Facility Name: Novel Iron Works, Inc.
Address: 250 Ocean Rd
Greenland
AFS #: 3301590778 **APP #:** 18-0107
Air Permit (Yes/No): Yes **If Yes, Permit #:** TV-049

PROCESS OPERATION INFORMATION		
Material Usage Basis	Actual	Actual or Potential
Reporting Year (ONLY if Actual is used)	2017	year
Coating application transfer efficiency [1]	60%	percent
Filter particulate capture efficiency [2]	0.0%	percent

DRAFT

[1] Spray gun transfer efficiency is the amount of paint that will go onto the part during painting

[2] Particulate capture efficiency (from the filter vendor) for the spray paint booth filter

STACK INFORMATION					
Stack # →	**1**	**2**	**3**	**4**	**5**
Height Above Ground (ft)					
Inside Diameter (ft)					
Orientation (Vertical / Horizontal)	Horizontal	Horizontal	Horizontal	Horizontal	
Obstructed (Cap? Yes or No)	NO	NO	NO	NO	
Distance to nearest property boundary	>=40 feet	>=40 feet	>=40 feet	>=40 feet	
Air Flow (acfm)	16,000	16,000	16,000	16,000	
Stack # →	**6**	**7**	**8**	**9**	**10**
Height Above Ground (ft)					
Inside Diameter (ft)					
Orientation (Vertical / Horizontal)					
Obstructed (Cap? Yes or No)					
Distance to nearest property boundary					
Air Flow (acfm)					
Exhaust Temperature (°F)					

Total stack flow 30.20 m^3/sec

What process or processes are associated with the stack?

Stack		**Stack**	
1	paint area	6	
2	paint area	7	
3	paint area	8	
4	paint area	9	
5		10	

Novel Iron Works Inc.
Greenland, NH

Facility Name: Novel Iron Works, Inc. **Usage:** **Actual** **Year:** 2017

Ref No.	Product I	Description	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec
C1	TN010	F090G1K97 zinc greenish grey										6	7	
C2	TN011	F394-0394 greenish grey primer							12	61	59	52	225	288
C4	TN027	F027-11WHA FC typoxy white A&B									8	41		
C7	TN035	Epoxoline Series WB1224									10			
C8	TN036	Tnemec series V10 primer	81	58	70	22	36	32	9	59	176	278	116	42
C9	SW003	B50NZ3 Kenbond high solids									4			
C10	SW007	B50AV11 Steel spec primer gray	13	34	54	82	88	63	29	103	152	200	159	249
C12	MEK001	MEK cleaning solvent	55					55		55		55	55	
C13														

NOTES:

DRAFT

Novel Iron Wroks
Greenland, NH

Facility Name: Novel Iron Works, Inc.
Material Usage: Actual **Year:** 2017

DRAFT

Ref No.	Product ID	Description	Density [lb/gal]	VOC [lb/gal]	R1 Xylene 1330-20-7	R2 Ethyl benzene 100-41-4	R3 Methylene bisphenyl isocyanate 101-68-8	R4 Zinc oxide [RF] 1314-13-2	R5 Silica, Crystalline-a-quartz [RF] 14808-60-7	R6 Talc (containing no asbestos fibers) [RF] 14807-96-6	R7 Titanium dioxide 13463-67-7	R8 n-Butanol 71-36-3	R9 1,2,4-Trimethylbenzene (as Trimethylbenzene) 95-63-6	R10 m-Xylene 108-38-3	R11 Iron oxide (Fe2O3) [RF] 1309-37-1	R12 1,3,5-Trimethylbenzene (as Trimethylbenzene) 108-67-8	R13 Acetone 67-64-1	R14 Methyl ethyl ketone (MEK) 78-93-3	R15 p-Xylene 106-42-3	R16 Methyl isobutyl ketone (MIBK) 108-10-1
C1	TN010	F090G1K97 zinc greenish grey	23.8	2.72	10.0%	10.0%	10.0%	10.0%	1.0%											
C2	TN011	F394-0394 greenish grey primer	21.2	2.76	1.0%		5.0%			5.0%			5.0%		60.0%	5.0%	1.0%			
C4	TN027	F027-11WHA FC typoxy white A&B	14.22	2.36	20.0%	10.0%				30.0%	30.0%	10.0%	10.0%	1.0%					0.50%	
C7	TN035	Epoxoline Series WB1224	14.7	1.09	20.0%	10%				30%	15.0%	10.0%	5.0%	1.0%					0.50%	
C8	TN036	Tnemec series V10 primer	12.7	2.76						30%	30.0%									
C9	SW003	B50NZ3 Kenbond high solids	13.35	2.68	7.9%	1.4%			0.21%	1.9%	5.95%				2.6%					0.22%
C10	SW007	B50AV11 Steel spec primer gray	12.35	2.77							2.0%									
C12	MEK001	MEK cleaning solvent	6.7	6.70														100%		
C13																				

TN027 A&B mix ratio is 1:1

HAP

VOC Emissions

Facility Name: Novel Iron Works, Inc. **Material Usage basis:** Actual

Year: 2017

Total TPY	5.0

Ref. No.	Product ID	Description	VOC [lb/gal]	Use [gal/yr]	[lb/yr]
C1	TN010	F090G1K97 zinc greenish grey	2.72	13	35.30
C2	TN011	F394-0394 greenish grey primer	2.76	697	1927
C4	TN027	F027-11WHA FC typoxy white A&B	2.36	49	115.6
C7	TN035	Epoxoline Series WB1224	1.09	10	10.90
C8	TN036	Tnemec series V10 primer	2.76	979	2702
C9	SW003	B50NZ3 Kenbond high solids	2.68	4.0	10.72
C10	SW007	B50AV11 Steel spec primer gray	2.77	1226	3396
C12	MEK001	MEK cleaning solvent	6.70	275	1843
C13					

DRAFT

HAP Emissions

DRAFT

Facility Name: Novel Iron Works, Inc.

Material Usage basis: Actual **Year:** 2017

	Sum of all HAPs = 0.25		**Single HAP =** 0.18		
	HAP	**CAS #**	**lb/yr**	**tpy**	Xylene
R1	Xylene	1330-20-7	352	0.176	
R2	Ethyl benzene	100-41-4	116	0.0580	
R3	Methylene bisphenyl isocyanate	101-68-8	19.4	0.00970	
R4	Zinc oxide [RF]	1314-13-2	NA		
R5	Silica, Crystalline-a-quartz [RF]	14808-60-7	NA		
R6	Talc (containing no asbestos fibers) [RF]	14807-96-6	NA		
R7	Titanium dioxide	13463-67-7	NA		
R8	n-Butanol	71-36-3	NA		
R9	1,2,4-Trimethylbenzene (as Trimethylbenzene)	95-63-6	NA		
R10	m-Xylene	108-38-3	8.44	0.00422	
R11	Iron oxide (Fe2O3) [RF]	1309-37-1	NA		
R12	1,3,5-Trimethylbenzene (as Trimethylbenzene)	108-67-8	NA		
R13	Acetone	67-64-1	NA		
R14	Methyl ethyl ketone (MEK)	78-93-3	NA		
R15	p-Xylene	106-42-3	4.22	0.00211	
R16	Methyl isobutyl ketone (MIBK)	108-10-1	0.117	5.87E-05	

RTAP Emissions

Facility Name: Novel Iron Works, Inc.
Reporting Year 2017
Material Usage Basis: Actual

DRAFT

Ref #	Product ID	Description	R1 Xylene	R2 Ethyl benzene	R3 Methylene bisphenyl isocyanate	R4 Zinc oxide [RF]	R5 Silica, Crystalline-a-quartz [RF]	R6 Talc (containing no asbestos fibers) [RF]	R7 Titanium dioxide	R8 n-Butanol	R9 1,2,4-Trimethylbenzene (as Trimethylbenzene)	R10 m-Xylene	R11 Iron oxide (Fe2O3) [RF]	R12 1,3,5-Trimethylbenzene (as Trimethylbenzene)
			1330-20-7	100-41-4	101-68-8	1314-13-2	14808-60-7	14807-96-6	13463-67-7	71-36-3	95-63-6	108-38-3	1309-37-1	108-67-8
		Percent Emitted -->	100%	100%	6.3%	1.00%	1.00%	1.00%	1.00%	100%	100%	100%	1.00%	100%
C1	TN010	F090G1K97 zinc greenish grey	30.94	30.94	1.949	0.3094	0.03094							
C2	TN011	F394-0394 greenish grey primer	147.8		46.55			7.388			738.8		88.66	738.8
C3	TN012	F010-1009 alkyd grey primer												
C4	TN027	F027-11WHA FC typoxy white A&B	139.4	69.68				2.090	2.090	69.68	69.68	6.968		
C5	TN031	F0731-1WHA endura-shield white												
C6	TN033	F06HS Gray primer												
C7	TN035	Epoxoline Series WB1224	29.40	14.70				0.4410	0.2205	14.70	7.350	1.470		
C8	TN036	Tnemec series V10 primer						37.30	37.30					
C9	SW003	B50NZ3 Kenbond high solids	4.203	0.7690			0.001121	0.01004	0.03177				0.01367	
C10	SW007	B50AV11 Steel spec primer gray							3.028					
C11	SW009	pro industrial pro-cryl acrylic primer												
C12	MEK001	MEK cleaning solvent												
C13														
	Units: lb RTAP / yr	**Total Emitted:**	351.7	116.1	19.40	0.3094	0.03206	47.23	42.67	84.38	815.8	8.438	88.67	738.8

NOTES:

Total emitted for Methylene bisphenyl isocyanate and Hexamethylene diisocyanate also accounts for 40 % over spray

RTAP Emissions

	Facility Name:				
	Reporting Year	R13	R14	R15	R16
	Material Usage Basis:	Acetone	Methyl ethyl ketone (MEK)	p-Xylene	Methyl isobutyl ketone (MIBK)
Ref #	**Product ID**	67-64-1	78-93-3	106-42-3	108-10-1
		100%	100%	100%	100.00%
C1	TN010				
C2	TN011	147.8			
C3	TN012				
C4	TN027			3.484	
C5	TN031				
C6	TN033				
C7	TN035			0.7350	
C8	TN036				
C9	SW003				0.1175
C10	SW007				
C11	SW009				
C12	MEK001		1843		
C13					
	Units: lb RTAP / yr	147.8	1843	4.219	0.1175

NOTES:

Total emitted for Metl

In-Stack Concentration Method

Facility Name: Novel Iron Works, Inc. **Material Usage Basis:** Actual **Year:** 2017

DRAFT

	RTAP	CASRN	RTAP Emissions [lb/day]	RTAP Emissions [lb/hr]	In-Stack Concentratio [ug/m^3]	24-hour AAL [ug/m^3]	Is 24-hour AAL exceeeded?	Annual AAL [ug/m^3]	Is Annual AAL exceeeded?
R1	Xylene	1330-20-7	0.963	0.0401	167	1,550	Pass	100	Modeling needed
R2	Ethyl benzene	100-41-4	0.318	0.0133	55	1,000	Pass	1,000	Pass
R3	Methylene bisphenyl isocyanate	101-68-8	0.0531	0.00221	9.2	0.18	Modeling needed	0.020	Modeling needed
R4	Zinc oxide [RF]	1314-13-2	0.000848	3.53E-05	0.15	50	Pass	34	Pass
R5	Silica, Crystalline-a-quartz [RF]	14808-60-7	8.78E-05	3.66E-06	0.015	0.089	Pass	0.060	Pass
R6	Talc (containing no asbestos fibers) [RF]	14807-96-6	0.129	0.00539	22	10	Modeling needed	6.7	Modeling needed
R7	Titanium dioxide	13463-67-7	0.117	0.00487	20	50	Pass	34	Pass
R8	n-Butanol	71-36-3	0.231	0.00963	40	305	Pass	203	Pass
R9	1,2,4-Trimethylbenzene (as Trimethylbenzene)	95-63-6	2.24	0.0931	389	618	Pass	60	Modeling needed
R10	m-Xylene	108-38-3	0.0231	0.000963	4.0	1,550	Pass	100	Pass
R11	Iron oxide (Fe2O3) [RF]	1309-37-1	0.243	0.01012	42	25	Modeling needed	17	Modeling needed
R12	1,3,5-Trimethylbenzene (as Trimethylbenzene)	108-67-8	2.02	0.0843	352	618	Pass	60	Modeling needed
R13	Acetone	67-64-1	0.405	0.0169	70	2,120	Pass	1,413	Pass
R14	Methyl ethyl ketone (MEK)	78-93-3	5.05	0.210	877	5,000	Pass	5,000	Pass
R15	p-Xylene	106-42-3	0.0116	0.000482	2.0	1,550	Pass	100	Pass
R16	Methyl isobutyl ketone (MIBK)	108-10-1	0.000322	1.34E-05	0.056	3,000	Pass	3,000	Pass