



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

**5 Post Office Square, Suite 100
BOSTON, MA 02109-3912**

CERTIFIED MAIL

March 2, 2011

Walter Pelletier, Owner
Beede Electrical Co., Inc.
88 Village Street
Penacook, NH 03303

Re: Authorization to discharge under the Remediation General Permit (RGP) – 910000.
Beede Electrical Instruments Co. Inc. site located at 88 Village Street, Penacook, NH
03303, Merrimack County, Authorization # NHG910003.

Dear Mr. Pelletier:

Based on the review of your Notice of Intent (NOI) submitted on behalf of your company Beede Electrical Instruments Co., Inc. for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner & 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 for 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>.

Also, please note that the list of pollutants attached to this authorization is subject to a recertification if operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA using a Notice of Change (NOC) within six (6) to twelve (12) months of operations in accordance with the 2010 RGP requirements, and at that time the permittee is authorized to request deletion of influent parameters not present during the last six months of operations.

This general permit and authorization to discharge will expire on September 9, 2015. You have not reported a termination date; we presume it will continue indefinitely. If for any reason the discharge terminates at a time sooner than the expiration date, 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,



David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Jeffrey Andrews, NHDES

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		NHG910003
Date Authorization Issued:	March, 2011	
Facility/Site Name:	Beede Electrical Instruments Co. Inc.	
Facility/Site Address:	88 Village Street, Penacook, NH 03303, Merrimack County, Email address of owner: wpelletier@beede.com ; Phone n:603.753.6362	
Legal Name of Operator:	Beede Electrical Instruments Co. Inc	
Operator contact name, title, and Address:	Walter Pelletier, Owner Beede Electrical Co., Inc.	
	Email: same as above	
Estimated Date of Completion:	Not Provided	
Category and Sub-Category:	II- Sub-category A. Volatile Organic Compounds (VOCs) Only.	
Receiving Water:	Hoyt Brook	

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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (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#60.2/5mL
	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/5.0mg/LmL
	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/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/ 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

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	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/ML5ug/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/ML5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML5ug/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/ML5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	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/ML5 ug/L, Me#610/ML5ug/L& Me#625/ML

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
		5ug/L
	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/l /Me#8270D/ML 5ug/L, Me#610/ML5ug/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/ML5ug/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/ML 5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
	h. Acenaphthene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug /L & Me#625/ML5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L,Me#610/ML5ug/L & Me#625/ML 5ug/L
	j. Anthracene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML5ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML5ug/L
	m. Fluorene	X/Me#8270D/ML 5ug/L,Me#610/ML5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/l / Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML 5ug/L & Me#625/ML 5ug/L
	p. Pyrene	X/Me#8270D/ML 5ug/L,Me#610/ML 5ug/L & Me#625/ML5ug/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 0.1ug/L

	Metal parameter	Minimum Level = ML	Total Recoverable Metal Limit @ $H^{10} = 25$ mg/l CaCO₃ for Discharges in New Hampshire (ug/l) ¹¹	
			Freshwater	Saltwater
	39. Antimony		5.6/ML 10	
	40. Arsenic **		10/ML 20	36/ML20
	41. Cadmium **		0.8/ML 10	9.3/ML 10
	42. Chromium III (trivalent) **		27.7/ML 15	100/ML 15
	43. Chromium VI (hexavalent) **		11.4/ML 10	50.3/ML 10
	44. Copper **		2.9/ML 15	3.7/ML 15
	45. Lead **		0.5/ML 20	8.5/ML 20
	46. Mercury **		0.9/ML 0.2	1.1/ML 0.2
	47. Nickel **		16.1/ML 20	8.2/ML 20
	48. Selenium **		5.0/ML 20	71/ML 20
	49. Silver		0.4/ML 10	2.2/ML 10
	50. Zinc **		37/ML 15	85.6/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 MH	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 "Oroclor 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 $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, 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

B. Suggested Form for 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 : Beede Electrical Instrument Co, Inc		Facility/site mailing address:	
Location of facility/site :	Facility SIC code(s):	Street:	
longitude: 71 36 00	3825	88 Village Street	
latitude: 43 17 00			
b) Name of facility/site owner :		Town: Penacook	
Email address of facility/site owner:		State:	Zip:
wpelletier@beede.com		NH	03303
Telephone no. of facility/site owner : 603-753-6362		County: Merrimack	
Fax no. of facility/site owner : 603-753-4926		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/>	
Address of owner (if different from site):		3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:	
Street: 43 Misty Oak Drive			
Town: Concord	State: NH	Zip: 03301	County: Merrimack
c) Legal name of operator :		Operator telephone no: 603-753-6362	
		Operator fax no.: 603-753-4926	Operator email: wpelletier@beede.com
Operator contact name and title: Walter P. Pelletier, CEO/Owner			
Address of operator (if different from owner):		Street:	
Town:	State:	Zip:	County:

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 #:
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:

2. permit or license # assigned:

3. state agency contact information: name, location, and telephone number:

Groundwater Permits Coordinator, NHDES
Waste Management Division, PO Box 95, Concord, NH 03302
603-271-3644

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:

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.

<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input checked="" type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input type="checkbox"/> B. Known Contaminated Sites <input type="checkbox"/>

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/> B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites <input type="checkbox"/> C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/> D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/> E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input type="checkbox"/>
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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:			
Effluent from groundwater pump and treat system (air stripping), CVOC contaminated groundwater.			
b) Provide the following information about each discharge:			
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?		
1	Max. flow	20 G.P.M.	Is maximum flow a design value ? Y <input checked="" type="radio"/> N <input type="radio"/>
	Average flow (include units)	10 G.P.M.	Is average flow a design value or estimate? <input type="text" value="Estimate"/>
3) Latitude and longitude of each discharge within 100 feet:			
pt.1: lat.	43 17 00	long.	71 36 00
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 <input type="radio"/> or seasonal <input type="radio"/> ?		
	Is discharge ongoing? Y <input checked="" type="radio"/> N <input type="radio"/>		
c) Expected dates of discharge (mm/dd/yy): start <input type="text" value="Ongoing"/> end <input type="text"/>			
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).			
<input type="text" value="Attached"/>			

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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input type="checkbox"/>								
3. Total Petroleum Hydrocarbons (TPH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	1664A	5	ND		ND	
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
6. Toluene (T)	108883	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5	35		10	
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5 / 5	15		2	
9. Total BTEX ²	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B		50	0.0016	12	0.0004
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	50	ND		ND	

* 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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B		ND		ND	
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
21. 1,1 Dichloroethene (DCE)	75354	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5	46		21	
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
24. Tetrachloroethene (PCE)	127184	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5	22		19	
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5	810	0.026	646	0.021
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	5	ND		ND	
27. Trichloroethene (TCE)	79016	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	grab	8260B	5	480	0.016	383	0.012

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	2	ND		ND	
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	grab	8260B	10	ND		ND	
30. 1,4 Dioxane	123911	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	grab	8260B	1	2.8	0.00009	1.7	0.00005
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1 to 5	ND		ND	
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8151	1	ND		ND	
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	1 to 5	ND		ND	
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	5	ND		ND	
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D		ND		ND	
a. Benzo(a) Anthracene	56553	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
b. Benzo(a) Pyrene	50328	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
c. Benzo(b)Fluoranthene	205992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.	ND		ND	
d. Benzo(k)Fluoranthene	207089	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
e. Chrysene	21801	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
g. Indeno(1,2,3-cd) Pyrene	193395	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D		ND		ND	

⁴ The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
i. Acenaphthylene	208968	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
m. Fluorene	86737	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
n. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
o. Phenanthrene	85018	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
p. Pyrene	129000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8270D	0.1	ND		ND	
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	8082	0.3	ND		ND	
38. Chloride	16887006	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
40. Arsenic	7440382	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	grab	200.7	50	ND		ND	
Other (describe):		<input checked="" type="checkbox"/>	<input type="checkbox"/>								

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

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

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input type="radio"/> N <input checked="" type="radio"/></p>	<p>If yes, which metals?</p>
<p><i>Step 2:</i> 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?</p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Etc.</p>	<p>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)?</p> <p>Y <input type="radio"/> N <input type="radio"/> If Y, list which metals:</p>

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

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:</p> <p>Down-well pumps draw water from 4 extraction wells. Water passes through an air stripper for treatment and is discharged near Hoyt Brook. See attached process diagram.</p>						
<p>b) Identify each applicable treatment unit (check all that apply):</p>	<p>Frac. tank <input type="checkbox"/></p>	<p>Air stripper <input checked="" type="checkbox"/></p>	<p>Oil/water separator <input type="checkbox"/></p>	<p>Equalization tanks <input type="checkbox"/></p>	<p>Bag filter <input type="checkbox"/></p>	<p>GAC filter <input type="checkbox"/></p>
	<p>Chlorination <input type="checkbox"/></p>	<p>De-chlorination <input type="checkbox"/></p>	<p>Other (please describe):</p>			

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 gpm Maximum flow rate of treatment system gpm
Design flow rate of treatment system gpm

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

None

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:

Culvert surface water discharge to Hoyt Brook

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

B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water

0.08

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)?

Mercury (state-wide)

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

Mercury

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 ☒ No Jeopardy

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:	Beede Electrical Instrument Co, Inc.
Operator signature:	
Printed Name & Title:	Walter P. Pelletier, CEO/ Owner
Date:	12/8/10

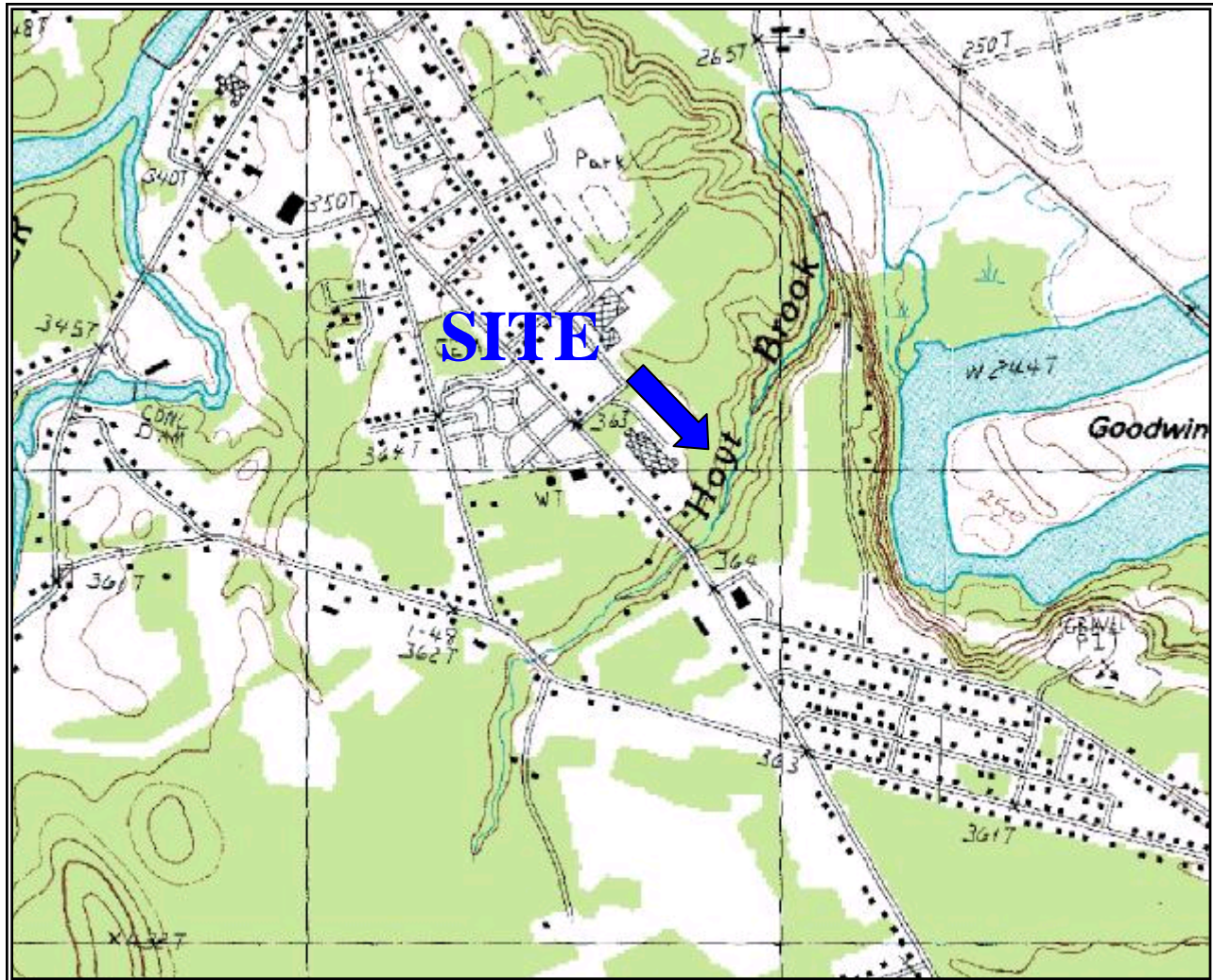


Image courtesy of the U.S. Geological Survey



Map Based on USGS
Penacook, NH
Quadrangle Map
Provisional Edition 1987

LOCATION MAP

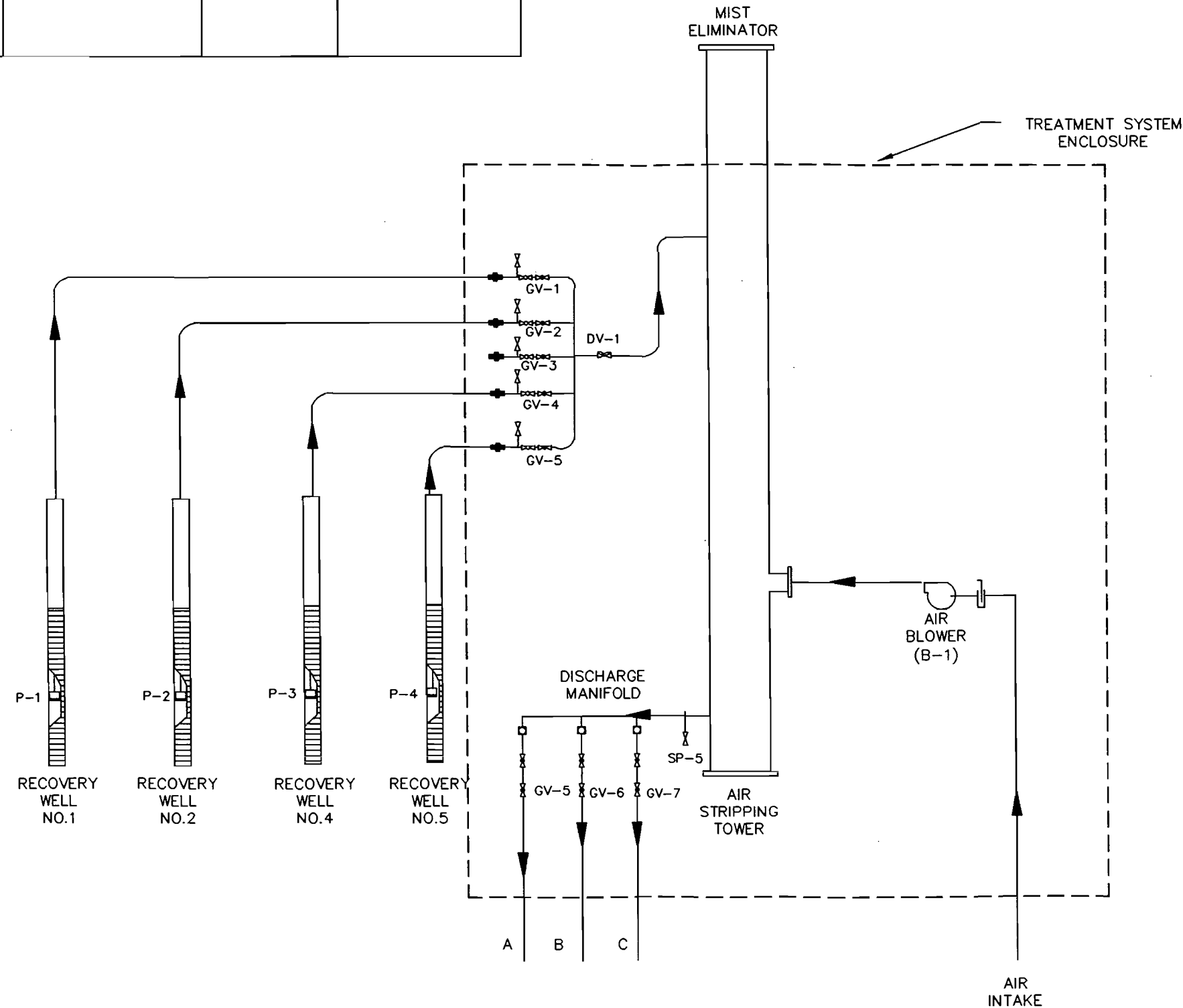
Beede Electrical Instrument Co.
Penacook, New Hampshire

Provan & Lorber, Inc.
Project P0030 December 2010

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
B	AIR BLOWER	P	PUMP
DV	DIAPHRAGM VALVE	SP	SAMPLE PORT
GV	GLOBE VALVE		

NOTES:

1) FIGURE MODIFIED FROM A DIAGRAM PREPARED BY GZA ENTITLED, "ENVIRONMENTAL APPLICATIONS, INC.,
BEEDE ELECTRICAL, PENACOOK, NH, GROUNDWATER TREATMENT SYSTEM PIPING: INSTRUMENTATION DIAGRAM,"
DATED 1/11/90.



A: DISCHARGE TO HOYT BROOK
B: DISCHARGE TO INFILTRATION GALLERY
C: DISCHARGE TO CITY SEWER

Only discharge to Hoyt Brook is active

NOT TO SCALE

SHA
Sanborn, Head & Associates
Consulting Engineers & Scientists

DRAWN BY: PGP
DESIGNED BY: NAD
CHECKED BY: JAC
REVIEWED BY: PMS
PROJECT MGR: PMS
PIC: PMS
DATE: JUN 98

SURFACE WATER DISCHARGE PERMIT
BEEDE ELECTRICAL INSTRUMENT, CO., INC.
PENACOOK, NEW HAMPSHIRE

PROCESS DIAGRAM

PROJECT NUMBER:
1063.1
FIGURE NUMBER:
3

