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LM095772

Statistical Data On Petroleum And Petroleum Products

B-178205

Department of Commerce
Tariff Commission
Department of the Interior

**BY THE COMPTROLLER GENERAL
OF THE UNITED STATES**

7-04627
095772

MAY 24 1974



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-178205

The Honorable Lester L. Wolff
House of Representatives

Dear Mr. Wolff:

In reply to your November 8, 1973, request for information on petroleum products and your subsequent requests during our discussions with your office, we are enclosing the following information:

- Appendix I--Schedules of Domestic Production, Domestic Demand, Imports, and Exports for Crude Petroleum, Selected Petroleum Products, Natural Gas, and Natural Gas Liquids.
- Appendix II--Domestic Productive Capacity of Crude Petroleum, Natural Gas, and Natural Gas Liquids Compared to Actual Production Attained on March 31, 1973.
- Appendix III--Operable Refinery Capacity and Crude Petroleum Processed.
- Appendix IV--Estimate of Domestic Crude Oil Resources.
- Appendix V--End of Year Primary Stocks of Selected Petroleum Products and Natural Gas Liquids Products.
- Appendix VI--Department of Commerce Regulations for Exports of Petroleum and Its Products.
- Appendix VII--Schedules of Production and Exports of Selected Petrochemicals, Plastic Resins, and Plastic Materials.

We obtained import and export data from the Bureau of the Census. The import data we used represents entries for immediate consumption and entries into bonded warehouses. We obtained production and demand data from the Bureau of Mines; production data for petrochemicals, plastic resins, and related materials from the Tariff Commission and the Society of Plastics Industry, Inc.;

and reserve and stock data from the American Petroleum Institute and the American Gas Association.

We did not review basic source data but relied on aggregate statistics available from the above sources. Consequently, we did not verify or analyze the information.

As you agreed, copies of this report are being sent to Senators Birch Bayh and Bob Dole and Congressmen George E. Danielson and Donald M. Fraser who also requested this information.

Sincerely yours,

A handwritten signature in black ink, appearing to read "A. M. Keller". The signature is written in a cursive, slightly slanted style.

Acting Comptroller General
of the United States

SCHEDULES OF DOMESTIC PRODUCTION, DOMESTIC DEMAND, IMPORTS,
AND EXPORTS FOR CRUDE PETROLEUM, SELECTED PETROLEUM
PRODUCTS, NATURAL GAS, AND NATURAL GAS LIQUIDS¹

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- Schedule I-B: Imports and Exports of Crude Petroleum by Country
- Schedule I-C: Imports and Exports of Gasoline and Motor Fuel,
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Kerosene-Type Jet Fuel, by Country
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- Schedule I-F: Imports and Exports of Distillate Fuel Oil
by Country
- Schedule I-G: Imports and Exports of Residual Fuel Oil
by Country
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by Country
- Schedule I-I: Imports and Exports of Natural Gas by Country

¹Natural gas and natural gas liquids are used in the production of plastics.

Schedule I-A

Summary Schedule

<u>Commodity</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Crude petroleum:					
Domestic production	3,371,751	3,517,450	3,453,914	3,455,368	3,353,370
Domestic demand	3,888,834	3,976,891	4,098,370	4,290,541	(b)
Imports (note a)	580,276	546,461	676,459	901,071	1,293,709
Exports (note a)	6,672	5,530	503	194	697
Gasoline and motor fuel, excluding jet fuel:					
Domestic production	2,208,152	2,105,258	2,202,573	2,319,950	2,401,860
Domestic demand	2,042,546	2,131,252	2,213,159	2,350,405	2,452,032
Imports (note c)	2,497	2,885	1,104	1,942	18,930
Exports (note c)	1,857	1,157	1,796	492	1,692
Kerosene, excluding kerosene-type jet fuel:					
Domestic production	102,859	95,712	87,499	80,090	80,126
Domestic demand	100,369	95,974	90,917	85,854	78,915
Imports (note d)	3,934	2,722	210	270	1,078
Exports (note d)	151	118	173	84	81
Jet fuel:					
Domestic production	321,718	301,913	304,674	310,029	313,689
Domestic demand	361,731	352,978	368,723	382,490	383,355
Imports (note e)	50,802	55,908	62,069	61,525	69,540
Exports (note e)	499	304	214	258	824
Distillate fuel oil:					
Domestic production	848,404	897,097	912,097	963,625	1,030,178
Domestic demand	900,262	927,211	971,316	1,066,049	1,124,308
Imports (note f)	12,628	17,958	35,505	107,195	187,301
Exports (note f)	1,820	1,748	1,863	667	2,641
Residual fuel oil:					
Domestic production	265,906	257,510	274,684	292,519	354,597
Domestic demand	721,924	804,288	838,045	925,647	1,019,934
Imports (note g)	460,438	536,299	493,230	475,756	547,180
Exports (note g)	17,141	19,899	13,185	11,534	8,396

<u>Commodity</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Natural gas liquids:					
Domestic production	703,762	731,903	748,033	768,595	771,249
Domestic demand	719,936	732,086	750,819	824,715	(b)
Imports (note h)	12,829	18,936	26,304	32,484	47,874
Exports (note h)	12,782	9,934	9,384	11,521	9,928
	(millions of cubic feet)				
Natural gas:					
Domestic production	20,698,240	21,920,642	22,493,012	22,531,698	22,457,483
Domestic demand	21,234,387	22,273,449	23,015,580	23,337,447	(b)
Imports (note i)	796,203	1,004,983	1,115,381	1,307,649	995,329
Exports (note i)	186,061	294,420	311,047	364,114	84,805

^aSee schedule I-B for country details.

^bNot available.

^cSee schedule I-C for country details.

^dSee schedule I-D for country details.

^eSee schedule I-E for country details.

^fSee schedule I-F for country details.

^gSee schedule I-G for country details.

^hSee schedule I-H for country details.

ⁱSee schedule I-I for country details.

NOTE: Domestic demand is a calculated value computed by adding or subtracting changes in stocks from primary sources and net imports (imports less exports) to domestic production. Domestic demand cannot be calculated from the information on this schedule because of the different sources used to obtain the information.

SOURCES: Production and demand figures are based on Bureau of Mines data. Export and import figures are based on Bureau of the Census data because it is current and provides commodity and country details.

Schedule I-B

Imports And Exports Of
Crude Petroleum By Country

<u>Country of origin or destination</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Imports:					
Canada	200,833	238,784	265,676	322,584	343,547
Indonesia	31,246	26,162	35,097	57,247	61,940
Iran	16,408	11,468	35,714	51,160	54,809
Libya	49,388	17,618	16,438	38,237	50,159
Mexico	21,999	20,961	9,546	7,523	5,157
Nigeria	18,864	17,122	32,403	86,064	121,525
Saudi Arabia	15,716	6,495	34,109	73,469	133,395
Venezuela	153,177	146,440	166,908	164,474	160,382
Other countries	72,645	61,411	80,568	100,313	146,671
Unidentified (note a)	-	-	-	-	216,124
Total	<u>580,276</u>	<u>546,461</u>	<u>676,459</u>	<u>901,071</u>	<u>1,293,709</u>
Exports:					
Bahamas	-	1,355	-	-	-
Belgium	(b)	-	-	-	177
Japan	755	223	139	187	520
Mexico	5,236	539	-	-	-
Trinidad	220	2,909	-	-	-
United Kingdom	431	176	120	-	-
Other countries	30	328	244	7	-
Total	<u>6,672</u>	<u>5,530</u>	<u>503</u>	<u>194</u>	<u>697</u>

^aEffective with the statistics for November 1973, the Bureau of the Census discontinued country-of-origin detail for crude petroleum. The quantities of crude petroleum imports for all countries are combined under the designation "unidentified."

^bLess than 1,000 barrels.

SOURCE: Bureau of the Census.

Schedule I-C

Imports And Exports Of Gasoline And Motor
Fuel, Excluding Jet Fuel, By Country

Country of origin or destination	Calendar years				
	1969	1970	1971	1972	1973
	(thousands of 42-gallon barrels)				
Imports:					
Belgium	-	-	(a)	-	884
Canada	1,114	1,088	430	676	4,625
Italy	-	-	-	196	1,811
Netherlands	-	3	-	-	2,477
Netherlands Antilles	623	988	405	693	1,377
Panama	331	496	-	-	392
Trinidad	81	31	-	-	1,365
Turkey	-	-	-	189	1,122
Venezuela	346	278	32	53	1,001
Other countries	2	1	237	135	3,876
Total	<u>2,497</u>	<u>2,885</u>	<u>1,104</u>	<u>1,942</u>	<u>18,930</u>
Exports:					
Canada	305	400	447	68	32
Italy	497	3	2	1	1
Mexico	102	165	236	262	932
Morocco	109	-	-	-	(a)
Netherlands	272	378	291	-	10
Singapore	117	-	156	-	(a)
United Kingdom	107	11	24	3	5
Other countries	348	200	640	158	712
Total	<u>1,857</u>	<u>1,157</u>	<u>1,796</u>	<u>492</u>	<u>1,692</u>

^aLess than 1,000 barrels.

SOURCE: Bureau of the Census.

Schedule I-D

Imports And Exports Of Kerosene, Excluding
Kerosene-Type Jet Fuel, By Country

<u>Country of origin or destination</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Imports:					
Bahamas	-	-	-	149	-
Bahrain	-	-	134	-	-
Japan	329	623	-	-	94
Netherlands					
Antilles	1,108	213	7	-	-
Panama	1,168	1,050	-	-	124
U.S.S.R.	-	-	-	-	684
Venezuela	926	440	-	-	-
Other countries	403	396	69	121	176
Total	<u>3,934</u>	<u>2,722</u>	<u>210</u>	<u>270</u>	<u>1,078</u>
Exports:					
Canada	15	15	10	6	4
French Pacific					
Islands	23	24	19	10	12
Japan	32	10	11	14	8
United Kingdom	38	21	69	-	-
West Germany	17	25	34	30	28
Other countries	26	23	30	24	29
Total	<u>151</u>	<u>118</u>	<u>173</u>	<u>84</u>	<u>81</u>

SOURCE: Bureau of the Census.

Schedule I-E

Imports And Exports Of Jet Fuel By Country

Country of origin or destination	Calendar years				
	1969	1970	1971	1972	1973
	(thousands of 42-gallon barrels)				
Imports:					
Bahamas	-	229	5,780	8,443	7,097
Japan	1,195	-	764	2,155	3,035
Netherlands					
Antilles	19,281	20,135	21,288	15,927	19,588
Singapore	-	-	-	1,058	3,291
Trinidad	11,769	13,535	11,479	11,419	12,276
Venezuela	12,260	15,995	11,909	9,674	10,337
Other countries	<u>6,297</u>	<u>6,014</u>	<u>10,849</u>	<u>12,849</u>	<u>13,916</u>
Total	<u>50,802</u>	<u>55,908</u>	<u>62,069</u>	<u>61,525</u>	<u>69,540</u>
Exports:					
Canada	13	21	2	59	642
French Pacific					
Islands	14	38	-	-	10
Iceland	49	-	-	-	-
Mexico	228	243	209	199	171
Singapore	193	-	-	-	-
Other countries	<u>2</u>	<u>2</u>	<u>3</u>	<u>-</u>	<u>1</u>
Total	<u>499</u>	<u>304</u>	<u>214</u>	<u>258</u>	<u>824</u>

SOURCE: Bureau of the Census.

Schedule I-F

Imports and Exports of Distillate
Fuel Oil by Country

<u>Country of origin or destination</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Imports:					
Bahamas	-	193	3,405	16,248	29,913
Canada	2,593	4,391	2,425	2,899	2,864
Italy	329	447	3,607	11,686	17,622
Netherlands Antilles	4,291	3,636	5,996	17,119	34,810
Trinidad	1,008	235	1,945	10,845	11,726
Venezuela	3,157	7,808	14,732	33,134	42,015
Other countries	<u>1,250</u>	<u>1,248</u>	<u>3,395</u>	<u>15,264</u>	<u>48,351</u>
Total	<u>12,628</u>	<u>17,958</u>	<u>35,505</u>	<u>107,195</u>	<u>187,301</u>
Exports:					
Canada	1,081	882	798	266	136
Mexico	76	47	514	209	801
Netherlands	279	439	251	-	353
United Kingdom	1	136	-	-	625
Other countries	<u>383</u>	<u>244</u>	<u>300</u>	<u>192</u>	<u>726</u>
Total	<u>1,820</u>	<u>1,748</u>	<u>1,863</u>	<u>667</u>	<u>2,641</u>

SOURCE: Bureau of the Census.

Schedule I-G
Imports and Exports of Residual
Fuel Oil by Country

<u>Country of origin or destination</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Imports:					
Netherlands Antilles	129,562	142,807	111,485	93,803	139,737
Trinidad	63,548	65,153	48,569	43,879	53,715
Venezuela	185,891	226,953	213,223	206,465	210,156
Other countries	<u>81,437</u>	<u>101,386</u>	<u>119,953</u>	<u>131,609</u>	<u>143,572</u>
Total	<u>460,438</u>	<u>536,299</u>	<u>493,230</u>	<u>475,756</u>	<u>547,180</u>
Exports:					
Canada	7,398	3,979	3,330	3,257	3,561
Japan	2,663	8,879	2,326	367	370
Mexico	2,115	1,827	3,521	1,817	2,356
Other countries	<u>4,965</u>	<u>5,214</u>	<u>4,008</u>	<u>6,093</u>	<u>2,109</u>
Total	<u>17,141</u>	<u>19,899</u>	<u>13,185</u>	<u>11,534</u>	<u>8,396</u>

SOURCE: Bureau of the Census.

Schedule I-H

Imports and Exports of
Natural Gas Liquids by Country

<u>Country of origin or destination</u>	<u>Calendar years</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Imports:					
Canada	12,402	17,873	22,212	27,883	31,650
Venezuela	408	915	3,337	4,046	12,693
Other countries	19	148	755	555	3,531
Total	<u>12,829</u>	<u>18,936</u>	<u>26,304</u>	<u>32,484</u>	<u>47,874</u>
Exports:					
Argentina	924	119	-	-	(a)
Brazil	617	-	57	47	(a)
Canada	838	300	97	162	363
Japan	514	511	10	888	401
Mexico	7,996	8,508	9,075	10,329	9,130
Spain	968	-	-	-	1
United Kingdom	702	293	30	1	2
Other countries	223	203	115	94	31
Total	<u>12,782</u>	<u>9,934</u>	<u>9,384</u>	<u>11,521</u>	<u>9,928</u>

^aLess than 1,000 barrels.

SOURCE: Bureau of the Census.

Schedule I-I

Imports and Exports of
Natural Gas by Country

Country of origin or destination	Calendar years				
	1969	1970	1971	1972	1973
	(millions of cubic feet)				
Imports:					
Natural gas, ethane, Methane, and Mixtures:					
Algeria	-	1,595	2,934	2,472	3,009
Canada	751,156	961,149	1,090,950	1,295,720	990,515
Mexico	45,047	42,240	21,498	9,457	1,805
Other countries	-	-	-	-	1
Total (note a)	<u>796,203</u>	<u>1,004,983</u>	<u>1,115,381</u>	<u>1,307,649</u>	<u>995,329</u>
Exports:					
Canada	166,045	231,283	241,270	302,899	26,204
Japan	2,982	44,247	50,231	45,252	42,997
Mexico	16,944	17,821	19,389	15,804	15,410
Other countries	<u>91</u>	<u>1,069</u>	<u>158</u>	<u>159</u>	<u>194</u>
Total (note a)	<u>186,061</u>	<u>294,420</u>	<u>311,047</u>	<u>364,114</u>	<u>84,805</u>

^aTotals may not add due to rounding.

NOTE: Natural gas that is temporarily moved across the Canadian--U.S. border was included in both import and export statistics through 1972. A Bureau of the Census official said that this accounts for the decrease in imports and exports of natural gas between the United States and Canada in 1973.

SOURCE: Bureau of the Census.

DOMESTIC PRODUCTIVE CAPACITY OF CRUDE PETROLEUM,
NATURAL GAS, AND NATURAL GAS LIQUIDS COMPARED TO
ACTUAL PRODUCTION ATTAINED ON MARCH 31, 1973

The American Petroleum Institute and the American Gas Association estimate the attainable productive capacities of crude oil, natural gas, and natural gas liquids. The estimates are developed as of December 31 and represent the average productive capacity attainable on March 31 of the following year.

CRUDE OIL

The crude oil estimate represents the maximum daily production rate achievable in 3 months with existing and expected wells, equipment, and surface facilities with no statutory, storage, transportation, or market restrictions on production. In addition, it is assumed that crude oil prices and costs of materials, equipment, and labor will not change. A comparison of estimated attainable capacity and actual production follows:

	Thousands of 42- gallon barrels
December 31, 1972, estimate of average daily productive capacity attainable on March 31, 1973	^a 10,301
Actual average daily production for March 1973	^b <u>8,742</u>
Difference	<u><u>1,559</u></u>

^aSource: American Petroleum Institute.

^bSource: Bureau of Mines.

An official of the American Petroleum Institute said that estimated production was not achieved because

- some State regulatory agencies have set production rates lower than those used by the Institute,
- environmental constraints have limited production,
- pipeline and transportation equipment is not always available, and
- production in the Santa Barbara Channel and Elk Hills regions in California has decreased.

NATURAL GAS

The estimate for natural gas includes fields which are producing as well as fields which are not producing. It considers potential production without regard to limitations of markets, transportation, and processing facilities. The comparison of estimated attainable capacity and actual production achieved follows:

	<u>Millions of cubic feet</u>
December 31, 1972, estimate of daily production capacity attainable on March 31, 1973	^a 85,998
Actual average daily production for March 1973	^b <u>63,200</u>
Difference	<u><u>22,798</u></u>

^aSource: American Gas Association.

^bSource: Bureau of Mines.

An official of the American Gas Association stated that the estimated production level was not attained because it was based on reservoir capabilities without regard to existing wells, treatment plants, and extraction equipment. He further stated that to achieve the estimated productive capacity level, uneconomical investments in wells, plants, and equipment would be necessary.

NATURAL GAS LIQUIDS

Natural gas liquids become available by separation from produced natural gas. The estimated productive capacity of natural gas liquids is based on estimated rates at which natural gas can be produced and rates at which liquids can be recovered from the natural gas. The comparison of the estimated capacity and actual production achieved follows:

	<u>Thousands of 42-gallon barrels</u>
December 31, 1972, estimate of daily production capacity attainable on March 31, 1973	^a 2,867
Actual average daily production for March 1973	^b <u>2,112</u>
Difference	<u>755</u>

^aSource: American Gas Association.

^bSource: Bureau of Mines.

OPERABLE REFINERY CAPACITY AND
CRUDE PETROLEUM PROCESSED

A petroleum refinery is an installation of equipment to manufacture finished petroleum products from crude oil and other liquid hydrocarbons. The American Petroleum Institute estimates operable capacity of domestic refineries on a monthly basis in terms of average number of barrels of crude oil that can be processed per day. Beginning with July 1973, unfinished oils were also included in the estimates.

The Bureau of Mines publishes monthly refinery use stated as a percentage of the total capacity reported by the Institute. The schedule in this appendix depicts monthly refinery use for 1972 and 1973. However, according to Bureau of Mines and American Petroleum Institute officials, the achieved use percentages understate actual refinery use because processed unfinished oils are not included in the calculation. An American Petroleum Institute official estimated that the calculation of refinery use understates achieved use by about 5 percent. We were informed that as of January 1974, Bureau of Mines monthly petroleum statements will include processed unfinished oils in the determination of refinery use.

APPENDIX III

	<u>Operable refinery capacity</u> (thousands of 42-gallon barrels per day)	<u>Crude runs to stills (note a)</u>	<u>Percent of capacity</u>
1972:			
January	13,356	11,388	85.3
February	13,350	11,356	85.1
March	13,350	11,345	85.0
April	13,353	11,184	83.8
May	13,354	11,478	86.0
June	13,369	11,841	88.6
July	13,370	11,885	88.9
August	13,327	11,915	89.4
September	13,327	12,112	90.9
October	13,359	11,871	88.9
November	13,382	11,854	88.6
December	13,377	12,113	90.6
1973:			
January	13,396	12,190	91.0
February	13,480	12,187	90.4
March	13,620	12,201	89.6
April	13,618	12,208	89.6
May	13,618	12,281	90.2
June	13,618	12,862	94.4
July	13,642	12,750	93.5
August	13,642	12,636	92.6
September	13,642	12,560	92.1
October	13,642	12,758	93.5
November	13,642	12,374	90.7
December	13,642	12,150	89.1

^aCrude runs to stills are defined as the volume of crude oil piped to a distillation unit.

SOURCE: Bureau of Mines.

ESTIMATE OF DOMESTIC CRUDE OIL RESOURCES
AS OF DECEMBER 31, 1972

	Thousands of 42-gallon barrels
Total original oil in place in known reservoirs	434,038,198
Less estimated ultimate recovery of crude oil:	
Cumulative production through December 1972	99,913,642
Proved reserves	<u>36,339,408</u>
Original oil in place which cannot be recovered under economic and operating conditions that existed on December 31, 1972	<u>^a297,785,148</u>

^aIncluded in this figure is 5,190,257 thousands of 42-gallon barrels of "indicated additional reserves" which could be recovered if recovery techniques were improved.

NOTE: The above information was obtained from the American Petroleum Institute. Terms used in the schedules were defined as follows:

Original oil in place--the estimated quantity of crude oil in known reservoirs before any production.

Ultimate recovery--the estimated quantity of crude oil which has been produced from a reservoir and is expected to be produced if no substantial changes occur in present economic relationships and known production technology.

Proved reserves--the estimated quantities of all liquids statistically defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

END OF YEAR PRIMARY STOCKS OF SELECTED
PETROLEUM PRODUCTS AND NATURAL
GAS LIQUIDS PRODUCTS

<u>Commodity</u>	<u>Primary stocks at December 31 (note a)</u>				
	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
	(thousands of 42-gallon barrels)				
Crude oil and selected refined products:					
Crude oil	265,227	276,367	259,648	246,395	242,478
Total gasoline	217,392	214,348	223,771	217,149	213,417
Jet fuel--naptha type	8,556	6,621	6,990	6,147	5,599
Jet fuel--kerosene type	19,517	20,989	20,747	19,346	22,945
Distillate fuel oil	171,714	195,271	190,662	154,319	196,461
Residual fuel oil	53,395	53,994	59,681	55,216	53,480
Selected natural gas liquids and liquified refinery gases:					
Ethane	2,182	1,319	3,365	7,052	5,023
Propane	24,677	43,322	62,861	53,561	64,647
Butane	15,084	15,758	16,644	13,900	19,145
Butane-propane mixture	582	988	1,350	1,344	1,490
Isobutane	7,077	5,656	10,493	9,770	8,336

^a Primary stocks include stocks at refineries, natural-gas-processing plants, and bulk terminals owned by refinery companies and in pipelines. This data excludes secondary stocks held by consumers, gasoline stations, independent bulk terminals, and fuel oil dealers.

DEPARTMENT OF COMMERCE REGULATIONS FOR
EXPORTS OF PETROLEUM AND ITS PRODUCTS

Before mid-December 1973, exports of petroleum products were authorized under a general licensing arrangement whereby exporters were required only to file a shippers export declaration with the carrier and certify that there was a general license for the item.

In cooperation with a domestic energy allocation program announced by the Federal Energy Office, the Office of Exports Administration of the Department of Commerce, on December 13, 1973, initiated a program to regulate U. S. exports of products subject to allocation. To accomplish this, Commerce required a validated export license for 14 petroleum commodities: crude petroleum, partly refined petroleum, gasoline, aviation gasoline 100 octane and over, aviation gasoline less than 100 octane, gasoline-blending agents, kerosene, jet fuel, distillate fuel oils, residual fuel oils, butane, propane, natural gas liquids, and carbon black feedstock oil.

The regulations provided that for the commodities other than crude oils, licenses would be issued during the balance of 1973 for accepted orders for shipment on or before January 15, 1974. Crude oils were to be licensed to the extent permissible under the Alaskan Pipeline Act of 1973. This act generally prohibits exports of domestically produced crude oil transported by pipelines over Federal rights-of-way except to the extent that such exports would not diminish the total quantity or quality of petroleum available to the United States.

On January 24, 1974, the Secretary of Commerce announced a new system for complete licensing of petroleum fuel exports during the first quarter of 1974, including country quotas for 6 of the 14 previously listed products: gasoline, aviation gasoline 100 octane and over, aviation gasoline less than 100 octane, gasoline-blending agents, distillate fuel oils, and residual fuel oils. The quotas were based on histories of exports during 1971, 1972, and the first half of 1973. Crude oil exports would not be licensed unless the export involved an interchange which would not affect the quantity of quality of petroleum available to domestic users.

On February 8, 1974, licensing restrictions were announced for the remainder of the products. The Secretary of Commerce announced the additional restrictions were required because the export licensing of the remaining commodities had been exceeding the historic rate of export and threatened to reduce domestic supplies to unsatisfactory levels.

SCHEDULES OF PRODUCTION AND EXPORTS
OF SELECTED PETROCHEMICALS, PLASTIC
RESINS, AND PLASTIC MATERIALSContents:

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Schedule VII-B:	High Density Polyethylene
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Schedule VII-O:	Butadiene Monomer

Schedule VII-A

Low Density Polyethylene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	409,124	31,023
February	390,344	50,944
March	437,960	29,144
April	434,070	20,410
May	447,295	35,425
June	413,160	24,756
July	413,881	31,993
August	460,202	32,002
September	457,727	34,075
October	466,771	40,358
November	465,329	30,354
December	469,288	34,547
1973:		
January	473,912	41,942
February	445,849	40,483
March	497,085	38,674
April	473,052	33,121
May	482,735	42,515
June	452,901	39,213
July	470,515	38,495
August	477,712	41,774
September	472,568	45,692
October	557,645	50,048
November	497,834	43,058
December	502,757	45,376

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-B

High Density Polyethylene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	164,382	26,204
February	176,410	18,802
March	187,694	21,368
April	188,722	16,436
May	196,985	27,078
June	190,704	21,196
July	190,380	21,594
August	197,761	25,790
September	204,455	26,101
October	219,465	28,424
November	203,712	30,636
December	220,470	28,358
1973:		
January	205,572	29,541
February	192,689	25,696
March	223,931	26,040
April	220,791	21,080
May	223,032	23,344
June	229,311	21,744
July	229,168	20,477
August	219,216	19,781
September	213,576	25,537
October	226,909	24,199
November	212,588	28,300
December	239,724	25,969

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-C

Polystyrene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	261,605	6,484
February	273,815	7,382
March	321,974	8,071
April	311,183	8,000
May	330,542	13,458
June	324,802	25,196
July	279,759	8,926
August	316,937	13,407
September	321,829	12,615
October	339,631	9,679
November	326,467	29,198
December	336,223	13,118
1973:		
January	329,473	8,910
February	317,080	8,371
March	349,590	9,443
April	345,570	9,359
May	365,956	15,242
June	360,081	15,330
July	329,128	20,943
August	334,293	20,284
September	319,355	26,962
October	326,153	29,133
November	322,148	28,851
December	321,804	19,535

SOURCE: Exports--Bureau of the Census
 Production--Society of Plastics Industry, Inc.

Schedule VII-D

Acrylonitrile Butadiene Styrene (ABS)
and Styrene Acrylonitrile (SAN)

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	60,945	6,910
February	68,547	5,383
March	73,491	3,983
April	71,716	3,143
May	74,235	3,065
June	79,008	2,442
July	78,607	2,988
August	83,720	2,076
September	73,637	2,052
October	77,330	2,115
November	78,280	1,611
December	83,996	2,237
1973:		
January	78,079	2,198
February	80,396	1,998
March	86,715	2,460
April	86,601	2,518
May	88,688	4,398
June	93,291	3,749
July	90,952	3,730
August	83,927	4,143
September	85,903	4,334
October	78,589	3,201
November	65,341	3,290
December	79,287	2,011

SOURCE: Exports--Bureau of the Census.
Production--Society of Plastics Industry, Inc.

Schedule VII-E

Phenolic Resin

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	117,801	2,105
February	109,520	2,202
March	120,172	2,109
April	121,373	1,919
May	123,144	1,466
June	122,895	1,515
July	106,717	1,660
August	124,071	1,751
September	146,544	1,297
October	173,255	2,344
November	156,858	1,755
December	155,389	1,685
1973:		
January	215,668	2,102
February	162,898	2,171
March	182,598	2,600
April	159,097	2,438
May	172,577	2,517
June	169,375	2,885
July	149,521	1,977
August	147,111	1,986
September	162,526	2,289
October	165,738	2,152
November	143,037	2,615
December	145,242	2,918

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-F

Polyvinyl Chloride

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	332,450	14,358
February	312,921	12,569
March	354,430	16,260
April	339,105	12,341
May	349,936	14,690
June	352,826	14,190
July	323,263	11,029
August	348,975	12,851
September	357,924	13,277
October	384,053	14,096
November	377,132	10,953
December	396,685	11,808
1973:		
January	384,211	11,836
February	363,181	12,729
March	395,000	11,873
April	385,886	12,283
May	388,793	11,875
June	358,745	10,900
July	354,145	13,202
August	349,751	12,684
September	365,940	16,586
October	374,940	15,571
November	367,920	17,952
December	377,222	15,032

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-G

Polypropylene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	127,314	12,366
February	108,581	10,985
March	125,617	10,977
April	128,659	11,203
May	140,892	10,258
June	157,428	15,126
July	151,928	14,100
August	155,609	17,558
September	150,915	12,585
October	150,648	18,686
November	161,922	16,110
December	165,807	15,469
1973:		
January	168,964	19,281
February	161,993	20,819
March	156,791	22,427
April	182,496	23,775
May	170,006	26,195
June	169,456	26,453
July	183,539	28,012
August	185,726	29,393
September	186,061	28,321
October	188,377	37,383
November	184,554	29,022
December	194,698	27,285

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-H

Styrene Monomer

	<u>Production</u> (thousands of pounds)	<u>Exports</u>
1972:		
January	407,501	48,652
February	424,630	81,617
March	462,252	48,989
April	450,027	20,382
May	460,127	94,171
June	511,512	88,371
July	494,829	63,397
August	478,776	50,763
September	480,071	25,438
October	537,120	56,693
November	451,415	26,302
December	500,902	56,713
1973:		
January	465,675	19,755
February	471,482	43,817
March	487,502	49,127
April	514,202	22,179
May	531,756	61,389
June	504,862	47,242
July	503,557	48,984
August	473,289	55,500
September	463,153	52,556
October	506,611	41,030
November	539,824	59,801
December	539,983	73,258

SOURCE: Exports--Bureau of the Census.
Production--U.S. Tariff Commission.

Schedule VII-I

Vinyl Chloride Monomer

	<u>Production</u> (thousands of pounds)	<u>Exports</u>
1972:		
January	426,707	51,910
February	337,128	17,193
March	376,782	65,108
April	409,839	41,923
May	430,624	62,750
June	456,331	76,534
July	423,888	54,510
August	434,381	45,886
September	418,348	77,141
October	442,082	51,592
November	480,591	32,265
December	514,662	42,760
1973:		
January	455,571	41,558
February	406,901	44,252
March	513,593	43,653
April	427,222	28,037
May	470,692	43,255
June	454,013	45,904
July	386,258	29,711
August	411,270	20,300
September	446,843	24,468
October	471,587	28,174
November	455,074	30,301
December	450,281	40,547

SOURCE: Exports--Bureau of the Census.
Production--U.S. Tariff Commission.

Schedule VII-J

	Toluene	
	<u>Production</u>	<u>Exports</u>
	(millions of gallons)	
1972:		
January	66.9	1.8
February	71.6	1.4
March	66.0	1.8
April	69.0	1.1
May	65.0	1.3
June	66.1	1.4
July	76.2	3.2
August	67.5	.8
September	67.8	5.2
October	70.9	1.0
November	62.5	1.5
December	71.2	5.2
1973:		
January	70.0	7.5
February	66.2	5.3
March	70.1	2.3
April	71.6	6.3
May	82.3	.4
June	72.7	12.3
July	76.9	5.9
August	79.6	18.1
September	82.5	5.1
October	81.7	7.7
November	83.3	11.3
December	84.9	10.3

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-K

Benzene

	<u>Production</u> (thousands of gallons)	<u>Exports</u>
1972:		
January	90,866	642
February	85,609	2,352
March	95,045	2,082
April	102,330	299
May	105,157	1,523
June	93,901	5,872
July	105,373	3,510
August	109,743	3,409
September	111,022	2,990
October	96,266	1,815
November	113,563	27
December	112,016	4,479
1973:		
January	117,853	496
February	107,093	3,471
March	120,109	2,091
April	115,674	721
May	118,014	4,241
June	117,534	3,158
July	121,095	5,225
August	127,797	974
September	116,560	3,909
October	128,252	1,548
November	127,474	2,084
December	123,694	1,695

SOURCE: Exports--Bureau of the Census.
Production--U.S. Tariff Commission.

Schedule VII-L

Ethylene Dichloride

	<u>Production</u> (thousands of pounds)	<u>Exports</u>
1972:		
January	(a)	9,857
February	(a)	34,036
March	(a)	28,380
April	(a)	36,503
May	(a)	37,450
June	(a)	6,723
July	(a)	15,891
August	(a)	48,208
September	(a)	16,444
October	(a)	71,591
November	(a)	12,625
December	(a)	61,431
1973:		
January	685,206	23,235
February	623,421	38,774
March	732,111	42,868
April	592,246	4,646
May	696,779	42,726
June	643,891	14,027
July	596,395	5,106
August	536,237	65,775
September	595,526	67,591
October	646,373	200
November	647,809	5,849
December	680,916	57,240

^aNot available.

SOURCE: Exports--Bureau of the Census.
Production--U.S. Tariff Commission.

Schedule VII-M

Para-xylene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	175,928	11,564
February	168,329	25,393
March	174,097	15,604
April	186,337	34,017
May	178,543	1,159
June	172,804	14,906
July	192,488	21,196
August	163,884	15,983
September	165,353	4,365
October	163,323	31,091
November	174,504	9,777
December	182,595	21,952
1973:		
January	194,852	36,240
February	174,512	6,640
March	198,494	17,919
April	179,419	23,020
May	182,158	4,502
June	173,386	12,340
July	184,125	2,113
August	206,091	15,875
September	186,021	20,015
October	181,877	10,817
November	213,812	3,753
December	233,216	5,818

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-N

Ortho-xylene

	<u>Production</u>	<u>Exports</u>
	(thousands of pounds)	
1972:		
January	62,582	14,750
February	41,131	6,871
March	43,331	13,895
April	57,299	4,982
May	78,762	11,819
June	57,979	15,486
July	75,665	34,299
August	65,090	25,057
September	64,131	11,657
October	65,165	24,259
November	76,639	7,409
December	98,672	27,107
1973:		
January	84,763	24,001
February	79,501	14,949
March	81,757	35,831
April	86,934	28,651
May	90,909	50,686
June	86,938	10,248
July	81,096	26,595
August	100,503	30,161
September	93,529	26,285
October	92,747	44,655
November	93,050	40,689
December	97,068	31,374

SOURCE: Exports--Bureau of the Census.
 Production--U.S. Tariff Commission.

Schedule VII-O

Butadiene Monomer

	<u>Production</u> (thousands of pounds)	<u>Exports</u>
1972:		
January	290,476	1,670
February	301,411	1,773
March	326,892	2,196
April	320,517	1,369
May	327,636	5,111
June	292,835	264
July	296,187	3,430
August	317,143	2,609
September	325,620	1,887
October	311,828	2,091
November	321,224	3,406
December	338,572	2,622
1973		
January	331,017	1,167
February	299,864	3,838
March	329,537	3,302
April	322,098	2,949
May	288,368	3,079
June	316,349	2,985
July	349,773	8,225
August	332,700	6,991
September	340,618	9,634
October	334,958	7,270
November	337,586	6,327
December	321,822	8,435

SOURCE: Exports--Bureau of the Census.
Production--U.S. Tariff Commission.