UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

MAR 27 2015

Greg Simpson
Site Remediation Engineer
Textron Inc.
40 Westminster St.
Providence RI, 02903

Re: Authorization to discharge under the Remediation General Permit (RGP) – MAG910000. Textron Inc., former Gorham Silver Site located at 340 South Main Street, Mansfield, MA 02048, Bristol County; Authorization # MAG910022

Dear Mr. Simpson:

Based on the review of your Notice of Intent (NOI) submittal on behalf of Textron Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: http://www.epa.gov/region1/npdes/mass.html#dgp.

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. The checklist also includes other parameters for which your laboratory reports indicated there was insufficient sensitivity to detect these parameters at the minimum levels established in Appendix VI of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to discharge limitations based on a dilution factor range (DFR). Because of the limited dilution at the wetland location where the effluent is discharged, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See

the RGP Appendix IV for Massachusetts facilities) Therefore, the limit for zinc of 66.6 ug/L, and iron of 1,000 ug/L, are required to achieve permit compliance at your site.

This EPA general permit and authorization to discharge will expire on September 9, 2015. You have reported this project will terminate also on September 9, 2015. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,

Thelma Murphy

Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Lee Azinheira, Town of Mansfield PWD
Luis A. Ferreira, AECOM

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**MAG910022**
Authorization Issued:	March, 2015
Facility/Site Name:	Textron Inc., former Gorham Silver Site
Facility/Site Address:	340 South Main Street, Mansfield, MA 02048
	Email address of owner or representative: gsimpson@textron.com
Legal Name of Operator:	AECOM, Inc.
Operator contact name, title, and Address:	Luis Ferreira, Project Manager –Site Investigation and Characterization. Phone# 401- 854 2806. 10 Orms Street, Suite 405, Providence, RI 02904
	Email: luis.ferreira@aecom.com
Estimated date of the site's Completion:	September 9, 2015
Category and Sub-Category:	Category II- Non Petroleum Site Remediation. Subcategory A. Volatile Organic Compounds (VOC) Only Sites.
RGP Termination Date:	September 9, 2015
Receiving Water:	Wetland

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	Parameter	**Effluent Limit/Method#/ML** (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
		ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene [5]	20 ug/L /Me#8260C/ML 2ug/L
√	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
√	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
√	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
√	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
√	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
√	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
√	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
√	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
√	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
√	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
√	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
√	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
	a. Benzo(a) Anthracene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	b. Benzo(a) Pyrene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	c. Benzo(b)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	d. Benzo(k)Fluoranthene [7]	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	e. Chrysene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
	h. Acenaphthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
√	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	Metal parameter	Total Recoverable MA/Metal Limit H [10] = 50 mg/l CaCO3, Units = ug/l [(11/12)] Freshwater Limits		Minimum level=ML	
	39. Antimony	5.6		ML	10
	40. Arsenic **	10		ML	20
	41. Cadmium **	0.2		ML	10
	42. Chromium III (trivalent) **	48.8		ML	15
	43. Chromium VI (hexavalent) **	11.4		ML	10
	44. Copper **	5.2		ML	15
	45. Lead **	1.3		ML	20
	46. Mercury **	0.9		ML	02
	47. Nickel **	29		ML	20
	48. Selenium **	5		ML	20
	49. Silver	1.2		ML	10
√	50. Zinc **	66.6		ML	15
√	51. Iron	1,000		ML	20

	Other Parameters	Limit
√	52. Instantaneous Flow	Site specific in CFS
√	53. Total Flow	Site specific in CFS
√	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab[13]
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab[13]
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab[13]
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab[14]
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab[14]
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab[14]
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab[14]
	61. Maximum Change in Temperature in MA – Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab[14]
	62. Maximum Change in Temperature in MA – Any Class SA water body - Coastal	1.5°F; 1/Month/Grab[14]
	63. Maximum Change in Temperature in MA – Any Class SB water body - July to September	1.5°F; 1/Month/Grab[14]
	64. Maximum Change in Temperature in MA –Any Class SB water body - October to June	4°F; 1/Month/Grab[14]

Footnotes:

[1] Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).
[2] Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
[3] Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
[4] BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
[5] Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
[6] The sum of individual phthalate compounds (not including the #34, Bis (2-Ethylhexyl) Phthalate. The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[7] Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
[8] In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Aroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
[9]Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
[10] Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
[11] For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
[12] Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
[13] pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
[14] Temperature sampling per Method 170.1

December 6, 2010

Mr. Victor Alvarez
EPA-Region 1, Office of Ecosystem Protection
5 Post Office Square, Suite 100
Mail Code OEP-06-4
Boston, MA 02109-3102

Subject: Textron Inc. – Former Gorham Silver Company Facility Site – Mansfield, MA; Notice of Intent for Continued Permit Coverage Under the Massachusetts Remediation General Permit (Site's Current RGP is Permit No. MAG910022)

Dear Mr. Alvarez,

Enclosed for your review and approval is a Notice of Intent (NOI) form and supporting materials requesting continued permit coverage under the Massachusetts Remediation General Permit for the Textron Inc. - Former Gorham Silver Company facility site in Mansfield, MA. Remediation system discharges from the site are currently covered under the previous Massachusetts RGP under permit No. MAG910022.

Please feel free to contact me 401-457-2635 or gsimpson@textron.com should you have any questions regarding this submittal.

Yours sincerely,

Greg Simpson
Site Remediation Engineer
gsimpson@textron.com

w/Enclosures

Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of **facility/site**: Textron- Former Gorham Silver Site		**Facility/site** mailing address:		
Location of **facility/site**: longitude: 71 - 12' - 45" W latitude: 42 -00'-49" N	Facility SIC code(s): 86610111	Street: 340 South Main Street		
b) Name of **facility/site owner:**		Town: Mansfield		
Email address of facility/site owner: gsimpson@textron.com		State: MA	Zip: 02048	County: Bristol
Telephone no. of facility/site **owner**: 401-457-2635				
Fax no. of facility/site **owner**: 401-457-6028		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):		Textron, Inc.		
Street: 40 Westminster Street				
Town: Providence	State: RI	Zip: 02903	County: USA	
c) Legal name of **operator**:		**Operator** telephone no: 401-274-5685		
AECOM, Inc.		**Operator** fax no.: 401-521-2730	**Operator** email: rich.michalewich@aecom.com	
Operator contact name and title: Richard Michalewich, Project Manager				
Address of **operator** (if different from owner):	Street: 10 Orms Street, Suite 405			
Town: Providence	State: RI	Zip: 02904	County: Providence	

d) Check Y for "yes" or N for "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Y ○ N ◉, if Y, number:
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge?
Y ○ N ◉, if Y, date and tracking #: Per 10/21/2005 letter from EPA, NPDES permit exclusion letter coverage was transferred to RGP #MAG910022
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ○ N ◉
4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ◉ N ○

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ◉ N ○
If Y, please list:
1. site identification # assigned by the state of NH or MA: RTN 4-0955
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:
MassDEP Southeast Region Main Office
20 Riverside Drive
Lakeville, MA 02347

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ◉, if Y, number:
2. Final Dewatering General Permit? Y ○ N ◉, if Y, number:
3. EPA Construction General Permit? Y ○ N ◉, if Y, number:
4. Individual NPDES permit? Y ○ N ◉, if Y, number:
5. any other water quality related individual or general permit? Y ◉ N ○, if Y, number: MAG910022

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y ○ N ◉

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☐
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) OnlySites ☒ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Multi-phase high-vacuum extraction (MHPVE) system installed to treat VOC contaminated groundwater (GW) . GW routed to GW treatment system and discharged to local storm drainage system, which ultimately discharges to a wetland located west of the site. See attached Figure 1 and Figure 2.

b) Provide the following information about each discharge:

1) Number of discharge points: one

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 401 cfs (50 gpm) Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 16 cfs (2 gpm) Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	42 - 00' - 49" N	long	71 - 12' - 46" W	pt.2: lat.		long.	;
pt.3: lat		long		pt.4: lat.		long.	;
pt.5: lat		long		pt.6: lat.		long.	;
pt.7: lat		long		pt.8: lat.		long.	; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ○ or seasonal ○ ?
Is discharge ongoing? Y ◉ N ○

c) Expected dates of discharge (mm/dd/yy): start Sep 10, 2010 end Sep 9, 2015

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). See attached Figure 3 line diagram.

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☒	☐								
2. Total Residual Chlorine (TRC)		☒	☐								
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	8100(M) - GC	200	<200		<200	
4. Cyanide (CN)	57125	☒	☐								
5. Benzene (B)	71432	☒	☐	1	grab	EPA 624	50.0	<50		<50	
6. Toluene (T)	108883	☒	☐	1	grab	EPA 624	50.0	<50		<50	
7. Ethylbenzene (E)	100414	☒	☐	1	grab	EPA 624	50.0	<50		<50	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	EPA 624	100.0	<100		<100	
9. Total BTEX [2]	n/a	☒	☐	1	grab	EPA 624	100.0	<100		<100	
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐								
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐								
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐								

***** Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

[2] BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

[3] EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	☒	☐								
14. Naphthalene	91203	☒	☐								
15. Carbon Tetrachloride	56235	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
18a. Total dichlorobenzene		☒	☐								
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
21. 1,1 Dichloroethene (DCE)	75354	☐	☒	1	grab	EPA 624	50.0	<50.0		<50.0	
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	1	grab	EPA 624	50.0	112		112	
23. Methylene Chloride	75092	☒	☐	1	grab	EPA 624	500	<500		<500	
24. Tetrachloroethene (PCE)	127184	☐	☒	1	grab	EPA 624	200	8,880		8,880	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
27. Trichloroethene (TCE)	79016	☐	☒	1	grab	EPA 623	50.0	767		767	

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	☒	☐	1	grab	EPA 624	50.0	<50.0		<50.0	
29. Acetone	67641	☒	☐	1	grab	EPA 624	500	<500		<500	
30. 1,4 Dioxane	123911	☒	☐	1	grab	SW846, 8260B/C	500	<500		<500	
31. Total Phenols	108952	☒	☐	1	grab	SW846, 8270C/D	5.15	<5.15		<5.15	
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab	846/8270C/D	20.6	<20.6		<20.6	
33. Total Phthalates (Phthalate esters) [4]		☒	☐	1	grab	846/8270C/D	5.15	<5.15		<5.15	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab	846/8270C/D	5.15	<5.15		<5.15	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								
a. Benzo(a) Anthracene	56553	☒	☐								
b. Benzo(a) Pyrene	50328	☒	☐								
c. Benzo(b)Fluoranthene	205992	☒	☐								
d. Benzo(k)Fluoranthene	207089	☒	☐								
e. Chrysene	21801	☒	☐								
f. Dibenzo(a,h)anthracene	53703	☒	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐								

[4] The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	☒	☐								
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☒	☐								
k. Benzo(ghi) Perylene	191242	☒	☐								
l. Fluoranthene	206440	☒	☐								
m. Fluorene	86737	☒	☐								
n. Naphthalene	91203	☒	☐								
o. Phenanthrene	85018	☒	☐								
p. Pyrene	129000	☒	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐	1	grab	sw846 8082	0.206	<0.206		<0.206	
38. Chloride	16887006	☐	☒	1	grab	EPA 300.0	1,000	44,700		44,700	
39. Antimony	7440360	☒	☐								
40. Arsenic	7440382	☒	☐								
41. Cadmium	7440439	☒	☐								
42. Chromium III (trivalent)	16065831	☒	☐								
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☐	☒	1	grab	EPA 200.7	5.0	<5.0		<5.0	
45. Lead	7439921	☐	☒	1	grab	EPA 200.8	0.2	1.0		1.0	
46. Mercury	7439976	☒	☐								
47. Nickel	7440020	☐	☒	1	grab	EPA 200.7	5.0	8.9		8.9	
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☐	☒	1	grab	EPA 200.7	5.0	68.2		68.2	
51. Iron	7439896	☐	☒	1	grab	EPA 200.7	15.0	1,410		1,410	
Other (describe):		☐	☐								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
		☐	☐								
		☐	☐								

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ◉ N ○	If yes, which metals? Iron and Zinc
Step 2: For any metals which exceed the **Appendix III** limits, calculate the **dilution factor (DF)** using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal: Iron DF: 1 Metal: Zinc DF: 1 Metal: DF: Metal: DF: Etc.	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y ◉ N ○ If Y, list which metals: Iron and Zinc (have assumed dilution factor of 1 because receiving water is a wetland)

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

See attached Figure 4 process flow diagram. GW from depression wells routed to "homerun shed" head settling tank. Effluent from head tank routed thru bag filters to "treatment shed". GW and vapor from MPHVE wells routed to treatment shed to phase separator. Water from separator routed thru bag filters and combined with GW from homerun shed. Combined effluent flow is then routed through two 1000-pound liquid-phase granular activated carbon (LGAC) adsorbers. LGAC adsorbers rated for flows up to 50 gpm. Effluent from the LGAC vessels routed thru a polishing particulate pre-filter and a series of ion exchange resin vessels. Treated effluent from the ion exchange vessels routed to on-site catch basin, ultimately discharging to wetland west of site via local storm drainage system.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper ☐	Oil/water separator ☐	Equalization tanks ☐	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):	Polishing particulate pre-filter and ion exchange resin vessels downstream of LGAC and upstream of discharge.		

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate**(s) (gallons per minute) of the treatment system:
Average flow rate of discharge 2 gpm Maximum flow rate of treatment system 50 gpm
Design flow rate of treatment system 50 gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

No chemical additives are used.

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☒	Other (describe):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Discharge to catch basin, thru local storm drain system to unnamed wetland west of site. See Figure 1.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water Class B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water n/a (wetland area) cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y ○ N ◉ If yes, for which pollutant(s)?

Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A ◉ B ○ C ○ D ○ E ○ F ○

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ○ N ○ Underway ○

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ○ N ○

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 ◉ 2 ○ 3 ○

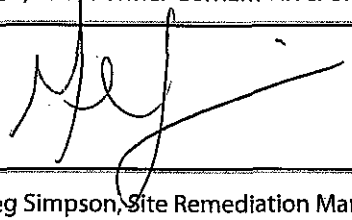
f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	Textron, Inc. - Former Gorham Silver Site
Operator signature:	
Printed Name &Title:	Greg Simpson, Site Remediation Manager
Date:	12/8/10

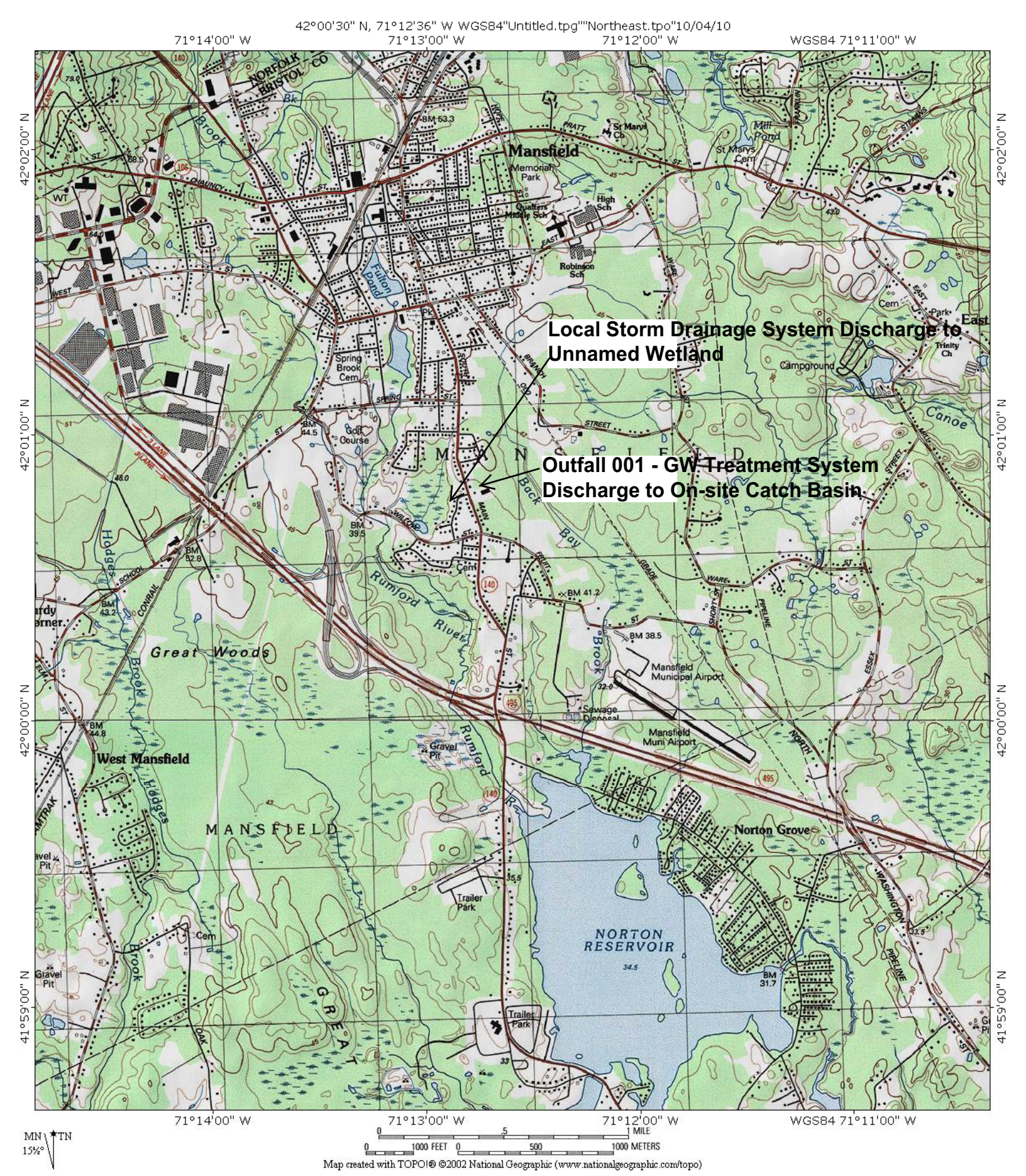
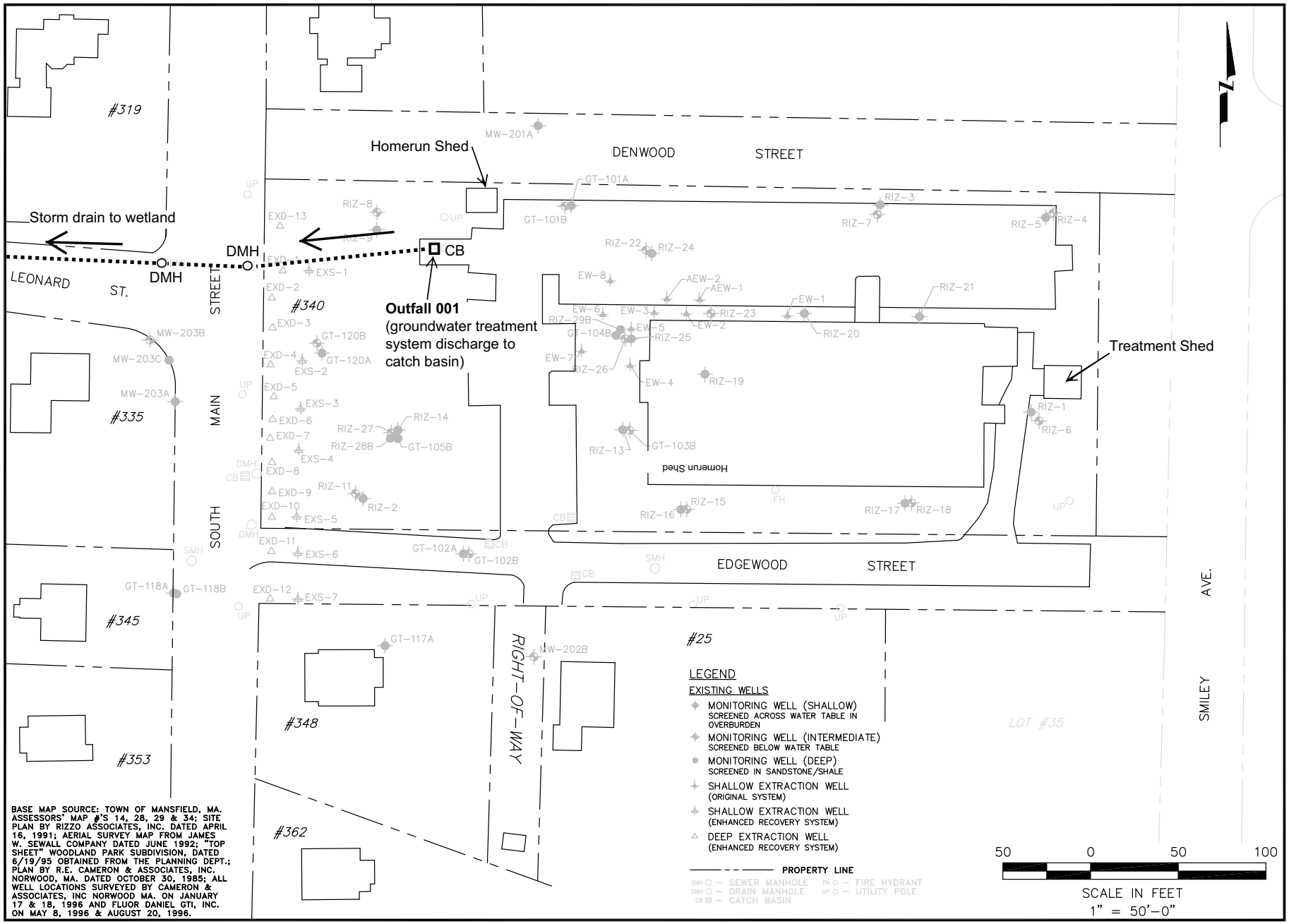


Figure 1 - Topo Map Showing Outfall Location and Receiving Water



BASE MAP SOURCE: TOWN OF MANSFIELD, MA. ASSESSORS' MAP #'S 14, 28, 29 & 34; SITE PLAN BY RIZZO ASSOCIATES, INC. DATED APRIL 16, 1991; AERIAL SURVEY MAP FROM JAMES W. SEWALL COMPANY DATED JUNE 1992; "TOP SHEET" WOODLAND PARK SUBDIVISION, DATED 6/19/95 OBTAINED FROM THE PLANNING DEPT.; PLAN BY R.E. CAMERON & ASSOCIATES, INC. NORWOOD, MA. DATED OCTOBER 30, 1985; ALL WELL LOCATIONS SURVEYED BY CAMERON & ASSOCIATES, INC NORWOOD MA. ON JANUARY 17 & 18, 1996 AND FLUOR DANIEL GTI, INC. ON MAY 8, 1996 & AUGUST 20, 1996.

FILENAME: 663011B.DWG

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY: X
DRAWN BY: K.P.B.
CHECKED BY: X
APPROVED BY: X

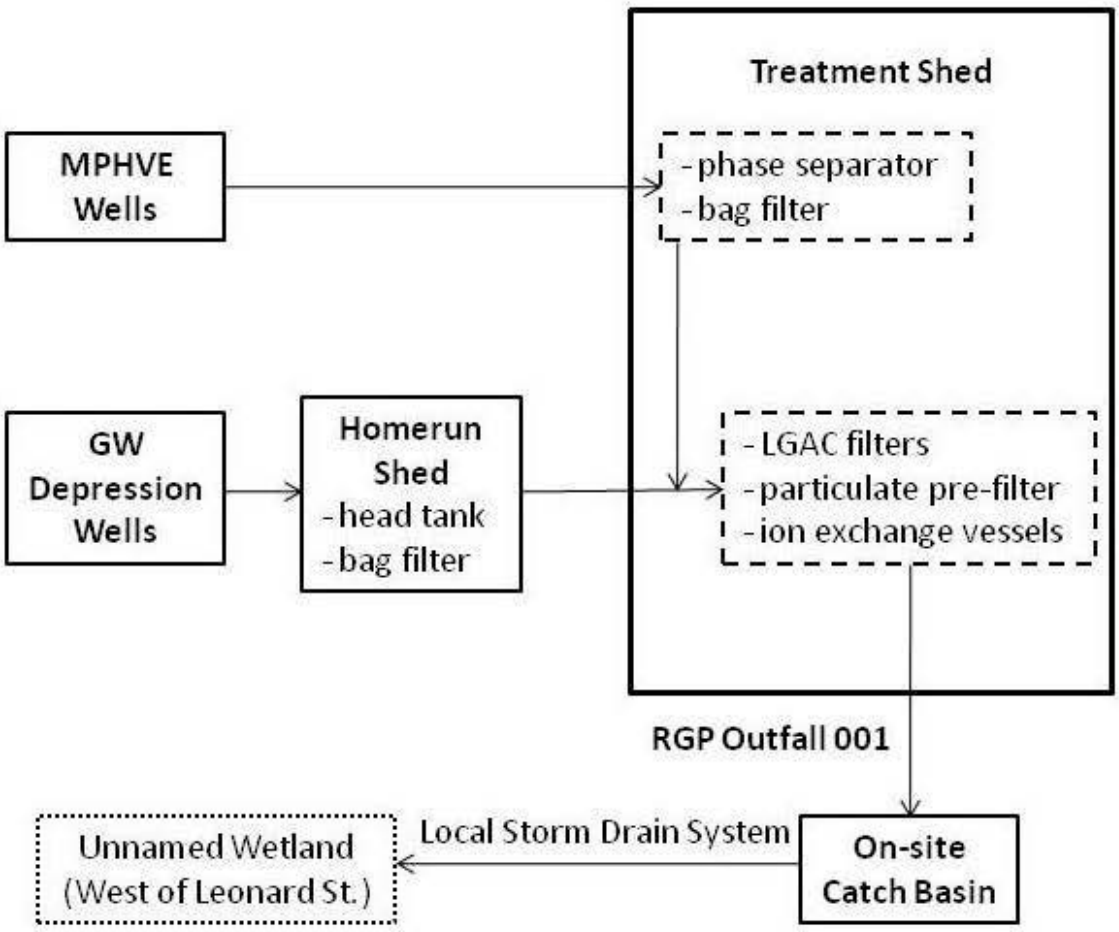
AECOM
ENSR CORPORATION
2 TECHNOLOGY PARK DRIVE
WESTFORD, MASSACHUSETTS 01886
PHONE: (978) 589-3000
FAX: (978) 589-3100
WEB: HTTP://WWW.ENSR.COM

SITE PLAN
FORMER GORHAM SILVER COMPANY
340 SOUTH MAIN STREET
MANSFIELD, MA

SCALE:	DATE:	PROJECT NUMBER:
1"=50'	7/04	06630-149-004

FIGURE NUMBER:
Figure 2

SHEET NUMBER:
1



AECOM

Textron, Inc.
Former Gorham Silver Facility Site
340 South Main Street
Mansfield, MA

Line Diagram Groundwater Treatment/Discharge

Figure 3

LEGEND

- VT — VACUUM TRANSMITTER
- PT — PRESSURE TRANSMITTER
- FT — FLOW TRANSMITTER
- * — INITIATE PLC SHUTDOWN
- DP — DIFFERENTIAL PRESSURE TRANSMITTER
- LT — LEVEL TRANSMITTER
- BUILDING
- SP — SAMPLE PORT

NOTE: THIS PFD IS NOT A P&ID AND DOES NOT SHOW ALL VALVES AND PIPE FITTINGS

TREATMENT SHED

BY NES

HOMERUN SHED

HVAC

EXD-1 THROUGH EXD-13;
ESD-2 THROUGH ESD-7

AIR PUMP

EXD-2 THROUGH EXD-13;
EXS-1 THROUGH EXS-7

HEAD SETTLING TANK

LH *

LT

BAG FILTER

FT

TRANSFER PUMP

FROM AIR PUMP P-01

EXD-2 THROUGH EXD-13;
EXS-2 THROUGH EXS-7
TYP. 1

SUMP

DP

EXD-1
TYP. 1

VT

TYP. 2
AW-2, EW-1
THROUGH EW-8

TYP. 2
PNEUMATIC PUMP (TYP.)

AEW-1

AEW-2, EW-1
THROUGH EW-8

SUMP

DILUTION AIR FILTER FS-31P-200

2"

4"

VI 102

CT-235P-400C
INLINE FILTER
SCH 80 PVC

VI 101

B-101
20 HP 230 VAC/3 PH/60 HZ/TEFC
200 SCFM @ 10 INCHES WC VAC
BLOWER: URAI-47-J
MOTOR: U649/256TTFNA4001
DRIVE: (MOTOR - 3/B4.4QD & SH 1 5/8)
(BLOWER - 3/B5.4QD & SD 7/8)
(3) GATES BELTS: BX53
MOTOR RPM: 3600
BLOWER RPM: 2973

215V-H01-QE0014

SCH 40 STEEL

SCH 40 STEEL

3"

SIGHT GLASS

SHH 101 *

SHH 101

LSL 101

DRAIN VALVE

TRANSFER PUMP

T-101
120 GAL.
SEPARATOR
TANK

B-101

DISCHARGE SILENCER

3"

SCH 40 STEEL

TI 101

PI 101

SP (INF)

SP (MID)

SP (EFF)

TO ATMOSPHERE

VGAC CARBON FILTERS
1000 LB

ITEM	MODEL	MANUFACTURER	SPECIFICATION / RANGE
VI-101	D82LFB2502LA010	TRERICE	30" HG TO 0 PSI RANGE / BOTTOM CONNECTION / 2 1/2 INCH DIAL
VI-102	D82LFB2502LA010	TRERICE	30" HG TO 0 PSI RANGE / BOTTOM CONNECTION / 2 1/2 INCH DIAL
PI-101	LP1-254-30" WC	TRERICE	0-30 INCHES WATER / 2 1/2 INCH DIAL / BOTTOM CONNECTION
TI-101	B8320207F	TRERICE	50-400 F RANGE / 2 1/2 INCH STEM / 3 INCH DIAL
LSHH-101	P-500-010	NES	BRASS CONSTRUCTION WITH BUNA-N FLOAT
LSL-101	P-500-010	NES	BRASS CONSTRUCTION WITH BUNA-N FLOAT

PT

FT

PT *

BAG FILTERS

SP (INF)

SP (MID)

LGAC CARBON FILTERS
1000 LB

SP (EFF-1)

ION EXCHANGE FILTERS

SP (EFF-2)

TO POTW

TWIN AIR DRYERS

COALESCING FILTERS

KEYSER SCREW COMPRESSOR

AECOM

TEXTRON MULTI PHASE SVE SYSTEM			PROCESS FLOW DIAGRAM
DATE: 09/01/09	DRWN: S.H./UKN		FIGURE 1

Attachment I – ESA and NHPA Eligibility Documentation

ESA Eligibility Determination

- Attached "Federally Listed Endangered and Threatened Species" table indicates that while there are T&E species in Bristol County, there are none known to exist in Mansfield.

- Review of Massachusetts Natural Heritage & Endangered Species Program "Core Habitats of Mansfield" Report and its associated "BioMap" and "Living Waters" core habitat maps indicate that there are no biological or living waters core habitats in the vicinity of the discharge location.

NHPA Eligibility

- Attached information from the National Register of Historic Places indicates that there are two registered properties in Mansfield. As shown on map, neither of the registered properties are in the vicinity of the Textron site, the discharge location or the receiving water.

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

COUNTY	SPECIES	FEDERAL STATUS	GENERAL LOCATION/HABITAT	TOWNS
Barnstable	Piping Plover	Threatened	Coastal Beaches	All Towns
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Chatham
	Sandplain gerardia	Endangered	Open areas with sandy soils.	Sandwich and Falmouth.
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Bourne (north of the Cape Cod Canal)
Berkshire	Bog Turtle	Threatened	Wetlands	Egremont and Sheffield
Bristol	Piping Plover	Threatened	Coastal Beaches	Fairhaven, Dartmouth, Westport
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Fairhaven, New Bedford, Dartmouth, Westport
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Raynham and Taunton
Dukes	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	All Towns
	Piping Plover	Threatened	Coastal Beaches	All Towns
	Northeastern beach tiger beetle	Threatened	Coastal Beaches	Aquinnah and Chilmark
	Sandplain gerardia	Endangered	Open areas with sandy soils.	West Tisbury
Essex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Gloucester, Essex and Manchester
	Piping Plover	Threatened	Coastal Beaches	Glocester, Essex, Ipswich, Rowley, Revere, Newbury, Newburyport and Salisbury
Franklin	Northeastern bulrush	Endangered	Wetlands	Montague
	Dwarf wedgemussel	Endangered	Mill River	Whately
Hampshire	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Hadley
	Puritan tiger beetle	Threatened	Sandy beaches along the Connecticut River	Northampton and Hadley
	Dwarf wedgemussel	Endangered	Rivers and Streams.	Hadley, Hatfield, Amherst and Northampton
Hampden	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Southwick
Middlesex	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Groton
Nantucket	Piping Plover	Threatened	Coastal Beaches	Nantucket
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Nantucket
	American burying beetle	Endangered	Upland grassy meadows	Nantucket
Plymouth	Piping Plover	Threatened	Coastal Beaches	Scituate, Marshfield, Duxbury, Plymouth, Wareham and Mattapoisett
	Northern Red-bellied cooter	Endangered	Inland Ponds and Rivers	Kingston, Middleborough, Carver, Plymouth, Bourne, and Wareham
	Roseate Tern	Endangered	Coastal beaches and the Atlantic Ocean	Plymouth, Marion, Wareham, and Mattapoisett.
Suffolk	Piping Plover	Threatened	Coastal Beaches	Winthrop
Worcester	Small whorled Pogonia	Threatened	Forests with somewhat poorly drained soils and/or a seasonally high water table	Leominster

-Eastern cougar and gray wolf are considered extirpated in Massachusetts.
-Endangered gray wolves are not known to be present in Massachusetts, but dispersing individuals from source populations in Canada may occur statewide.
-Critical habitat for the Northern Red-bellied cooter is present in Plymouth County.

7/31/2008

Documentation of NHPA Eligibility

Source: National Register of Historic Places – Mansfield

Fisher--Richardson House (added 1998 - **Building** - #98000096)
354 Willow St., Mansfield

Soldiers' Memorial Library (added 1995 - **Building** - #95000681)
Also known as **Memorial Library Building**
Jct. of Park Row and Union St., Mansfield