# AIR POLLUTION REPORT FEDERAL FACILITIES

# METROPOLITAN INDIANAPOLIS INTRASTATE

AIR QUALITY CONTROL REGION

U.S DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Environmental Health Service
National Air Pollution Control Administration

# AIR POLLUTION REPORT FEDERAL FACILITIES

# METROPOLITAN INDIANAPOLIS INTRASTATE AIR QUALITY CONTROL REGION

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NATIONAL AIR POLLUTION CONTROL
ADMINISTRATION

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#### NARRATIVE

On September 18, 1969, the Metropolitan Indianapolis Intrastate Air Quality Control Region was designated pursuant to section 107(a) of the Clean Air Act, as amended. The Region consists of the counties of Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby (Figure 1).

This report presents the current status of the Federal facilities in the Region with regard to implementation of the objectives prescribed by the Clean Air Act and Executive Order 11282. Quantitative data on fuel burning and refuse disposal practices, air pollutant emissions, and abatement plans are included. The data in this report reflect that most recently available.

Table I lists the 50 Federal facilities in the Region along with data concerning both fuel burning and refuse disposal practices for each. A summary by county of fuel-use by type -- coal, fuel oil, natural gas-- is presented in Table II.

The Federal facilities in the Metropolitan Indianapolis Intrastate Air Quality Control Region emit annually a total of 1300 tons of sulfur oxides (SOX), 230 tons of nitrogen oxides (NOX), 110 tons of carbon monoxide (CO), 340 tons of particulates (PART), and 30 tons of hydrocarbon (HC). Table III clearly indicates that the majority of the emissions emanate from Marion County. Table IV, in fact, lists only one Federal source in the Region which emits more than 100 tons of any pollutant each year (point source). These two tables point out that Fort Benjamin Harrison contributes nearly all of the Federal air pollution to the Region.

Seven coal-fired boilers at Fort Benjamin Harrison, as listed in Table V, are in violation of the particulate emissions limitations in Federal regulations (Title 42, Part 76.4, Sections (7) and (8)).

Five Federal facilities, listed in Table VI, reported air pollution problems and/or proposed abatement measures in their 1967-1972 five-year abatement plans. Of the five, none have reported their problems as solved, four are in the process of developing solutions and one has not as yet submitted plans. Table VII is a quantitative summary of the pollutant reductions which will be realized when the abatement measures described in Table VI are completed.

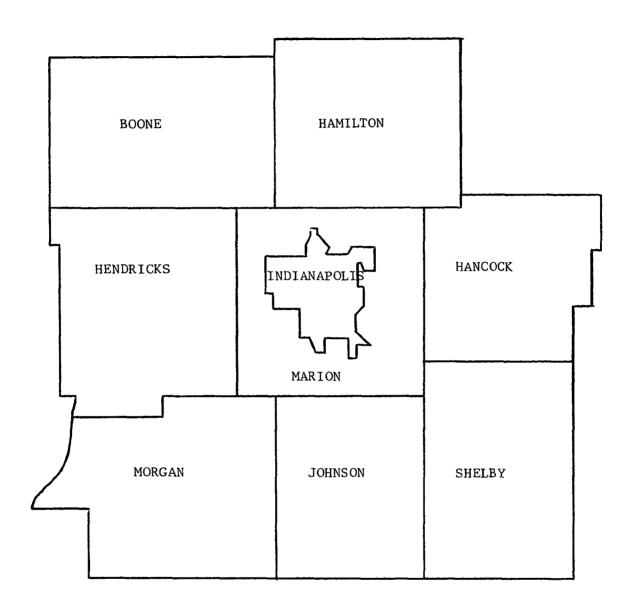


FIGURE 1

METROPOLITAN INDIANAPOLIS INTRASTATE

AIR QUALITY CONTROL REGION

TABLE I FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

·	REFUSE	(LBS/DAY)		FUFLS (	PER YEAR)		·
LOCATIONS	OPEN BURNING	INCIN- EPATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	CHAL (TONS)	COMMENTS
INDIANA BOONE LEBANON							
POST OFFICE	^.	a.	ი მ 2 •	າ•	٦.	C •	NO PEFUSE
INDIANA HAMILTON NOBLESVILLE							
POST OFFICE	0.	.0.	1500.	٦.	) •	0.	PEFUSE .COLLECTED
INDIANA HAMILTON SHERIDAN							
POST OFFICE	0.	0.	0.	9300.	0.	? •·	REFUSE COLLECTED
INDIANA HANCOCK GREENFIFLD							
POST OFFICE	0.	Ō.	1024.	0.	Λ.	O • :	REFUSE COLLECTED

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(LBS/DAY) -	FU	FLS (PEP	AE70)	+	
LOCATIONS	PURNING	INCIM- SRATION		ST OIL RE GALS)		NAL -	COMMENTS
POST OFFICE SITE	0.	0.	0.	٥.	<b>○•</b>	^ • ·	NO RUILPING
INDIANÁ HENDRICKS BROWNSBURG							
FAA VTAC1	0.	٥.	9.	þ.	9.	٥.	RANGE/DIRECT DETERMINER
FAA RCAG1	0.	n.	0.	٥.	0.	Ç.	REMOTE COULPMENT
INDIANA HENDRICKS DANVILLE					·	·	
POST OFFICE	0.	0.	1019.	C.	0.	0.	NO REFUSE
INDIANA HENDRICKS PLAINFIELD							
FAA H1	0.	٠.	5.	લ•	<b>7.</b>	٥.	BEVCLA HUMING

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	RFFUSE	(LBS/DAY)	FUF	ELS (PER	R YEAR)		-
LOCATIONS	OPEN BURNING	INCIN- ERATION		ST OIL RE	SID DIL (GALS)	COAL (TONS)	COMMENTS
FAA OM1	0.	ŷ.	ე•.	0.	o.	·.	OUTER MARKER
INDIANA JOHNSON FRANKLIN							·
POST OFFICE	0.	).	703.	٥.	?.	0.	REFUSE COLLECTED
INDIANA MARION FT HARRISON		:					
FORT BEN HARRISON	0.	€.	၇.	<u></u> .	0.	20754.	LANDFILL REFUSE
INDIANA MARION INDIANAPOLIS							
PO BROAD RIPPLE STA	c.	0.	1920.	C.	J.	ာ•	TO BE CLOSED

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(LBS/DAY)	FU	JELS (P	ER YEAR)		
LOCATIONS	OPEN BURNING	INC IN- EPATION		IST OIL IGALS)	RESID DIL (GALS)	COAL (TONS)	COMMENTS
VA HOSPITAL W 10TH ST	0.	50.	0.	o.	ე.	ာ•	PURCHASE STEAM
VA HOSPITAL CLD SPRNG RD	· .	2000.	9.	0.	472000.	ဂ္.	
POST OFFICE- COURTHOUSE	· ·	300.	0.	C.	0.	0•	PURCHASE STEAM
CENTURY BUILDING	c.	n.	٥.	0.	0.	ာ•	PURCHASE STEAM
ILLINOIS ST POSTAL STA	· .	o•	0.	0.	0.	0.	PURCHASE STEAM
FAA RTR3	0.	0.	0.	0.	o.	0.	TRANSMITTE

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(LBS/DAY)	FU	ELS (PER	YEAR)	ł	1	
LOCATIONS	OPEN BURNING	INCIN- ERATION		ST OIL RE GALS)		DAL TONS)	- COMMENTS	
FAA UVDF1	0.	Ċ•	0.	C •	0.	0.	DIRECTION FINDER	
FAA ARSR1	0.	0.	250•	0•	0.	ာ.	LONG RANGE RADAR	
FAA ASR2	0.	0.	0.	0.	0.	n.	- SHORT RANG! - RADAR	
FAA LOC2	c.	0.	0.	C •	0.	0.	HORIZONTAL GUIDANCE	
FAA PAR1	0.	0.	0.	0,•	0.	0.	PRECISION RADAR	
FAA ALSF3	0.	0.	0.	0.	0.	ဂ•	APPROACH LIGHT SYS	

TABLE I

FUEL USAGE AND PEFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(LBS/DAY)	FUF	LS (PER	YFAR)		
LOCATIONS	OPEN BURNING	INCIN- ERATION	1			NAL NNS)	COMMENTS
FAA RCAG1	0.	0.	0.	ი.	<b>o.</b>	0.	REMOTE FOUIPMENT
FAA MM2	0.	0•	0.	٠.	0.	٠.	MIDDLE MIRKERS
FAA GS2	0.	٠.	o.	O.	· •	ာ•	VERTICAL GUIDANCE
FAA VASI1	0.	0.	0.	0.	७.	٥.	LIGHTING SYSTEM
FAA OM1	c.	<b>0.</b>	ာ•	ο.	٠.	٠.	OUTER MARKE
FAA RVR2	0.	٥٠)	o.	o.	C •	ڻ <b>.</b>	NAVIGATIONA AIOS

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(LBS/DAY)	Lûê	LS (PE	R YEAR)		
LOCATIONS	OPEN BURNING	INCIN- ERATION		T OIL RE ALS)	ESID OIL (GALS)	CHAIL (TONS)	COMMENTS
FAA ARTOO	0.	100.	0.	0.	<b>^</b> .	o.	- HEATED RY - THE ATROOR
COE RADIO FACILITY	0.	0.	0.	0.	0.	?•!	- NB DATA -
NAVY AVIONIC FACILITY	0.	n.	81999.	0.	aca.	<b>೧.</b> ∙	- RHEUSE - COLLECTED
NAVY RESERVE TRAINING CTR	· .	€ •	0.	С.	າ.	. • ·	- MO, DATA
NAVY R AND R HEADQUARTERS	۰.	<b>7.</b>	٥.	€.	ე•	^•·	· ΝΟ ρατα ·
CROWN HILL CONTED MNUMT	0.	٩.	n.	0.	9.	٠.	. Mi GUILDING

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	(L3S/DAY)		FUELS (	PER YEAR)		
LOCATIONS	OPEN BURNING	INCIN- ERATION	GAS (	DIST OIL (GALS)	RESID DIL (GALS)	COAL (TONS)	COMMENTS
CROWN HILL NAT'L CEMTRY	0.	0.	0.	c.	ç.	c.	NO BUILDINGS
USARC WEST INDIANAPOLIS	· .	၁.	ე:	0.	0.	170.	NO REFUSE
NAT'L GUARD TENT CITY	0.	0.	o.	0.	7.	ĵ.	NO DATA
INDIANA MORGAN MARTINSVILLE				0.	^	٠ <u>.</u>	סבבווכב
POST OFFICE	0.	0.	592.	0.	0.	•	REFUSE COLLECTED
INDIANA SHELBYVILLE			·			·	
POST OFFICE	0.	o.	0.	0.	0.	0.	MA DATA REQUESTED

TABLE I FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

	REFUSE	REFUSE (LBS/DAY)		FUELS (			
LOCATIONS	OPEN BURNING	INCIN- FRATION	GAS (MCF)	DIST OIL (GALS)	RESID DIL (GALS)	COAL -	COMMENTS
FAA VOR1	′ 0.	0.	ი.	. <u>0</u> .	0.	0.	DIRECTION DETERMINER
INDIANA SHFLBY NO CITY ID							
FAA RMLR1	6.	0.	0.	· •	0.	0.	RADAR MICRO- WAVE LINK

TABLE II

ANNUAL FUEL USE BY FEDERAL FACILITIES

	COAL (TONS)	RESID DIL (GAL)	OIST OIL (GAL)	GAS (MCF)
INDIANA	^	•	^	0.00
BOONE	0.	0.	0.	002.
HAMILTON	, C.	0•	8399.	1500.
HANCOCK	0.	0.	0.	1024.
HENDRICKS	C •	ე.	o .	1019.
JOHNSON	0.	0.	0.	703.
MARION	20924.	472999.	0.	93269.
MORGAN	0.	Λ.	<b>○</b> •	592.
SHELBY	0.	۸.	<b>○</b> •	0.
TOTAL	20924.	472999.	8399.	30099.

TABLE III

FEDERAL CONTRIBUTION TO AIR POLLUTION
(TONS/YEAR)

	Sūx	NOX	co	PART	НС
INDIANA					
BOONE	1.	1.	1.	1.	1.
HAMILTON	1.	1.	1.	1.	1.
HANCOCK	1.	1.	1.	1.	1.
HENDRICKS	l.	1.	1.	1.	1.
JCHNSON	1.	1.	1.	1.	1.
MARTON	1300.	220.	190.	330.	20.
MORGAN	1.	1.	1.	1.	1.
SHELBY	1.	1.	1.	1. •	1.
STATE TOTAL	1300.	230.	110.	340.	30.
AREA TOTAL	1300.	230.	110.	340.	30.€

TABLE IV

# FEDERAL POINT SOURCES (TONS/YEAR)

	SOX	NOX	CÚ	PART	нс
INDIANA MARION FORT BEN HARRISON	1300.	190.	٥ŋ.	320.	20.

TABLE V

COAL-FIRED BOILERS IN VIOLATION OF 42 CFR 76.4

INSTALLATION NAME	BOILER SIZE (MMBTU/HR)	NUMBER	COAL USED (TONS/YEAR)	PART. EMITTED (TONS/YEAR)	PART. ALLOWED (TONS/YEAR)
FORT BEN HARRISON	49.0	4•	3060.0	42.8	18.1
FORT BEN HARRISON	19.0	3.	2001.0	43.0	13.9

#### TABLE VI

#### ABATEMENT PROGRAM FOR FEDERAL PROBLEM AREAS

- A. Problem
- B. Abatement measures proposed in five year plan\*
- C. Abatement measures needed but not reported in the plan
- D. Abatement measures accomplished or in progress

#### INDIANA

#### MARION

#### FT. HARRISON

## Fort Benjamin Harrison

- A. 1. Main coal burning power plant
  - 2. Secondary power plant
  - 3. Mess hall, coal furnace
  - 4. Hospital incinerator
  - 5. Two small incinerators
- B. 1. Convert to natural gas
  - 2. To be closed when main plant converted
  - 3. Conditional approval for conversion to natural gas
- C. 4. Needs upgrading to meet Federal specifications
  - 5. Should be eliminated

#### INDIANAPOLIS

# VA Hospital, Cold Spring Road

- A. 1. Oil-fired boilers
  - 2. Incinerator
- B. 1. Request for conversion to natural gas has been submitted
- C. 2. Needs to be replaced or upgraded to meet Federal specifications

\*1967-72 plan per Executive Order 11282 superseded by Executive Order 11507.

#### INDIANAPOLIS (CONT'D)

## Post Office-Courthouse

- A. Roof-top incinerator
- B. To be eliminated by July 1, 1969

# Air Route Traffic Control Center

- A. Multiple-chamber incinerator
- C. Needs a scrubber

# USARC, West Indianapolis

- A. Coal-fired boilers
- B. Request for conversion to natural gas has been submitted

TABLE VII

POLLUTANT REDUCTION GOALS
(TONS/YEAR)

	sox	XGN	co	PART	нс
INDIANA					
BOONE	0.	0.	0.	0.	0.
HAMILTON	0.	0.	0.	0.	0.
HANCOCK	0.	0.	0.	0.	0.
HENDRICKS	0.	0.	0.	0.	0.
JOHNSON	0.	0.	0.	0.	0.
MARION	1300.	120.	90.	320.	20.
MORGAN	0.	0.	0.	0.	0.
SHELBY	0.	0.	0.	0.	0.
STATE TOTAL	1300.	120.	90.	320.	20.
AREA TOTAL	1300.	120.	90.	320.	20.

NOTE: THESE REDUCTIONS WILL RESULT FROM ABATEMENT MEASURES PROPOSED, BUT NOT YET ACCOMPLISHED, IN THE FIVE-YEAR PLAN.

#### REFERENCES AND NOTES

- 1. Duprey, R.L., <u>Compilation of Air Pollutant Emission Factors</u>,
  Public Health Service Publication No. 999-AP-42, 1968.
  - All calculated emissions are based on these factors.
- 2. Report for Consultation on the Metropolitan Indianapolis Intrastate Air Quality Control Region, Public Health Service, May, 1969.

Data on emissions from all sources used to calculate percent government contribution were obtained from this report.

- 3. Clean Air Act, as amended, (42 U.S.C. 1857 1857L) Sec 107, Sec 111. November 21, 1967.
- 4. Executive Order 11507, Control of Air Pollution originating from Federal Installations, May 26, 1966.
- 5. <u>Title 42 Public Health</u>, Chapter I, Subchapter F, Part 76, June 2, 1966.
- 6. Bureau of the Budget Circular A-76, August 6, 1966.