APPENDIX A

Documentation Notices

Wyoming Air Quality Control Regions

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE
WASHINGTON, D.C. 20201

OCT 19 1970

Dr. Robert Alberts
Director of Public Health
State Office Building
Cheyenne, Wyoming 82001

Dear Dr. Alberts:

As the Governor's designated representative for matters pertaining to State air pollution control, this is to advise you that we have completed the process of designation of the Metropolitan Cheyenne Intrastate Air Quality Control Region. The Region, as will be announced in the Federal Register, will consist of Albany, Goshen, Laramie, and Platte Counties, in the State of Wyoming.

The formal designation of the Region sets in motion a schedule of activities that the involved States are expected to carry out. Air quality criteria and control technology documents are sent to your office upon publication and announcement in the Federal Register.

Under the Clean Air Act, as amended, upon the publication of the designation of the Metropolitan Cheyenne Intrastate Air Quality Control Region in the Federal Register, the Governor will have 90 days in which to formally file a letter stating his intent to set ambient air quality standards and develop implementation plans in the air quality control region for those pollutants for which criteria and control technology documents have been issued; he will have an additional 180 days in which to adopt standards, and a further 180 days to adopt plans for implementing the standards.

We look forward to working with you to restore the quality of the Nation's air resource.

Sincerely,

/s/ Elliot L. Richardson

Secretary

ENVIRONMENTAL PROTECTION AGENCY
1626 K STREET, N.W.
WASHINGTON, D. C. 20460

MAR 23 1971

Mr. Robert E. Sundin, Director
Division of Industrial Hygiene
Department of Public Health
State Office Building
Cheyenne, Wyoming 82001

Dear Mr. Sundin:

As the Governor's designated representative for matters pertaining to State air pollution control, this is to advise you that we have completed the process of designation of the Casper Intrastate Air Quality Control Region. See the enclosed Federal Register regulation for areas included within the Region.

The results of the official consultation with appropriate State and local authorities have indicated a general acceptance of the designated boundaries of the Region, as well as a high degree of awareness of the existing and potential air pollution problems in your State. The designation of this Region completes the coverage of the major intrastate areas of Wyoming by air quality control regions. The remaining areas of the State will automatically become a single Region on March 31, 1971, under the provisions of the Clean Air Amendments of 1970.

The Clean Air Amendments of 1970 provide that all areas of every State will be covered by air quality control regions within 90 days of the enactment of these Amendments. Within 120 days of the enactment of the Amendments, the Environmental Protection Agency will promulgate national primary and secondary ambient air quality standards for each pollutant for which air quality criteria have been issued prior to enactment. You will be expected to hold public hearings and adopt a plan for implementation of these national ambient air quality standards. The State implementation plan must be submitted to the Environmental Protection Agency within nine months after the promulgation of air quality standards. The formal letter of intent, required previously within 90 days of designation of an air quality region, is no longer necessary. State adoption of ambient air quality standards is likewise no longer obligatory.

If you have any questions concerning the timetable on implementation plans for this or any other air quality control region within your State, please contact the Acting Commissioner, Air Pollution Control Office, Environmental Protection Agency. We are anxious to continue to work with you and your staff in accomplishing our mutual goals.

Sincerely yours,

William D. Ruckelshaus

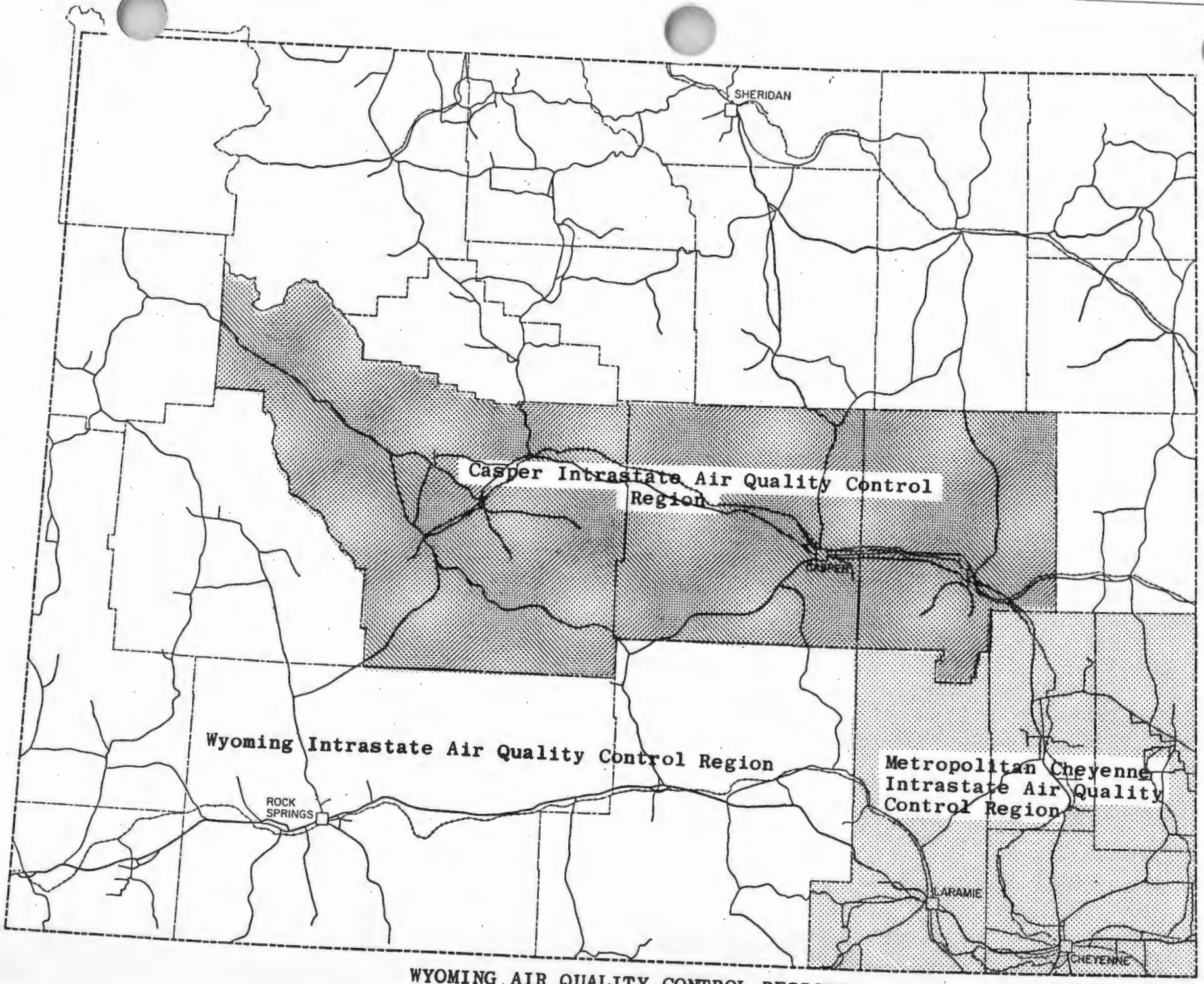
William D. Ruckelshaus
Administrator

Enclosure

APPENDIX B

Geographical Boundaries

Wyoming Air Quality Control Regions



WYOMING AIR QUALITY CONTROL REGIONS

Wyoming Air Quality Control Regions

Region	Counties	
1. Cheyenne Intrastate	Albany	
	Goshen	
	Laramie	
	Platte	
2. Casper Intrastate	Converse	
	Fremont	
	Natrona	
3. Wyoming Intrastate	Big Horn	Park
	Campbell	Sheridan
	Carbon	Sublette
	Crook	Sweetwater
	Hot Springs	Teton
	Johnson	Uinta
	Lincoln	Washakie
	Niobrara	Weston

APPENDIX G

Air Quality Emissions Inventory

Table I - Cheyenne Intrastate Region

Table II - Casper Intrastate Region

Table III - Wyoming Intrastate Region

Air Quality Data

Table I-A - Casper Intrastate Region

Table I-B - Cheyenne Intrastate Region

Table I-C - Wyoming Intrastate Region

TABLE I

EMISSIONS INVENTORY SUMMARY FOR THE STATE OF WYOMING

METROPOLITAN CHEYENNE INTRASTATE AIR QUALITY CONTROL REGION

DATA REPRESENTATIVE OF CALENDAR YEAR 1970

Tons of Pollutant/Year

	Particulate	SO_2	CO	HC	NO_x
I. Fuel Combustion					
A. Residential Fuel-Area Source	101	3	105	42	388
B. Comm-Instl & Ind	1,542	6,637	133	235	1,857
C. Steam-Electric Power Plant	0	0	0	0	0
II. Process Losses					
A. Area Sources	0	0	0	1,660	0
B. Point Sources	24,227	936	29,500	9,140	121
III. Solid Waste Disposal	4,881	71	69,450	10,223	482
IV. Transportation-Area Source	1,166	1,223	39,054	12,656	8,710
V. Miscellaneous-Area Source	0	0	0	0	0
VI. Grand Total					
A. Area Source	3,323	1,262	56,312	20,079	9,399
B. Point Source	28,594	7,608	81,930	13,877	2,159
C. Total	31,917	8,870	138,242	33,956	11,558

BEST AVAILABLE ORIGINAL

TABLE II

EMISSIONS INVENTORY SUMMARY FOR THE STATE OF WYOMING

CASPER INTRASTATE AIR QUALITY CONTROL REGION

DATA REPRESENTATIVE OF CALENDAR YEAR 1970

	Tons of Pollutant/Year				
	Particulate	SO_2	CO	HC	NO_x
I. Fuel Combustion					
A. Residential Fuel-Area Source	82	1	87	34	318
B. Comm-Instl & Ind	303	14,262	58	319	4,826
C. Steam-Electric Power Plant	20,076	19,012	926	276	16,678
II. Process Losses					
A. Area Sources	0	0	0	1,407	0
B. Point Sources	3,495	4,355	70,750	4,601	93
III. Solid Waste Disposal	1,763	30	17,422	4,586	120
IV. Transportation-Area Source	791	542	33,185	10,410	6,612
V. Miscellaneous-Area Source	0	0	0	0	0
VI. Grand Total					
A. Area Source	2,306	568	45,168	15,819	7,172
B. Point Source	24,204	37,634	77,260	5,816	21,475
C. Total	26,510	38,202	122,428	21,635	28,647

BEST AVAILABLE ORIGINAL

TABLE II

EMISSIONS INVENTORY SUMMARY FOR THE STATE OF WYOMING

CASPER INTRASTATE AIR QUALITY CONTROL REGION

DATA REPRESENTATIVE OF CALENDAR YEAR 1970

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BEST AVAILABLE ORIGINAL

TABLE III

EMISSIONS INVENTORY SUMMARY FOR THE STATE OF WYOMING

WYOMING INTRASTATE AIR QUALITY CONTROL REGION

DATA REPRESENTATIVE OF CALENDAR YEAR 1970

	Tons of Pollutant/Year				
	Particulate	SO_2	CO	HC	NO_x
I. Fuel Combustion					
A. Residential Fuel-Area Source	318	213	709	194	627
B. Comm-Instl & Ind	903	5,466	152	861	16,620
C. Steam-Electric Power Plant	13,727	15,581	1,002	403	22,941
II. Process Losses					
A. Area Sources	0	0	0	2,429	0
B. Point Sources	72,801	944	76,767	5,444	2,265
III. Solid Waste Disposal	3,365	82	30,177	8,201	274
IV. Transportation-Area Source	3,025	2,901	92,379	28,195	21,890
V. Miscellaneous-Area Source	0	0	0	0	0
VI. Grand Total					
A. Area Source	5,811	3,165	113,541	37,643	22,951
B. Point Source	88,328	22,022	87,645	8,084	41,666
C. Total	94,139	25,187	201,186	45,727	64,617

BEST AVAILABLE ORIGINAL

TABLE I-A
AIR QUALITY DATA SUMMARY
Casper Intrastate AQCR-#241

Pollutant	Sampling Method	Station Identification	Annual Average $\mu g/m^3$	Maximum 24 hour Average $\mu g/m^3$	Number of Samples	Sampling Period
Suspended Particulate	Hi-Vol	241.1	58 G.M.	128	26	1970
"	"	Mills 1	-	213 (1)	7	1 week 1969
"	"	Mills 2	-	289 (1)	7	"
"	"	Mills 3	-	248 (1)	7	"
"	"	Mills 4	-	274 (1)	7	"
"	"	Mills 5	-	235 (1)	7	"
"	Estimated (2)	-	-	<150	-	-
Sulfur Oxides	Bubbler	241.1	10 A.M.	29	25	1970
"	Estimated (2)	-	-	<260	-	-
Nitrogen Oxides	Estimated (3)	-	<100 A.M.	-	-	-
Photo Chemical Oxidants	Estimated (3)	-	-	<160 (4)	-	-
Carbon Monoxide	Estimated (3)	-	-	<10,000 (5)	-	-

(1) Reflects source oriented type sampling
(2) Estimating technique used was the Miller-Holzworth point source model documented in April 7, 1971, Federal Register
(3) Estimation basis is August 14, 1971, Federal Register, pg. 15488, where it states that any region not having an urban place population greater than 200,000 shall be classified priority III, i.e. having an air quality below the secondary standard.
(4) Maximum 1 hour avg.
(5) Maximum 8 hour avg.

TABLE I-B
AIR QUALITY DATA SUMMARY
Cheyenne Intrastate AQCR-#242

Pollutant	Sampling Method	Station Identification	Annual Average $\mu g/m^3$	Maximum 24 hour Average $\mu g/m^3$	Number of Samples	Sampling Period
Suspended Particulate	Hi-Vol	242.1	33 G.M.	56	23	1970
"	Hi-Vol	Laramie 1	(158 G.M.	(277 (1)	6	12 Months-1969
			(-	(281 (1)	1	1970
"	"	Laramie 2	47 G.M.	69 (1)	6	12 Months-1969
"	"	Laramie 3	(429 G.M.	(6544 (1)	6	12 Months-1969
			(-	(166 (1)	1	1970
"	"	Laramie 4	99 G.M.	234 (1)	6	12 Months-1969
"	"	Laramie 5	(153 G.M.	(215 (1)	6	12 Months-1969
			(-	(1810 (1)	1	1970
"	"	Laramie 6	174 G.M.	323 (1)	6	12 Months 1969
"	Estimated (1)	-	-	< 260	-	-
Sulfur Oxides	Estimated (2)	-	-	< 260	-	-
Nitrogen Oxides	Estimated (3)	-	≤100 A.M.	-	-	-
Photo Chemical Oxidants	Estimated (3)	-	-	< 160 (4)	-	-
Carbon Monoxide	Estimated (3)	-	-	<10,000 (5)	-	-

(1) Reflects source oriented type sampling.
(2) Estimating technique used was the Miller-Holzworth point source model documented in April 7, 1971, Fed. Reg.
(3) Estimation basis is August 14, 1971, Federal Register, pg. 15488, where it states that any region not having an urban place population greater than 200,000 shall be classified priority III, i.e. having an air quality below the secondary standard.
(4) Maximum 1 hour avg.
(5) Maximum 8 hour avg.

TABLE I-C
AIR QUALITY DATA SUMMARY
Wyoming Intrastate AQCR-#243

Pollutant	Sampling Method	Station Identification	Annual Average $\mu g/m^3$	Maximum 24 hour Average $\mu g/m^3$	Number of Samples	Sampling Period
Suspended Particulate	Hi-Vol	243-2	10 G.M.	39	26	1970
"		243-3	8 G.M.	33	24	1970
"						
"						
"						
"						
"	Estimated (1)	-	-	> 260 (5)	-	-
Sulfur Oxides	Bubbler	243.3	4 A.M.	23	12	July-Dec. 1970
"						
"						
"						
"						
"						
"	Estimated (1)	-	-	< 260	-	-
Nitrogen Oxides	Estimated (2)	-	< 100 A.M.	-	-	-
Photo Chemical Oxidants	Estimated (2)	-	-	< 160 (3)	-	-
Carbon Monoxide	Estimated (2)	-	-	<10,000 (4)	-	-

(1) Estimating technique used was the Miller-Holzworth point source model documented in April 7, 1971, Fed. Reg.
(2) Estimation basis is August 14, 1971, Federal Register, pg. 15488, where it states that any region not having an urban place population greater than 200,000 shall be classified priority III, i.e. having an air quality below the secondary standard.
(3) Maximum 1 hour avg.
(4) Maximum 8 hour avg.
(5) This value exceeds the primary ambient air quality standard reflecting the need for much source oriented sampling in this region.

BEST AVAILABLE ORIGINAL

Appendix H

Air Quality Control Regions

Projected Emission Estimates

Table A - Casper Intrastate

Table B - Cheyenne Intrastate

Table C - Wyoming Intrastate

TABLE A

CASPER - AIR QUALITY CONTROL REGION

1975 PROJECTED EMISSION ESTIMATES

Pollutant - Tons Per Year

Source Category	1970 Emissions (1)					Increased Emissions Due to Growth (2)					Reductions in Emissions from Control (3)					1975 Emissions				
	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x
I. Fuel Combustion																				
A. Residential	82	1	87	34	318	5	0	6	2	21	0	0	0	0	0	87	1	93	36	339
B. Industrial	303	14,262	58	319	4,826	73	3,423	14	77	1,158	0	0	0	198	0	376	17,685	72	198	5,984
C. Utility	20,076	19,012	926	276	16,678	6,083	5,761	281	84	5,053	20,142	0	0	0	0	6,017	24,773	1,207	360	21,731
II. Industrial Process Losses	3,495	4,355	70,750	6,008	93	839	1,045	16,980	1,442	22	650	0	0	0	0	3,684	5,400	87,730	7,450	115
III. Solid Waste Disposal	1,763	30	17,422	4,586	120	116	2	1,150	303	8	310	6	431	214	25	1,569	26	18,141	4,675	103
IV. Transportation																				
A. Motor Vehicle	687	331	32,634	4,838	6,402	150	72	-	-	-	-	-	8,844	1,703	499	837	403	23,790	3,135	5,903
B. Other	104	211	551	5,572	210	10	20	52	529	20	0	0	0	3,051	0	114	231	603	3,050	230
GRAND TOTAL	26,510	38,202	122,428	21,633	28,647	7,276	10,323	18,483	2,437	6,282	21,102	6	9,275	5,166	524	12,684	48,519	131,636	18,904	34,405

(1) Reference 1970 Wyoming Emissions Inventory

(2) Growth factors obtained from "Economic Projections for Air Quality Control Regions", U. S. Dept. of Commerce Publication pg. 140.

(3) See compliance schedule and control strategy sections this plan.

TABLE 8

CHEYENNE AIR QUALITY CONTROL REGION

1975 PROJECTED EMISSIONS ESTIMATES

Pollutant - Tons Per Year

Source Category	1970 Emissions (1)					Increased Emissions Due to Growth (2)					Reductions in Emissions from Control (3)					1975 Emissions				
	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x
I. Fuel Combustion																				
A. Residential	101	3	105	42	388	7	0	7	3	26	0	0	0	0	0	108	3	112	45	414
B. Industrial	1,542	6,637	133	235	1,857	370	1,593	32	56	446	0	0	0	0	0	1,912	8,230	165	291	2,303
C. Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
II. Industrial Process Losses	24,227	936	29,500	10,800	121	5,814	225	7,080	2,592	29	27,541	749	0	4,018	77	2,500	412	36,580	9,374	73
III. Solid Waste Disposal	4,881	71	69,450	10,223	482	322	5	4,584	675	32	473	3	361	82	25	4,730	73	73,673	10,816	489
IV. Transportation																				
A. Motor Vehicle	845	407	37,849	5,724	7,818	185	89	-	-	-	-	-	10,257	2,015	610	1,030	496	27,592	3,709	7,208
B. Other	321	816	1,205	6,932	892	30	78	114	659	85	0	0	0	3,796	0	351	894	1,319	3,795	977
Grand Total	31,917	8,870	138,242	33,956	11,558	6,728	1,990	11,817	3,985	618	28,014	752	10,618	9,911	712	10,631	10,108	139,441	28,030	11,464

(1) Reference 1970 Wyoming Emissions Inventory

(2) Growth factors obtained from "Economic Projections for Air Quality Control Regions", U. S. Dept. of Commerce Publication pg. 140.

(3) See compliance schedule and control strategy sections this plan.

TABLE C

WYOMING INTRASTATE AIR QUALITY CONTROL REGION

1975 PROJECTED EMISSIONS ESTIMATES

Pollutant - Tons Per Year

Source Category	1970 Emissions (1)					Increased Emissions Due to Growth (2)					Reductions in Emissions from Control (3)					1975 Emissions				
	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x	Part	SO_2	CO	HC	NO_x
I. Fuel Combustion																				
A. Residential	318	213	709	194	627	21	14	47	13	42	0	0	0	0	0	339	227	756	207	669
B. Industrial	903	5,466	152	861	16,620	217	1,312	36	207	3,989	0	0	0	0	0	1,120	6,778	188	1,068	20,609
C. Utility	13,727	15,581	1,002	403	22,941	4,159	4,721	304	122	6,951	10,982	0	0	0	0	6,904	20,302	1,306	525	29,892
II. Industrial Process Losses	72,801	944	76,767	7,873	2,265	17,472	227	18,424	1,890	544	50,961	0	0	4,882	0	39,312	1,171	95,191	4,882	2,809
III. Solid Waste Disposal	3,365	82	30,177	8,201	274	222	5	1,992	541	18	424	36	2,144	757	137	3,163	51	30,025	7,985	155
IV. Transportation																				
A. Motor Vehicle	2,331	1,097	89,925	14,051	19,895	510	240	-	-	-	-	-	24,370	4,946	1,552	2,841	1,337	65,555	9,105	18,343
B. Other	694	1,804	2,454	14,144	1,995	66	171	233	1,344	190	0	0	0	7,744	0	760	1,975	2,687	7,744	2,185
Grand Total	94,139	25,187	201,186	45,727	64,617	22,667	6,690	21,036	4,117	11,734	62,367	36	26,514	18,328	1,689	54,439	31,841	195,708	31,516	74,662

(1) Reference 1970 Wyoming Emissions Inventory

(2) Growth factors obtained from "Economic Projections for Air Quality Control Regions", U. S. Dept. of Commerce Publication pg. 140.

(3) See compliance schedule and control strategy sections this plan.