COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHCENTRAL REGION
AIR QUALITY PROGRAM
OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the Rules and Regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below.

Permit No.	06-1007	**Source**	Specialty Steel
Owner/Operator	Carpenter Technology Corp.	**Air**	Mfg. Facility
Address	PO Box 14662	**Cleaning**	
	Reading, PA 19612-4662	**Device**	
Attention:	Mr. Robert J. Torcolini		
	VP-Mfg. Operations, Field Division	**Location**	Reading Plant
			Reading/Muhlenberg Twp.
			Berks County

This permit is subject to the following conditions:

(1) That the source(s) and any associated air cleaning devices are to be:

(a) operated in such a manner as not to cause air pollution;

(b) in compliance with the specifications and conditions of the plan approval issued under the same number;

(c) operated and maintained in a manner consistent with good operating and maintenance practices.

(2) This permit is valid only for the specific equipment, location and owner named above.

(SEE THE ATTACHED ADDITIONAL CONDITIONS)

Failure to comply with the conditions placed on this permit is a violation of Secton 127.444. Violations of this or any other provision of Article III of the Rules and Regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued: September 27, 1996

Expires: ~~September 30, 2001~~

LEIF ERICSON
Program Manager

cc: Permits
Southcentral Regional Office
Lancaster District Office
Reading District Office

Sources and Associated Control Devices
Permit No. 06-1007
Carpenter Technology Corporation

1. Furnaces (less than 20 million BTU/hr) - 170 units as identified in Table 1 attached.
2. Rotary Hearth Furance F-641 (Davy McKee)
3. #1 Walking Beam Furnace F-643 (Midland-Ross)
4. #2 Walking Beam Furnace F-681 (North American)
5. #14 Annealing Furance F-562 (CarTech)
6. #4 Annealing Furnace F-476 (CarTech)
7. Boilers (less than 20 million BTU/hr - 15 units as identified in Table 2 attached.
8. Boilers (20 to 50 million BTU/hr) - 3 units as identified in Table 3 attached.
9. Space Heaters (less than 20 million BTU/hr) - 178 units as identified in Table 4 attached.
10. Make-up Air Units (less than 20 million BTU/hr) - 20 units as identified in Table 5.
11. Emergency Generators - 23 units as identified in Table 6 attached.
12. Melt Shop and No. 1 Fabric Collector (AAF)
    a) Electric Arc Furnace "A" (CarTech)
    b) Electric Arc Furnace "B" (CarTech)
    c) Electric Arc Furnace "C" (CarTech)
    d) Electric Arc Furnace "D" (CarTech)
    e) Electric Arc Furnace "E" (Lectromelt)
    f) #1 AOD (CarTech)
13. Melt Shop and No. 2 Fabric Collector (Carborundum)
    a) Electric Arc Furnace "F" (Lectromelt)
    b) #2 AOD (Whiting)
    c) #3 AOD (Whiting)
14. #9 Heat Treating Line
    a) Nitric-Hydrofluoric Acid Tank
    ~~b) Electrolytic Sulfuric Tank~~
15. #7 Heat Treating Line - Two Nitric-Hydrofluoric Acid Tanks
16. Rod Cleaning Line: Nitric-Hydrofluoric Acid Tank
17. #1 Acid (Block) Cleaning Line and two Wetted Packed Bed Scrubbers (Heil)
18. #2 Acid (Block) Cleaning Line and two Weeted Packed Bed Scrubbers

Sources and Associated Control Devices
Permit No. 06-1007
Carpenter Technology Corporation
(continued)

19. Bench Cleaning Line and two Wetted Packed Bed Scrubbers (Heil)

20. Kerosene Treatment

21. Oil Quench Tank

22. Cold Degreasers - 67 units as identified in Table 7 attached

23. Two Vapor Degreasers (Building 48 and 112)

24. Bar Ends Coating Operations

25. Two (2) Z-Mills (Building 48B)

26. Gasoline Storage Tanks - (5 tanks) as identified in Table 8 attached and Pumping Station

27. Diesel Fuel Storage Tanks - (6 tanks) as identified in Table 8 attached

28. Sludge Drying Facility

    a) Sludge Dryer F-131 (Renneberg) and associated Fabric Collectors (Flex Kleen)
    ~~b) Pneumatic Conveying System (Carpenter) and associated Fabric Collector (Ultra Industries)~~
    ~~c) Storage Silo and Truck Loading (T. E. Grimac) and associated Fabric Collector (Fuller)~~

29. 12-Ton Walking Beam Furnace F-755 (Maerz Ofenbau)

~~30. Baghouse Dust Reclaim System: Two Fuller Fabric Collectors~~

31. AOD Vessel Preheater (F-531)

~~32. Torch Scrap Cutting Operation and associated Fabric Collector (Griffin)~~

~~a) Automatic Torch Cutting Station~~
~~b) Manual Torch Cutting Station~~

33. Kolene Rinse tank and Wetted Packed Bed Scrubber (Heil/Xerxes)

Table 1
Carpenter Technology Corporation
Operating Permit No. 06-1007
Furnaces (less than 20 million BTU/hr)

Furnace No.	Location	Fuel	Heat Input (million BTU/hr
F-173	Bldg. 68	gas	0.2
F-229	Bldg. 1	gas/oil	8.0
F-261	Bldg. 48	gas	1.2
F-274	Bldg. 48	gas	3.3
F-313	Bldg. 48	gas	2.3
F-331	Bldg. 48	gas	5.3
F-332	Bldg. 48	gas	6.8
F-339	Bldg. 48	gas	2.7
F-340	Bldg. 48	gas	2.4
F-341	Bldg. 2	gas/oil	2.7
F-357	Bldg. 48	gas	8.7
F-360	Bldg. 2	gas	5.6
F-361	Bldg. 2	gas	6.4
F-371	Bldg. 48	gas/oil	8.5
F-378	Bldg. 28	gas/oil	1.5
F-380	Bldg. 48	gas	1.5
F-387	Bldg. 55	gas	3.3
F-392	Bldg. 78	gas	6.5
F-393	Bldg. 78	gas	6.5
F-394	Bldg. 4	gas	2.6
F-395	Bldg. 4	gas	2.6
F-404	Bldg. 48	gas	10.0
F-409	Bldg. 48	gas	2.3
F-412	Bldg. 55	gas/oil	7.9
F-413	Bldg. 4	gas	10.4
F-414	Bldg. 4	gas	10.4
F-420	Bldg. 48	gas	1.3
F-434	Bldg. 48	gas	0.5
F-435	Bldg. 48	gas	0.5
F-436	Bldg. 48	gas	1.0
F-437	Bldg. 4	gas	2.6
F-438	Bldg. 4	gas	2.6
F-442	Bldg. 48	gas	1.6
F-452	Bldg. 1	gas/oil	4.5
F-460	Bldg. 113	gas/oil	2.8
F-461	Bldg. 31	gas/oil	1.8
F-462	Bldg. 31	gas/oil	3.6
F-465	Bldg. 55	gas	7.9
F-466	Bldg. 48	gas	5.6
F-467	Bldg. 48	gas	5.6
F-468	Bldg. 48	gas	10.0
F-470	Bldg. 31	gas/oil	1.8
F-473	Bldg. 48	gas	1.2
F-479	Bldg. 2	gas/oil	6.0

Table 1
Carpenter Technology Corporation
Operating Permit No. 06-1007
Furnaces (less than 20 million BTU/hr)

Furnace No.	Location	Fuel	Heat Input (million BTU/hr
F-480	Bldg. 1	gas/oil	9.0
F-481	Bldg. 1	gas/oil	9.0
F-482	Bldg. 78	gas/oil	12.7
F-483	Bldg. 78	gas/oil	12.7
F-484	Bldg. 78	gas/oil	12.7
F-485	Bldg. 78	gas	14.0
F-486	Bldg. 78	gas/oil	9.2
F-487	Bldg. 78	gas	8.0
F-488	Bldg. 78	gas	7.8
F-492	Bldg. 48	gas	2.0
F-493	Bldg. 48	gas	3.3
F-498	Bldg. 48	gas	8.2
F-501	Bldg. 1	gas	3.3
F-508	Bldg. 48	gas	2.4
F-517	Bldg. 84	gas	4.0
F-518	Bldg. 84	gas	4.0
F-520	Bldg. 31	gas	0.5
F-531	Bldg. 89	gas/oil	2.3
F-533	Bldg. 78	gas	7.7
F-534	Bldg. 105	gas	10.5
F-536	Bldg. 48	gas	3.9
F-543	Bldg. 48	gas	1.1
F-548	Bldg. 48	gas	2.6
F-554	Bldg. 48	gas	0.4
F-555	Bldg. 84	gas	4.0
F-559	Bldg. 48	gas	8.2
F-561	Bldg. 48	gas	5.3
F-566	Bldg. 97	gas	4.0
F-570	Bldg. 84	gas	4.0
F-580	Bldg. 89	gas/oil	3.7
F-586	Bldg. 2	gas	8.5
F-592	Bldg. 101	gas	5.0
F-593	Bldg. 105	gas/oil	9.2
F-594	Bldg. 105	gas/oil	9.2
F-595	Bldg. 105	gas/oil	9.2
F-597	Bldg. 105	gas	6.4
F-598	Bldg. 105	gas	6.4
F-608	Bldg. 55	gas/oil	9.4
F-609	Bldg. 105	gas/oil	6.4
F-610	Bldg. 105	gas	8.0
F-613	Bldg. 105	gas	12.0
F-617	Bldg. 48	gas	2.4
F-618	Bldg. 31	gas/oil	2.4
F-619	Bldg. 31	gas/oil	2.7

Table 1
Carpenter Technology Corporation
Operating Permit No. 06-1007
Furnaces (less than 20 million BTU/hr)

Furnace No.	Location	Fuel	Heat Input (million BTU/hr
F-622	Bldg. 48	gas	6.9
F-623	Bldg. 55	gas/oil	10.0
F-624	Bldg. 55	gas/oil	7.5
F-625	Bldg. 31	gas/oil	2.7
F-628	Bldg. 84	gas	4.0
F-629	Bldg. 112	gas/oil	10.6
F-630	Bldg. 112	gas/oil	10.6
F-631	Bldg. 112	gas/oil	10.6
F-632	Bldg. 112	gas/oil	10.6
F-633	Bldg. 112	gas/oil	10.6
F-642	Bldg. 118	gas	5.0
F-644	Bldg. 112	gas	16.3
F-646	Bldg. 118	gas	4.0
F-647	Bldg. 118	gas	4.0
F-648	Bldg. 118	gas	4.0
F-649	Bldg. 84	gas	4.0
F-650	Bldg. 118	gas	6.0
F-651	Bldg. 118	gas	6.0
F-654	Bldg. 120	gas	12.0
F-656	Bldg. 120	gas	16.4
F-660	Bldg. 55	gas/oil	9.4
F-668	Bldg. 118	gas	12.0
F-669	Bldg. 118	gas	12.0
F-670	Bldg. 112	gas	0.6
F-671	Bldg. 73	gas	1.1
F-672	Bldg. 112	gas/oil	10.6
F-673	Bldg. 112	gas/oil	10.6
F-674	Bldg. 112	gas/oil	10.6
F-676	Bldg. 55	gas/oil	7.9
F-677	Bldg. 55	gas/oil	7.9
F-678	Bldg. 112	gas	4.0
F-679	Bldg. 112	gas	4.0
F-680	Bldg. 112	gas	4.0
F-682	Bldg. 112	gas	4.0
F-683	Bldg. 112	gas	4.0
F-694	Bldg. 113	gas/oil	4.0
F-695	Bldg. 113	gas/oil	10.0
F-696	Bldg. 113	gas	10.0
F-697	Bldg. 113	gas/oil	6.0
F-698	Bldg. 113	gas/oil	6.0
F-700	Bldg. 101	gas	5.1
F-701	Bldg. 101	gas	7.1
F-702	Bldg. 48	gas	5.0
F-703	Bldg. 101	gas	5.0

Table 1
Carpenter Technology Corporation
Operating Permit No. 06-1007
Furnaces (less than 20 million BTU/hr)

Furnace No.	Location	Fuel	Heat Input (million BTU/hr
F-704	Bldg. 120	gas	8.6
F-705	Bldg. 120	gas	8.6
F-706	Bldg.120	gas	8.0
F-707	Bldg. 120	gas	8.0
F-708	Bldg. 120	gas	6.0
F-709	Bldg. 102	gas	1.0
F-718	Bldg. 112	gas/oil	10.6
F-724	Bldg. 78	gas/oil	12.0
F-725	Bldg. 48	gas	5.5
F-726	Bldg. 64	gas	1.0
F-727	Bldg. 55	gas	4.0
F-734	Bldg. 78	gas/oil	12.7
F-735	Bldg. 78	gas	6.0
F-736	Bldg. 78	gas/oil	6.0
F-737	Bldg. 78	gas/oil	12.7
F-738	Bldg. 78	gas	14.0
F-739	Bldg. 112	gas/oil	10.6
F-740	Bldg. 1	gas/oil	4.5
F-741	Bldg. 2	gas/oil	2.7
F-742	Bldg. 2	gas/oil	2.5
F-743	Bldg. 55	gas	4.0
F-750	Bldg. 14	gas	0.9
F-752	Bldg. 14	gas	0.5
F-753	Bldg. 14	gas	0.5
F-759	Bldg. 84	gas	4.0
F-760	Bldg. 84	gas	4.0
F-761	Bldg. 84	gas	4.0
F-762	Bldg. 84	gas	4.0
F-763	Bldg. 84	gas	4.0
F-764	Bldg. 84	gas	4.0
F-766	Bldg. 112	gas	4.0
F-768	Bldg. 112	gas	4.0
F-769	Bldg. 118	gas	4.0
F-770	Bldg. 118	gas	4.0
F-771	Bldg. 118	gas	4.0
LF-1070	Bldg. 68	gas	2.5
LF-1188	Bldg. 68	gas	1.2
P.T.	Bldg. 115	gas	0.2

Table 2
Carpenter Technology Corporation
Operating Permit No. 06-1007
Boilers (less than 20 million BTU/hr)

Boiler No.	Location	Fuel	Heat Input (million BTU/hr)
F-319	Bldg. 16	gas/oil	4.20
F-474	Bldg. 68	gas/oil	8.40
F-475	Bldg. 68	gas/oil	8.40
F-490	Bldg. 17	gas/oil	8.40
F-538	Bldg. 87	gas/oil	1.09
F-544	Bldg. 41	gas/oil	0.25
F-571	Bldg. 28	gas/oil	4.20
F-582	Bldg. 98	gas/oil	1.68
F-583	Bldg. 100	gas/oil	1.43
F-638	Bldg. 109	gas/oil	4.20
F-639	Bldg. 109	gas/oil	4.20
F-657	Bldg. 122	gas/oil	12.60
F-658	Bldg. 122	gas/oil	12.60
F-662	Bldg. 55	gas/oil	4.20
F-663	Bldg. 55	gas/oil	4.20

Table 3
Carpenter Technology Corporation
Operating Permit No. 06-1007
Boilers (20 to 50 Million BTU/hr)

Boiler No.	Location	Fuel	Heat Input (million BTU/hr)
F-572	Bldg. 48	gas/oil	29.40
F-573	Bldg. 48	gas/oil	29.40
F-645	Bldg. 48	gas/oil	21.00

Table 4
Carpenter Technology Corporation
Operating Permit No. 06-1007
Space Heaters

Heating Unit	Fuel	Heat Input (million BTU/hr)
1	gas	0.060
2	gas	0.060
3	gas	0.060
4	gas	0.060
5	gas	0.060
6	gas	0.060
7	gas	0.060
8	gas	0.060
9	gas	0.090
10	gas	0.060
11	gas	0.060
12	gas	0.060
13	gas	0.060
14	gas	0.030
15	gas	0.090
16	gas	0.060
17	gas	0.060
18	gas	0.060
19	gas	0.090
20	gas	0.060
21	gas	0.060
22	gas	0.060
23	gas	0.060
24	gas	0.060
25	gas	0.060
26	gas	0.090
27	gas	0.090
28	gas	0.090
29	gas	0.090
30	gas	0.090
31	gas	0.090
32	gas	0.090
33	gas	0.060
34	gas	0.060
35	gas	0.060
36	gas	0.060
37	gas	0.060
38	gas	0.060
39	gas	0.060
40	gas	0.060
41	gas	0.030
42	gas	0.060
43	gas	0.060
44	gas	0.060

Table 4
Carpenter Technology Corporation
Operating Permit No. 06-1007
Space Heaters

Heating Unit	Fuel	Heat Input (million BTU/hr)
45	gas	0.060
46	gas	0.060
47	gas	0.090
48	gas	0.090
49	gas	0.090
50	gas	0.090
51	gas	0.090
52	gas	0.090
53	gas	0.060
54	gas	0.060
55	gas	0.060
56	gas	0.060
57	gas	0.060
58	gas	0.060
59	gas	0.060
60	gas	0.060
61	gas	0.060
62	gas	0.060
63	gas	0.060
64	gas	0.060
65	gas	0.060
66	gas	0.060
67	gas	0.060
68	gas	0.060
69	gas	0.060
70	gas	0.060
71	gas	0.030
72	gas	0.060
73	gas	0.060
74	gas	0.060
75	gas	0.060
76	gas	0.060
77	gas	0.060
78	gas	0.060
79	gas	0.060
80	gas	0.060
81	gas	0.060
82	gas	0.060
83	gas	0.030
84	gas	0.060
85	gas	0.060
86	gas	0.060
87	gas	0.060
88	gas	0.060

Table 4
Carpenter Technology Corporation
Operating Permit No. 06-1007
Space Heaters

Heating Unit	Fuel	Heat Input (million BTU/hr)
89	gas	0.060
90	gas	0.060
91	gas	0.060
92	gas	0.060
93	gas	0.060
94	gas	0.050
95	gas	0.050
96	gas	0.050
97	gas	0.050
98	gas	0.050
99	gas	0.050
100	gas	0.050
101	gas	0.050
102	gas	0.050
103	gas	0.050
104	gas	0.050
105	gas	0.050
106	gas	0.050
107	gas	0.030
108	gas	0.030
109	gas	0.060
110	gas	0.060
111	gas	0.060
112	gas	0.060
113	gas	0.060
114	gas	0.060
115	gas	0.060
116	gas	0.060
117	gas	0.030
118	gas	0.030
119	gas	0.050
120	gas	0.050
121	gas	0.050
122	gas	0.050
123	gas	0.050
124	gas	0.060
125	gas	0.060
126	gas	0.060
127	gas	0.030
128	gas	0.060
129	gas	0.060
130	gas	0.060
131	gas	0.060
132	gas	0.060

Table 4
Carpenter Technology Corporation
Operating Permit No. 06-1007
Space Heaters

Heating Unit	Fuel	Heat Input (million BTU/hr)
133	gas	0.060
134	gas	0.060
135	gas	0.060
136	gas	0.060
137	gas	0.060
138	gas	0.060
139	gas	0.060
140	gas	0.060
141	gas	0.060
142	gas	0.060
143	gas	0.060
144	gas	0.060
145	gas	0.050
146	gas	0.060
147	gas	0.060
148	gas	0.060
149	gas	0.060
150	gas	0.060
151	gas	0.060
152	gas	0.060
153	gas	0.060
154	gas	0.060
155	gas	0.060
156	gas	0.060
157	gas	0.060
158	gas	0.060
159	gas	0.060
160	gas	0.040
161	gas	0.090
162	gas	0.090
163	gas	0.090
164	gas	0.090
165	gas	0.090
166	gas	0.090
167	gas	0.090
168	gas	0.090
169	gas	0.090
170	gas	0.090
171	gas	0.090
172	gas	0.090
173	gas	0.015
174	gas	0.100
175	gas	0.100
176	gas	0.100

Table 4
Carpenter Technology Corporation
Operating Permit No. 06-1007
Space Heaters

Heating Unit	Fuel	Heat Input (million BTU/hr)
177	gas	0.100
178	gas	0.100

Table 5
Capenter Technology Corporation
Operating Permit No. 06-1007
Make-up Air Units

Unit No.	Location	Fuel	Heat Input (million BTU/hr)
1	Bldg. 112	gas	7.00
2	Bldg. 118	gas	1.30
3	Bldg. 118	gas	1.30
4	Bldg. 118	gas	3.00
5	Bldg. 118	gas	1.30
6	Bldg. 118	gas	1.30
7	Bldg. 41	gas	5.00
8	Bldg. 41	gas	5.00
9	Bldg. 41	gas	5.00
10	Bldg. 41	gas	3.50
11	Bldg. 41	gas	0.60
12	Bldg. 48	gas	1.50
13	Bldg. 48SX	gas	0.80
14	Bldg. 48SX	gas	0.80
15	Bldg. 97	gas	2.20
16	Bldg. 97	gas	2.20
17	Bldg. 73	gas	1.00
18	Bldg. 53	gas	2.20
19	Bldg. 120	gas	4.20
20	Bldg. 129	gas	0.94

Table 6
Carpenter Technology Corporation
Operating Permit No. 06-1007
Emergency Generators

Generator No.	Location	Fuel	Power Output
1	Bldg. 31	gas	30.0
2	Bldg. 33	gas	20.0
3	Bldg. 34	gas	15.0
4	Bldg. 48	gas	30.0
5	Bldg. 48B	gas	40.0
6	Bldg. 48	gas	15.0
7	Bldg. 53	gas	2.5
8	Bldg. 54	gas	15.0
9	Bldg. 55	gas	75.0
10	Bldg. 64	gas	5.0
11	Bldg. 68	gas	75.0
12	Bldg. 68	gas	600.0
13	Bldg. 73	gas	25.0
14	Bldg. 78	gas	15.0
15	Bldg. 84	gas	5.0
16	Bldg. 87	gas	30.0
17	Bldg. 94	gas	15.0
18	Bldg. 97	gas	30.0
19	Bldg. 104	gas	3.5
20	Bldg. 108	gas	12.5
21	Bldg. 109	gas	15.0
22	Bldg. 112	gas	30.0
23	Bldg. 118	gas	15.0

Table 7
Carpenter Technology Corporation
Operating Permit No. 06-1007
Cold Degreasers

Washer	Location	Capacity	User
M09834	Bldg. 55	80	Roll Shop
M10401	Bldg. 120	10	Annealing
M10402	Bldg. 122	20	HVAC
M10403	Bldg. 118	10	Die Rest
M10404	Bldg. 118	10	Forge
M10405	Bldg. 109	20	Paint Shop
M10406	Bldg. 109	10	Pipe Filters
M10407	Bldg. 109	130	Machine Shop
M10408	Bldg. 109	20	Automotive
M10409	Bldg. 109	30	Automotive
M10410	Bldg. 15	20	Maint. 6
M10411	Bldg. 108	20	Coil
M10412	Bldg. 101	20	Machine Shop
M10413	Bldg. 41	40	Machine Shop
M10414	Bldg. 58	20	Maint. 3
M10415	Bldg. 48Bs	40	Maint. 2
M10416	Bldg. 48B	40	Strip
M10417	Bldg. 66	5	Wire
M10418	Bldg. 66	5	Wire
M10419	Bldg. 66	5	Wire
M10420	Bldg. 48A	10	Wire
M10421	Bldg. 48A	10	Wire
M10422	Bldg. 48A	10	Wire
M10423	Bldg. 48A	10	Wire
M10424	Bldg. 48A	10	Wire
M10425	Bldg. 50	20	Maint. 9
M10426	Bldg. 48	117	Maint. 1
M10427	Bldg. 48	20	Wire
M10428	Bldg. 48Lb	40	Lab
M10429	Bldg. 97	15	Diasho
M10430	Bldg. 73	10	Bar
M10431	Bldg. 73Bs	5	Lab
M10432	Bldg. 75	10	Shaped Bar & Wire
M10433	Bldg. 75	10	Shaped Bar & Wire
M10434	Bldg. 75	10	Shaped Bar & Wire
M10435	Bldg. 129	5	Wire
M10436	Bldg. 68	42	R&D Lab
M10441	Bldg. 118	10	Forge
M10442	Bldg. 118	10	Forge
M10460	Bldg. 7	5	HVAC
M10461	Bldg. 48Bs	40	Maint. 2
M10462	Bldg. 48Bs	60	Maint. 2
M10463	Bldg. 118	40	Maint. 8
M10464	Bldg. 15	30	Maint. 6
M10465	Bldg. 15	50	Maint. 6
M10466	Bldg. 68	80	R&D Lab
M10467	Bldg. 109	30	Machine Shop

Table 7
Carpenter Technology Corporation
Operating Permit No. 06-1007
Cold Degreasers

Washer	Location	Capacity	User
M10468	Bldg. 109	120	Machine Shop
M10469	Bldg. 109	30	Machine Shop
M10470	Bldg. 55	20	Maint. 3
M10471	Bldg. 30	30	Maint.
M10472	Bldg. 30	50	Maint.
M10473	Bldg. 30	30	Machine Shop
M10474	Bldg. 31	10	Melt Maint.
M10475	Bldg. 112	20	Roll Shop
M10476	Bldg. 112	20	Roll Shop
M10477	Bldg. 78	5	Press Shop
M10478	Bldg. 41	5	Maint. 2
M10479	Bldg. 48	30	West Shore Auto
M10480	Bldg. 48	20	Bar
M10492	Bldg. 109	5	Automotive
M10493	Bldg. 101	10	Maint. 4
M6039	Bldg. 55	165	Maint. 3
M7916	Bldg. 112	40	Roll Shop
M8503	Bldg. 17	60	Roll Grinding
M9835	Bldg. 112	220	Roll Shop
M9838	Bldg. 55	275	Maint. 3

Table 8
Carpenter Technology Corporation
Operating Permit No. 06-1007
Storage Tanks

Tank No.	Capacity (gal.)	Fuel	Location
T-326	2000	gasoline	aboveground
T-348	5000	gasoline	aboveground
T-426	10000	gasoline	aboveground
T-532	2500	gasoline	underground
T-543	2500	gasoline	aboveground
T-347	5000	No. 2	aboveground
T-470	2000	No. 2	aboveground
T-516	4000	No. 2	aboveground
T-542	2000	No. 2	aboveground
T-579	5000	No. 2	aboveground
T-584	8000	No. 2	aboveground

Conditions (continued):

(3) This Operating Permit is issued for the purpose of defining the Department's NO_x and VOC Reasonably Available Control Technology (RACT) determination for the air contamination sources at Carpenter Technology Corporation's Reading Plant.

(4) For the purpose of the US EPA and the SIP, the RACT portion of this Permit does not expire.

(5) This Operating Permit establishes the NO_x RACT for the Heating Furnaces with rated heat inputs less than 20 million BTU/hr, as identified in Table 1, as presumptive as defined in Section 129.93(c)(1).

(6) This Operating Permit establishes the NO_x RACT for the Rotary Hearth Furnace (F-641) and Pre-heat Furnace (F-642) as a NO_x emission rate of 105 #/million cubic feet of natural gas fired over a three (3) hour averaging period.

(7) This Operating Permit establishes the NO_x RACT for the No. 1 Walking Beam Furnace (F-643) as a NO_x emission rate of 153 #/million cubic feet of natural gas fired over a three (3) hour averaging period.

(8) This Operating Permit establishes the NO_x RACT for the No. 2 Walking Beam Furnace (F-681) as a NO_x emission rate of 1020 #/million cubic feet of natural gas fired over a three (3) hour averaging period.

(9) This Operating Permit establishes the NO_x RACT for the No. 14 Coil Annealing Furnace (F-562) as a NO_x emission rate of 115 #/million cubic feet of natural gas fired over a three (3) hour averaging period.

(10) This Operating Permit establishes the NO_x RACT for the No. 4 Coil Annealing Furnace (F-476) as a NO_x emission rate of 78 #/million cubic feet of natural gas fired over a three (3) hour averaging period.

(11) This Operating Permit establishes the NO_x RACT for the Boilers with rated heat inputs less than 20 million BTU/hr, as identified in Table 2, as presumptive as defined in Section 129.93(c)(1).

(12) This Operating Permit establishes the NO_x RACT for the Boilers with rated heat inputs of 20 to 50 million BTU/hr., as identified in Table 3, as presumptive as defined in Section 129.93(b)(2).

(13) The boilers (Table 3) in Condition 12 are subject to the following:

A. The owner/operator shall perform an annual adjustment and/or tune-up on the boilers which shall include the following:

a) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.

Conditions (continued):

b) Inspection of the flame pattern or characteristics and adjustments necessary to minimize emissions of NO_x, and to the extent practicable minimize emissions of CO.

c) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

B. The owner/operator shall maintain a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:

a) The date of the tuning procedure
b) The name of the service owner/operator and technicians
c) The final operating rate or load
d) The final CO and NO_x emission rates
e) The final excess oxygen rate
f) Any other information required by this approval

C. The annual adjustment shall be in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved in writing by the Department.

(14) This Operating Permit establishes the NO_x RACT for the Space Heaters with rated heat inputs less than 20 million BTU/hr, as identified in Table 4, and Make-Up Air Units with rated heat inputs less than 20 million BTU/hr, as identified in Table 5, as presumptive as defined in Section 129.93(c)(1).

(15) This Operating Permit establishes the NO_x RACT for the Emergency Electrical Generators, as defined in Table 6, as an operational limit of 500 hours of operation per twelve (12) months for each unit as presumptive as defined in Section 129.93(c)(5).

(16) The owner/operator shall maintain an hour meter, or use another method as approved by the Department, to measure and record the operating time of each emergency electrical generator.

(17) This Operating Permit establishes the NO_x and VOC RACT for the Melt Shop, which consists of Arc Furnaces A, B, C, D, E and F and AODs 1, 2 and 3, exhausted to the two (2) Melt Shop Fabric Collectors as the current operating practices.

(18) The emissions from the Melt Shop shall be limited to the following:

a) Electric Arc Furnaces A (F-134), B (F-135), C (F-291), D (F-140) and E (F-369) and No. 1 AOD (F-563)

1) NO_x - 54 #/hr (24-hour average)
2) VOC - 13 #/hr (24-hour average)

Conditions (continued):

b) Electric Arc Furnace F (F-620), No. 2 AOD (F-579) and No. 3 AOD (F-699)

1) NO_x - 126 #/hr (24-hour average)
2) VOC - 24 #/hr (24-hour average)

(19) This Operating Permit establishes the NO_x RACT for the Acid Cleaning Lines as:

a) Operation of the existing heat exchangers in each tank containing nitric acid to maintain tank temperatures located in Block Cleaning Lines #1 and #2.
b) The addition of urea or other oxidizers to each tank containing nitric or nitric and HF acid located in Block Cleaning Lines #1 and #2 and Bench Cleaning Line.
c) The exhausting of each nitric acid tank to a wetted packed bed scrubber.

(20) This Operating Permit establishes the VOC RACT for the cold degreasers and vapor degreasers, as identified in Table 7, as presumptive as defined in Section 129.63.

(21) This Operating Permit establishes the VOC RACT for the Bar Ends Coating Operating as limiting VOC emissions to less than 2.7 tons per year.

(22) This Operating Permit establishes the VOC RACT for the Kerosene Treatment as the present operation with an annual limit of 13.13 tons of VOC.

(23) This Operating Permit establishes the NO_x and VOC RACT for the following sources as:

a) Oil Quench - NO_x and VOC emissions less than 2.7 tons/year
b) Z-Mills - VOC emissions less than 2.7 tons/year
c) Storage Tanks - VOC emissions less than 2.7 tons/year each

(24) This Operating Permit establishes the NO_x RACT for the Sludge Dryer (F-751) as presumptive as defined in Section 129.93(c)(1).

(25) This Operating Permit establishes the NO_x RACT for the 12-ton Walking Beam Furnace (F-755) as a NO_x emission rate of 0.3 #/million BTU and 10 tons per year or 65.4 million cubic feet per year of natural gas, whichever is more restrictive.

(26) The owner/operator shall maintain on site all records necessary to verify compliance with the NO_x and VOC RACT Plan.

(27) The owner/operator shall maintain a list of all sources subject to RACT under conditions 5, 11, 14, 15 and 20 and their location, fuel and heat input rating. The list shall be updated quarterly and made available to the Department upon request. An updated list shall be submitted to the Department annually. The owner/operator shall notify the Department of any new sources that increase the emissions of NO_x or VOC by more than 1 TPY, except for sources specifically exempted by 25 Pa. Code Section 127.14. Any new sources subject to the Department's Chapter 127 permitting requirements will be required to receive a Plan Approval before construction.

Conditions (continued):

~~(28) Records required under this Operating Permit shall be kept for a period of five (5) years and shall be made available to the Department upon its request.~~

(29) The total annual emissions from the Rotary Hearth Furnace (F-641) and the Preheat Furnace (F-642) shall not exceed the following limits based on the combustion of 244.4 million cubic feet per year of Natural Gas:

~~Particulate~~	~~1.67 TPY~~
~~Sulfur Dioxide~~	~~0.07 TPY~~
~~Carbon Monoxide~~	~~4.28 TPY~~
Nitrogen Oxides	12.83 TPY
VOC	0.34 TPY

(30) The total annual emissions from the #1 Walking Beam Furnace (F-643) shall not exceed the following limits based on the combustion of 140 million cubic feet per year of Natural Gas:

~~Particulate~~	~~0.96 TPY~~
~~Sulfur Dioxide~~	~~0.04 TPY~~
~~Carbon Monoxide~~	~~2.45 TPY~~
Nitrogen Oxides	9.88 TPY
VOC	0.20 TPY

(31) The total annual emissions from the #2 Walking Beam Furnace (F-681) shall not exceed the following limits based on the combustion of 86 million cubic feet per year of Natural Gas:

~~Particulate~~	~~0.59 TPY~~
~~Sulfur Dioxide~~	~~0.03 TPY~~
~~Carbon Monoxide~~	~~1.50 TPY~~
Nitrogen Oxides	25.23 TPY
VOC	0.12 TPY

(32) The total annual emissions from the 8-ton Walking Beam Furnace (F-644) shall not exceed the following limit based on the combustion of 80 million cubic feet per year of Natural Gas:

~~Particulate~~	~~0.56 TPY~~
~~Sulfur Dioxide~~	~~0.03 TPY~~
~~Carbon Monoxide~~	~~1.40 TPY~~
Nitrogen Oxides	5.6 TPY
VOC	0.11 TPY

(33) The total annual emissions from the Heating Furnace (F-724) shall not exceed the following limits:

~~Particulate~~	~~0.14 TPY~~
~~Sulfur Dioxide~~	~~0.01 TPY~~
~~Carbon Monoxide~~	~~0.35 TPY~~
Nitrogen Oxides	1.39 TPY
VOC	0.03 TPY

Conditions (continued):

(34) The #51 annealing furnace (F-229) shall be limited to the following:

(a) 18 million cubic feet of natural gas per year.
(b) Nitrogen Oxides - 0.9 TPY

~~(35) The boilers, F-572, F-573 and F-645 are limited to the following fuels and total fuel consumption limits:~~

~~(a) Natural Gas - 215 million cubic feet per year~~
~~(b) No. 2 Fuel Oil - 60,320 gallons per year~~

(36) The total annual emissions from the boilers F-572, F-573 and F-645 shall not exceed the following limits:

~~Particulate~~	~~1.48 TPY~~
~~Sulfur Dioxide~~	~~1.34 TPY~~
~~Carbon Monoxide~~	~~3.91 TPY~~
Nitrogen Oxides	19.47 TPY
VOC	0.35 TPY

~~(37) The sulfur content of the No. 2 fuel oil fired in all boilers shall not, at any time, exceed 0.3% (by weight).~~

~~(38) The boiler F-645 subject to Subpart Dc of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR §60.4 requires submission of copies of all requests, reports, application, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:~~

~~Director
Air, Toxics and Radiation Division
US EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107~~

~~(39) The No. 2 and 3 AOD Vessels and "F" Arc Furance together shall not exceed the following additional limits:~~

~~(a) Particulate
(1) 0.0017 gr/dscf
(2) 35 T/yr
(b) Sulfur Dioxide: 25.8 T/yr
(c) Carbon Monoxide: 385.4 T/yr~~

~~(40) The emissions of particulate from the Baghouse Dust Reclaim System (M-07016) shall not exceed 1.00 T/yr~~

Conditions (continued):

(41) The emissions of particulate from the Torch Scrap Cutting Operation shall not exceed 1.0 T/yr.

(42) The #1 AOD preheater (F-531) shall be limited to the following:

(a) 12 million cubic feet of natural gas per year.
(b) Nitrogen Oxides - 0.6 TPY

(43) The No. 2 and No. 3 AOD Vessels and "F" Arc Furnace are subject to Subpart AAa of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR §60.4 requires submission of copies of all requests, reports, application, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
US EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

(44) The owner/operator shall conduct visible emission readings on the Fabric Collector controlling the No. 2 and No. 3 AOD Vessels and "F" Arc Furnace in accordance with NSPS, Sections 60.8 and 60.272a of 40 CFR Part 60, Subpart AAa. The Department and EPA shall be notified of any violations.

(45) Equipment (a Differential Manometer or equivalent, as approved by the Department), shall be provided and maintained so that at any time the pressure drop across the Melt Shop No. 2 Fabric Collector can be measured.

(46) Equipment shall be provided so that at the request of the Department the following can be measured on all of the scrubbers for permitted sources:

(a) pressure drop across the scrubber, utilizing a Differential Manometer, or equivalent;
(b) water flow rate to the scrubber, utilizing a Rotometer, or equivalent.

(47) A water flow rate to Kolene Rinse Tank Scrubber of at least 330 GPM shall be maintained on any occasion that the source is operated.

(48) The owner/operator shall measure the pH of the scrubber water in the Bench Cleaning Line and No. 1 Block (south) Cleaning Line Scrubbers at least twice per operating day.

(49) Equipment (a Differential Manometer or equivalent, as approved by the Department), shall be provided and maintained so that at any time the pressure drop across each of the Fabric Collectors at the Sludge Drying Facility can be measured.

Conditions (continued):

(50) The Sludge Dryer is subject to Subpart E of the National Emission Standards for Hazardous Air Pollutants and shall comply with all applicable requirements of this Subpart. 40 CFR §61.04 requires submission of copies of all requests, reports, application, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director
Air, Toxics and Radiation Division
US EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

(51) The owner/operator shall sample the sludge entering the dryer for mercury as per CFR40 Section 61.54 prior to requesting the renewal of this permit. Results shall be submitted with the permit renewal application.

(52) This Operating Permit is valid for a limited period of time and may be renewed before its expiration. Requests for an Operating Permit Renewal must be in writing and must be accompanied by a permit fee in the amount of six hundred dollars ($600.00) payable to the "Clean Air Fund" (three hundred dollars ($300.00) application processing fee and three hundred dollars ($300.00) annual administration fee). The request should be made on the attached Interim Application for Renewal of a Permit to Operate Form and must be received by the Department along with a completed Compliance History Form (attached) no later than May 1, 2001.

An Annual Operating Permit administration fee of two hundred fifty dollars ($250.00) is also due upon receipt of notice from the Department.

(53) This Operating Permit includes the sources and air cleaning devices previously approved by:

Plan Approval Nos.	Issued on:
06-307-055B	June 17, 1994
06-309-018	January 14, 1985
06-309-018A	September 23, 1991
06-327-002	November 21, 1985
06-327-002A	March 24, 1988
06-307-002	February 3, 1973
06-307-061	November 10, 1988
06-318-026	June 26, 1978
06-307-026	July 6, 1977 and June 6, 1981
06-302-112	March 30, 1977
06-307-046	May 21, 1980
06-307-026A	March 24, 1988
06-307-026B	June 18, 1993
06-302-122	January 10, 1978

Conditions (continued):

06-302-122A	March 24, 1994
06-302-123	January 10, 1978
06-302-149	January 23, 1985
06-302-109	March 30, 1977
06-302-110	March 30, 1977
06-307-055	October 5, 1981 and July 30, 1982
06-307-055A	March 24, 1992
06-307-035A	April 13, 1992
06-307-101	March 30, 1977
06-307-106	March 30, 1977
06-302-111	March 30, 1977
06-302-107	March 30, 1977
06-302-113	March 30, 1977

to Carpenter Technology Corporation and operated under Operating Permit No. 06-399-018A issued April 13, 1993; No. 06-327-002A issued on November 1, 1993; No. 06-307-002B issued on May 1, 1993; No. 06-307-026B issued on January 4, 1994; No. 06-302-122A issued on May 1, 1993; No. 06-302-149 issued on December 1, 1992; No. 06-307-005 issued on November 1, 1993; No. 06-307-055A issued on November 1, 1993 and No. 06-307-035A issued on May 1, 1993 to Carpenter Technology Corp.

(54) This Operating Permit supersedes the Operating Permit No. 06-399-018A issued April 13, 1993; No. 06-327-002A issued on November 1, 1993; No. 06-307-002B issued on May 1, 1993; No. 06-307-026B issued on January 4, 1994; No. 06-302-122A issued on May 1, 1993; No. 06-302-149 issued on December 1, 1992; No. 06-307-005 issued on November 1, 1993; No. 06-307-035A issued on May 1, 1993; No. 06-307-055A issued on November 1, 1993 to Carpenter Technology Corp.