal - Steady State	E7139			3-01-014-01	0.0	8,760.0		0.0		60.0	130.0

000000 U2 OS1 (Storage Vessel Content)
Print Date: 4/19/2024

Content Name:	Methyl alcohol (Methanol)
CAS Number:	00067-56-1
Is the Content Under Pressure?	
Pressure (PSIG):	
Physical State:	Liquid
Estimated Average Working Volume:	9,000
Units:	gallons
Density of Contents:	
Units:	lb/gal
Estimated Minimum Storage Temperature (deg F):	0.000
Estimated Maximum Storage Temperature (deg F):	50.000
Estimated Average Storage Temperature (deg F):	40.000
Does the Content Contain VOCs?:	Yes
Organic Density:	
Units:	lb/gal
Molecular Weight (Lbs/Lbs-Mole):	32.040
Vapor Pressure at Average Storage Temperature (PSIA):	
Vapor Pressure at 70 deg F (mmHg):	
Estimated Average Annual Throughput:	
Units:	
Estimated Maximum Annual Throughput:	4,000,000.0000
Units:	gallons

000000 U2 OS1 (Efficiency Table - CD3)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

000000 U2 OS2 (Storage Vessel Content)
Print Date: 4/19/2024

Content Name:	Methyl alcohol (Methanol)
CAS Number:	00067-56-1
Is the Content Under Pressure?	
Pressure (PSIG):	
Physical State:	Liquid
Estimated Average Working Volume:	12,000
Units:	gallons
Density of Contents:	
Units:	lb/gal
Estimated Minimum Storage Temperature (deg F):	0.000
Estimated Maximum Storage Temperature (deg F):	50.000
Estimated Average Storage Temperature (deg F):	40.000
Does the Content Contain VOCs?:	Yes
Organic Density:	
Units:	lb/gal
Molecular Weight (Lbs/Lbs-Mole):	32.040
Vapor Pressure at Average Storage Temperature (PSIA):	
Vapor Pressure at 70 deg F (mmHg):	
Estimated Average Annual Throughput:	
Units:	
Estimated Maximum Annual Throughput:	4,000,000.0000
Units:	gallons

000000 U2 OS2 (Efficiency Table - CD3)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

000000 U2 OS6 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):

000000 U2 OS6 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

000000 U2 OS6 (Efficiency Table - CD3)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			

000000 U2 OS12 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

000000 U2 OS13 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	450.00

000000 U2 OS13 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP VOC		Liquid		Yes				lb/gal

000000 U2 OS13 (Pollutant Information - CD5)
Print Date: 4/19/2024

Chemical Name	Pollutant Category	Solubilty (g/ml of scrubbing media)
Non-HAP VOC	VOC (Total)	

000000 U2 OS13 (Efficiency Table - CD5)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)	100.00	99.00	99.00

000000 U2 OS13 (Scrubber - CD5)
Print Date: 4/19/2024

Liquid Recirculation Method:	Recirculated
Liquid Being Used for Absorption:	
Chemical Additive in Scrubbing Medium:	
Minimum Concentration of Chemical Additive (%):	
Maximum Concentration of Chemical Additive (%):	
How is the activity of the Scrubbing Medium Maintained?	
Maximum pH:	
Minimum pH:	
Maximum Oxidation Reduction Potential (mV):	
Minimum Oxidation Reduction Potential (mV):	

000000 U2 OS14 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP VOC		Liquid		Yes				lb/gal

000000 U2 OS14 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	450.00

000000 U2 OS14 (Scrubber - CD5)
Print Date: 4/19/2024

Liquid Recirculation Method:	Recirculated
Liquid Being Used for Absorption:	
Chemical Additive in Scrubbing Medium:	
Minimum Concentration of Chemical Additive (%):	
Maximum Concentration of Chemical Additive (%):	
How is the activity of the Scrubbing Medium Maintained?	
Maximum pH:	
Minimum pH:	
Maximum Oxidation Reduction Potential (mV):	
Minimum Oxidation Reduction Potential (mV):	

000000 U2 OS14 (Efficiency Table - CD5)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
CO			
HAP (Total)			
NOx			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)	100.00	99.00	99.00

000000 U2 OS14 (Pollutant Information - CD5)
Print Date: 4/19/2024

Chemical Name	Pollutant Category	Solubilty (g/ml of scrubbing media)
non-HAP VOC	VOC (Total)	

000000 U2 OS15 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
non-HAP particulate		Solid		No				
Water		Liquid		No				

000000 U2 OS15 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	1,000.00

000000 U2 OS15 (Efficiency Table - CD3)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
HAP (Total)			
Other (Total)			
Pb			
PM-10			
PM-2.5			
SO2			
TSP			
VOC (Total)			
CO			
NOx			

000000 U2 OS16 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				

000000 U2 OS16 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS16 (Efficiency Table - CD6)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
HAP (Total)			
Other (Total)			
PM-10			
SO2			
VOC (Total)	100.00	99.00	99.00
CO			
NOx			
Pb			
PM-2.5			
TSP			

000000 U2 OS17 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid						

000000 U2 OS17 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS17 (Efficiency Table - CD6)
Print Date: 4/19/2024

Pollutant Category	Capture Efficiency (%)	Removal Efficiency (%)	Overall Efficiency (%)
HAP (Total)			
Other (Total)			
PM-10			
SO2			
VOC (Total)	100.00	99.00	99.00
CO			
NOx			
Pb			
PM-2.5			
TSP			

000000 U2 OS18 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

000000 U2 OS18 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	200.00

000000 U2 OS19 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

000000 U2 OS19 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	200.00

000000 U2 OS20 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	280.00

000000 U2 OS20 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
Methanol		Liquid		Yes				lb/gal
Salts		Solid		No				
Water		Liquid		No				

000000 U2 OS21 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP solids		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
water		Liquid		No				

000000 U2 OS21 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	100.00

000000 U2 OS22 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
Water		Liquid		No				

000000 U2 OS22 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS23 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
Water		Liquid		No				

000000 U2 OS23 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS24 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

000000 U2 OS24 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS26 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

000000 U2 OS26 (Gas Flow)
Print Date: 4/19/2024

Volume of Gas Discharged from this source (acfm):	15.00

000000 U2 OS27 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particluate		Solid		No				

000000 U2 OS28 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				
Water		Liquid		No				

000000 U2 OS29 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				
Water		Liquid		No				

000000 U2 OS30 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP Particulate		Solid		No				

000000 U2 OS31 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulate		Solid		No				

000000 U2 OS32 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

000000 U2 OS33 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

000000 U2 OS34 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP particulates		Solid		No				

000000 U2 OS35 (Raw Materials)
Print Date: 4/19/2024

Raw Material	CAS Number	Physical State	Molecular Weight (lbs/lbs-mole)	Does the Material Contain VOC?	Weight Fraction (%)	Vapor Pressure @ 70 deg F (mmHg)	Organic Density	Units
non-HAP solids		Solid		No				
non-HAP VOC		Liquid		Yes				lb/gal
water		Liquid		No				

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)			D	D	tons/yr	No
PM-10 (Total)			D	D	tons/yr	No
VOC (Total)			2.76000000	2.76000000	tons/yr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS1

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No
Methyl alcohol (Methanol)		0.11000000	0.11000000	0.11000000	lb/hr	No
VOC (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS2

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No
Methyl alcohol (Methanol)		0.11000000	0.11000000	0.11000000	lb/hr	No
VOC (Total)		0.11000000	0.11000000	0.11000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS6**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		20.97000000	0.21000000	0.21000000	lb/hr	No
Methyl alcohol (Methanol)		20.97000000	0.21000000	0.21000000	lb/hr	No
VOC (Total)		20.97000000	0.21000000	0.21000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS12**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No
VOC (Total)					lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS13**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)					lb/hr	No
VOC (Total)		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS14**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS15**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No
VOC (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS16**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS17

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS18

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS19

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS20**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
HAPs (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No
VOC (Total)		0.50050000	0.50050000	0.50050000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS21**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS22**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS23**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS24

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS25

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS26

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS27**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS28**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: **U2 MEOHScrubber**

Operating Scenario: **OS29**

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS30

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS31

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS32

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

New Jersey Department of Environmental Protection
Potential to Emit

Subject Item: U2 MEOHScrubber

Operating Scenario: OS33

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS34

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)		D	D	D	lb/hr	No
TSP		D	D	D	lb/hr	No

Subject Item: U2 MEOHScrubber

Operating Scenario: OS35

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)		1.69000000	1.69000000	1.69000000	lb/hr	No