OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
1800 WaterMark Drive
Columbus, OH 43215-1099

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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

July 19, 1995 CERTIFIED MAIL

Re: Modification to Permit to Install No. 15-144
Stark County

Timken Company Faircrest Plant
1835 Dueber Avenue SW
Canton, Oh 44706

Attention: William Fladung

Enclosed please find a modification to the Ohio EPA Permit to Install referenced above which will modify the terms and conditions.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, OH 43215.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

Enclosure

cc: US EPA
CANTON DIVISION OF AIR POLLUTION CONTROL

State of Ohio Environmental Protection Agency

Permit to Install
Terms and Conditions

Issuance Date: July 19, 1995
Effective Date: July 19, 1995
Modification Fee: $500.00

OHIO ENVIRONMENTAL PROTECTION AGENCY

MODIFICATION TO PERMIT TO INSTALL

Name of Applicant: Timken Company Faircrest Plant
Address: 4511 Faircrest Rd SW
City: Perry Twp, OH 44706
Telephone: (614) 833-9155

The Ohio EPA has received a request for a modification for the Ohio EPA Permit to Install referenced above.

The Permit to Install issued to Timken Company Faircrest Plant (PTI No. 15-144) is hereby modified in the following manner:

Terms and Conditions on pages 4, 6, 7, 9, 10, 11 and 12 of Permit to Install issued January 10, 1990.

The reason for the modification is: To modify (EAF) allowable emission & requirments and add requirements for the Eiken Inspection Paint Spray Booth to PTI 15-144 issued January 10, 1990, due to stack test results.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

Ohio Environmental Protection Agency

Donald R Schregardus

Director

SOURCE	POLLUTANT	BACT LIMIT	ALLOWABLE EMISSIONS (TPY)	TECHNOLOGY
Gas or No. 2 oil 56.8 MMBTU boiler Boiler No. 1	Part.	0.02 lb/MMBTU	4.98	Burner Control
	SO_2	0.55 lb/MMBTU	136.83	
	NO_x	0.25 lb/MMBTU	62.2	
	CO	0.04 lb/MMBTU	9.95	
Gas or No. 2 oil 56.8 MMBTU boiler Boiler No. 2 (Standby)	Part.	0.02 lb/MMBTU	4.98	Burner Control
	SO_2	0.55 lb/MMBTU	136.83	
	NO_x	0.25 lb/MMBTU	62.2	
	CO	0.04 lb/MMBTU	9.95	
Plant roadways & parking lots	Part.	80% control efficiency	6.28	Sweeping & flushing surface coatings
Gasoline dispensing facility	VOC	13 lbs/1,000 gal	1.0	Submerged fill vapor bal. system
Eiken inspection paint spray booth	VOC	<10 gal/day	10.95	
Electric Arc Furnace (EAF)	VOC	.14 lb/ton	63.00	Baghouse Furnac
	NOx	.35 lb/ton	157.50	Design Baghouse
	Lead	.00077 lb/ton	.35	
	Part.	0.0052 gr/dscf	197.59	
	CO	4.8 lb/ton	2160	
	Fluorides	2.25 lb/hr	7.45	
	SO_2	.25 lb/ton	112.5	
Degasser refiner #1	Part.	0.0052 gr/dscf	*	Burner control
Soaking pits 1-8 Gas or No. 2 oil 21.6 MMBTU each	Part.	0.02 lb/MMBTU	15.16	Burner control
	SO_2	0.55 lb/MMBTU	416.28	
	NO_x	0.50 lb/MMBTU	378.44	
	CO	0.04 lb/MMBTU	30.3	
Hot scarfer	Part.	0.01 gr/dscf	23.87	Wet ESP
Billet grinders #1 & #2	Part.	0.01 gr/dscf**	18.92	Baghouse
Shot blast unit	Part.	0.01 gr/dscf	2.65	Baghouse

SOURCE	POLLUTANT	BACT LIMIT	ALLOWABLE EMISSIONS (TPY)	TECHNOLOGY
Continuous thermal treatment ID/OD quench furnace, Nat. gas only austenitizing furnace, tempering furnace, holding furnace	Part. NO_x CO	0.02 lb/MMBTU 0.50 lb/MMBTU 0.04 lb/MMBTU	3.5 92.55 7.4	Burner control
Truck dumping	Part.	0.01 gr/dscf	13.24	Baghouse
Stool plate	Part.	0.01 gr/dscf	13.05	Baghouse
√ Ladle dryer nat. gas only 16.8 MMBTU/hr #0	Part. NO_x CO	0.020 lbs/MMBTU 0.50 lbs/MMBTU 0.04 lbs/MMBTU	* 36.79 2.94	Burner control
Melt shop additive bins	Part.	0.01 gr/dscf	23.52	Baghouse
√ Car furnace C1 nat. gas only 41.48 MMBTU/hr	Part. NO_x CO	0.020 lbs/MMBTU 0.50 lbs/MMBTU 0.04 lbs/MMBTU	3.63 90.84 7.27	Burner control
√ Car furnace C3 nat. gas only 41.48 MMBTU/hr	Part. NO_x CO	0.020 lbs/MMBTU 0.50 lbs/MMBTU 0.04 lbs/MMBTU	3.63 90.84 7.27	Burner control
√ Ladle preheater nat. gas only 21.0 MMBTU/hr #1	Part. NO_x CO	0.02 lbs/MMBTU 0.50 lbs/MMBTU 0.04 lbs/MMBTU	* 45.99 3.68	Burner control

* Exhausted through baghouse serving EAF.

** Changed from 0.02 gr/dscf to 0.01 gr/dscf.

This PTI covers only the sources listed above. Any other sources installed at this facility will need a new separate PTI application even if they were on PTI 15-144 (issued in 1981).

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	335.00
NO_x	1017.35
SO_2	802.44
CO	2238.76
VOC	74.95
Fluorides	7.45
Lead	.35

ALLOWABLES BY SOURCE

	SOURCE	PM	NO_x	SO_2	CO	VOC	FLUOR.	PB
	Boiler No. 1	4.98	62.20	136.83	9.95	--	--	--
B102	Boiler No. 2	4.98	62.20	136.83	9.95	--	--	--
	Plant Roadways	6.28	--	--	--	--	--	--
	GDF	--	--	--	--	1.00	--	--
P103	EAF	197.59	157.50	112.5	2160000	63.00	7.45	.35
	Degasser	*	--	--	--	--	--	--
P104	Soaking Pits 1-4	7.58	189.22	208.14	15.15	--	--	--
P105	Soaking Pits 5-8	7.58	189.22	208.14	15.15	--	--	--
	Scarfer	23.87	--	--	--	--	--	--
	Billet Grinders	18.92	--	--	--	--	--	--
	Eiken INSP	--	--	--	--	10.95	--	--
	Shot Blast	2.65	--	--	--	--	--	--
	C.T.T.	3.50	92.55	Neg.	7.40	--	--	--
	Stool Plate	13.05	--	--	--	--	--	--
	Truck Dumping	13.24	--	--	--	--	--	--

SOURCE	PM	NO_x	SO_2	CO	VOC	FLUOR.	PB
Ladle Dryer	*	36.79	Neg.	2.94	--	--	--
Ladle Preheater	*	45.99	Neg.	3.68	--	--	--
Additive Bins	23.52	--	--	--	--	--	--
Car Furnace C1	3.63	90.84	Neg.	7.27	Neg.	--	--
Car Furnace C3	3.63	90.84	Neg.	7.27	Neg.	--	--
	335.00	1017.35	802.44	2238.76	74.95	7.45	.35

* Exhausted through meltshop baghouse.

GASOLINE DISPENSING FACILITIES

BAT for any gasoline dispensing operation identified within this permits consists of the use of Stage I vapor balance system. The vapor balance system shall be designed and operated to route at least 90% by weight of the organic compounds in the displaced vapors from the storage tanks to the delivery vessel and shall be equipped with a means to prevent the discharge into the atmosphere of displaced vapors from an unconnected vapor line. This shall be used at all times when filling the tanks.

The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

This facility shall be serviced by a bulk gasoline plant or terminal that is in compliance with OAC Rule 3745-21-09(P) or (Q), respectively.

There shall be no leaks in the vapor and liquid lines during the transfer of gasoline.

All fill caps shall be "in place" and clamped during normal storage conditions.

The gasoline dispensing facility shall repair within 15 days any leaks from the vapor balance system which is employed to meet the requirements of Paragraph (A)(3) of OAC Rule 3745-31-05 or

Paragraph (R)(1) of OAC Rule 3745-21-09 when such leaks are equal to or greater than 100% of the lower explosive limit of propane, as determined under Paragraph (K) of OAC Rule 3745-21-10.

NSPS REQUIREMENTS

The following sources are subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

Source No.	Source Description	NSPS Regulation (Subpart)
P002	EAF	AA

The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

1. Construction date (no later than 30 days after such date);
2. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
3. Actual start-up date (within 15 days after such date); and
4. Date of performance testing (at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
Authorization and Compliance Unit
P.O. Box 1049
Columbus, OH 43266-0149

and Canton Division of Air Pollution Control
Third Floor, City Hall
218 Cleveland Avenue, SW
Canton, OH 44702

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report shall be submitted and signed by the person responsible for the test, describing the test procedures followed and the results of such tests. The Director, or an Ohio EPA representative, shall be

allowed to witness the tests, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

1. A completed Intent to Test form shall be submittd to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.

2. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.

3. Tests shall be performed for the following sources and pollutants:

SOURCE	POLLUTANT(S)	T/YR ALLOWABLE
B001 Boiler No. 1	NO_x	62
Electric Arc Furnace	PM	197
	CO	2160
	FL	7.45
Soaking Pits 1-8	NO_x	378
Hot Scarfer	PM	24
Billet Grinders #1 & #2	PM	19
Continuous Thermal Treatment	NO_x	93
Truck Dumping	PM	13
Stool Plate	PM	13
Melt Shop Additive Bins	PM	23
Car Furnace C-1	NO_x	91

This modified PTI issued in 1995 requires no additional testing. The tests required by this PTI have been completed.

SPECIAL TERMS AND CONDITIONS

ELECTRIC ARC FURNACE

1. Daily opacity readings shall be taken by a certified visible emission observer from the baghouse and electric arc furnace. The six minute average visible emissions shall not exceed the following limits:

   a. 3% opacity from the baghouse exit;
   b. 6% opacity from the shop area, except during charging and tapping periods;
   c. 20% opacity from the shop area during charging periods; and
   d. 40% opacity from the shop area during tapping periods.

2. Timken Company shall submit summaries of the opacity readings on a quarterly basis. The actual readings shall be kept for a minimum of four months.

3. The PM emissions from this source shall not exceed .0052 grains/DSCF.

4. The baghouse servicing this source shall have an efficiency of 99.65% or higher.

5. No more than 900,000 tons of steel shall be produced in any one year. Annual records of steel production shall be retained in the company's files for a period of not less than three years and shall be made available to the Director or any authorized representative of the Director during normal business hours.

6. This source shall perform all of the monitoring requirements found in 40 CFR 60.274.

PLANT ROADWAYS AND PARKING LOTS

1. Paved roadways shall be swept and/or flushed as often as necessary to minimize or eliminate fugitive dust emissions.

2. Unpaved roadways shall have water or other suitable dust suppressant applied to them as often as necessary to minimize or eliminate fugitive dust emissions.

3. This facility shall maintain records of when and what type of dust control measures were employed. These records shall be kept for a minimum of one year and shall be made available for inspection by members of the Ohio EPA or its contractual representatives during regular working hours upon request.

OhioEPA
REPRESENTATIVE
SERVING STARK COUNTY

AIR POLLUTION CONTROL DIVISION
DEPARTMENT OF HEALTH • CITY HALL • CANTON, OHIO 44702
ROBERT E. PATTISON, M.P.A.
HEALTH COMMISSIONER
BRUCE E. BLANKENSHIP
ADMINISTRATOR
TELEPHONE:
489-3385
FAX:
489-3337

December 18, 1992

Mr. Mike Hopkins
Ohio EPA, Central District Office
P.O. Box 2198
2305 Westbrooke Drive, Building C
Columbus, Ohio 43266-2198

RE: PTI TIMKEN FAIRCREST

Dear Mr. Hopkins:

Earlier this month, you contacted this office to say that you would be trying to resolve the PTI for the Timken Faircrest facility.

I will attempt to summarize the prior events involved with this PTI.

In December 1981, the Ohio EPA issued PTI 15-144 for the Timken Faircrest facility (copy enclosed). This was a PSD permit. In March 1982, construction was begun on the facility. In 1985, the facility began operations. In 1985, revisions to the PTI application were submitted based on what actually was installed as opposed to what had been planned. Stack testing was done on the baghouse servicing the EAF. This stack test showed that it was in compliance for PM. CO was not tested for.

In May of 1989, Timken, Canton LAA, and Ohio EPA officials met to discuss the PTI. A memo about this meeting is enclosed. The NOx emission problem from the soaking pits among other things was discussed. In December 1989, a revised PTI 15-144 was issued (copy enclosed). Stack testing in 1990 showed that CO emissions from the EAF were above the allowables found in modified PTI. Also, SO_2 emissions were found. There were no allowables for SO_2. This was from the foaming process which uses coal/coke.

In October 1990, Tom Blaszak sent Bob Hodanbosi a letter saying that the Faircrest facility might be modernized which might trigger a PSD review (copy enclosed). This agency has not heard anything about this modernization recently.

Also, in October 1990, Mr. Bill Lacure of Timken wrote to Bruce Blankenship of our agency explaining the ultra high power (UHP) process (copy enclosed).