Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources.* AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

AP42 Section: 11.1

Reference Number: 227

Title: Source Sampling For Particulate Emissions, I. A. Construction Corp.,Fresno, CA,

San Joaquin Valley Unified Air Pollution Control, Fresno, CA,

June 1, 1993.

AP-42 Section 11.1
Reference
Report Sect. 4
Reference 227

1992 AB2588 EMISSION INVENTORY REPORT AS REQUIRED UNDER THE AIR TOXICS "HOT SPOTS" INFORMATION AND ASSESSMENT ACT OF 1987

Not a test report! Just data. Do not use!

PREPARED FOR

INDUSTRIAL ASPHALT
SANGER FACILITY
FRESNO, CALIFORNIA

JUNE 1, 1993

SUBMITTED TO

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT
1999 TUOLUMNE STREET, SUITE 200
FRESNO, CALIFORNIA 93721

PREPARED BY

ENGINEERING-SCIENCE, INC.
199 South Los Robles Avenue
P.O. Box 7056
Pasadena, California 91109

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SECTION 2	DOCUMENTATION SUPPORTING EMISSION CALCULATIONS
SECTION 3	POOLED SOURCE TEST REPORT AND FUEL AND MATERIAL ANALYSIS

AB2588 REPORTING FORMS AND FLOW DIAGRAM

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT FACILITY DESCRIPTION	FORM FAC

FACILITY DATA

COMPANY NAME: INDUSTRIAL ASPHALT

ADDRESS: 17125 E. KINGS CANYON

CITY: FRESNO

ZIP CODE: 93706

CONTACT PERSON: DWIGHT BEAVERS

TELEPHONE: 818 - 781 - 6080

FACILITY SIC: 2951

NUMBER OF EMPLOYEES: 4

MAILING ADDRESS DATA

COMPANY NAME: INDUSTRIAL ASPHALT

ADDRESS: P.O.BOX 7607

CITY: VAN NUYS

ZIP CODE: 91409

ATTENTION: DWIGHT BEAVERS

FOR OFFICE USE ONLY

COUNTY ID:

FACILITY ID:

ACTION CODE:

DISTRICT:

AIR BASIN CODE:

CITY CODE (OPTIONAL)

AQCR (OPTIONAL)

SUBCOUNTY ID

FACID1 (OPTIONAL)

FACID2 (OPTIONAL)

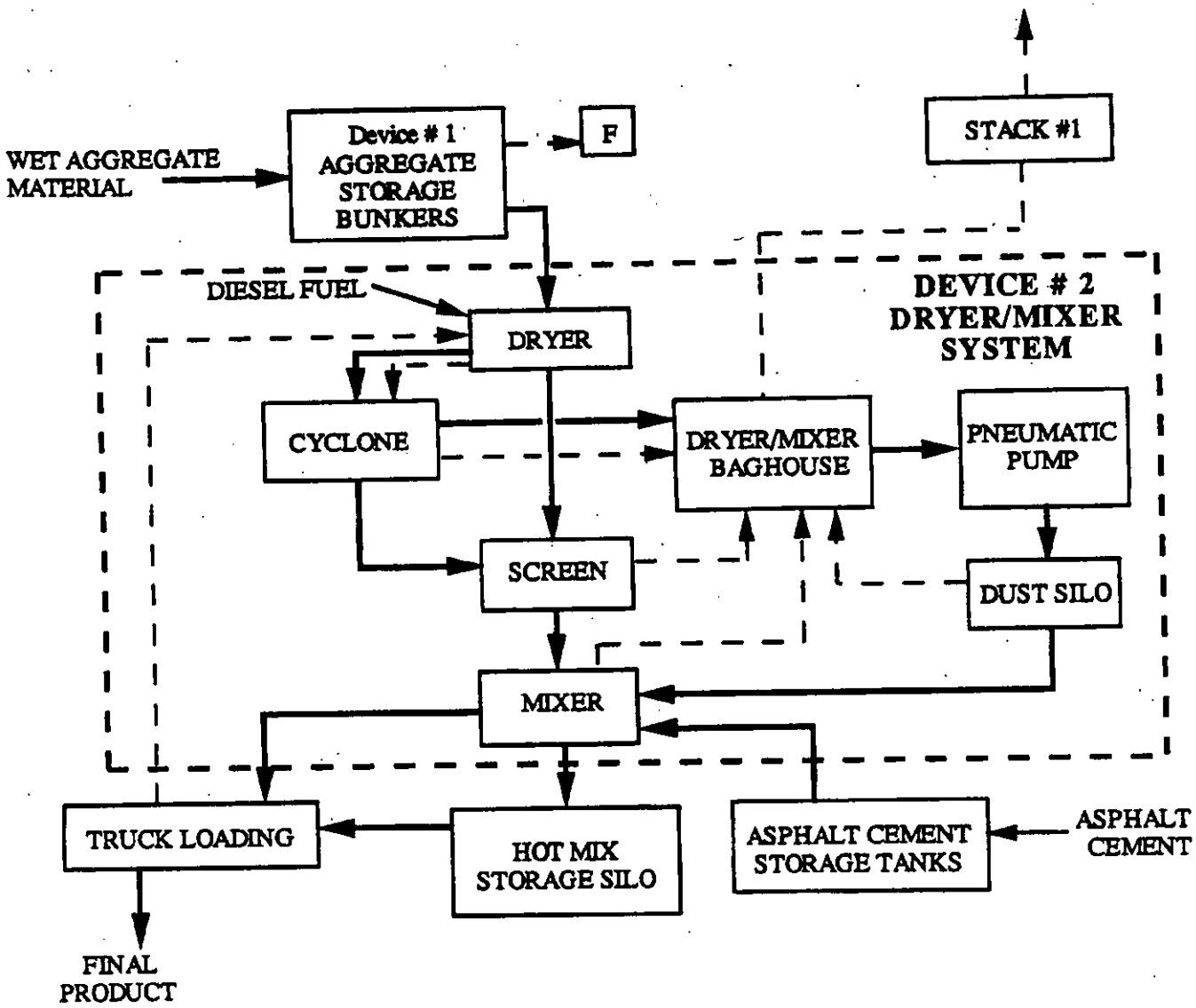
UTM ZONE

UTM EAST

UTM NORTH

NAME: ANTOINE ASSIOUN - ENGINEERING - SCIENCE, INC. *DATE:* 5 / 25 / 93

SANGER
INDUSTRIAL ASPHALT
PROCESS FLOW DIAGRAM



Process Material
Emissions

SANGER-PL

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT STACK DATA	FORM STK

FOR OFFICE USE ONLY COUNTY ID: FACILITY ID:

DO NOT DELETE STACK IF IT SERVES OTHER DEVICES. SEE INSTRUCTIONS

DESC CODE	STACK/VENT CATEGORY	REQUIRED INFORMATION
	AMBIENT TEMP & LOW-VELOCITY EXHAUST (T W/IN 25 F OF AMBIENT & V LT 750 FPM)	
1	RELEASE POINT (RP) AT GROUND-LEVEL	STACK ID & CODE ONLY
2	RELEASE FROM BLDG HVAC ONLY	STACK ID, CODE, & STACK HEIGHT
3	RP W/IN (2.5 X HB) ABOVE GROUND AND W/IN (5 X HB) SIDEWAYS TO NEAREST BLDG	STACK ID, CODE, & STACK HEIGHT
4	OTHER STACK/VENT (LOW T,V)	STACK ID, CODE, & STACK HEIGHT
	OTHER TEMP & FLOW CONDITIONS	
5	RP W/IN (2.5 X HB) ABOVE GROUND AND W/IN (5 X HB) SIDEWAYS TO NEAREST BLDG	ALL STACK INFORMATION
6	OTHER STACK/VENT (OTHER T,V)	ALL STACK INFORMATION

WHERE HB = HEIGHT OF NEAREST BUILDING AND HVAC = HEATING, VENTILATING AND AIR CONDITIONING

OFC USE

********* EXHAUST *********

ACTION CODE	STACK ID	DESC CODE	HEIGHT ABOVE GROUND (FEET)	DIAMETER (FEET)	GAS TEMP (F)	GAS FLOW RATE (CFM)	GAS VELOCITY (FPM)	UTM EAST (KILOMETER)	UTM NORTH (KILOMETER)
	1	6	24	4.25	180	44,500			

OFC USE ONLY

NAME: ANTOINE ASSIOUN , ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT DEVICE DESCRIPTION AND DEVICE-STACK RELATIONS	FORM DEV

FOR OFFICE USE ONLY

COUNTY ID:

FACILITY ID:

**** OFFICE USE ONLY ****
** EACH ITEM IS OPTIONAL **

OFC USE ACTION CODE	DEVICE ID	DEVICE NAME	NBR OF DEV.	STACK ID	PERMIT ID (IF AVAILABLE)	DEVD 1	DEVD 2	DEVICE GROUP
	1	STORAGE BUNKERS	4	NONE	NONE			
	2	DRYER/MIXER SYSTEM	1	1	5010050101			

NAME: ANTOINE ASSIOUN - ENGINEERING SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA	FORM PRO SIDE A

FOR OFFICE USE ONLY

PROCESS DESCRIPTION: C

SCC NO:

COUNTY ID:

AIR BASIN:

ACTION CODE:

PROD 1 (OPTIONAL):

PROD 2 (OPTIONAL):

FACILITY ID:

STOP FILL OUT ANY SUPPLEMENTAL PROCESS FORM(S) FOR THIS PROCESS FIRST. THEN FILL OUT THIS PAGE, SUBMITTING ONE FOR EACH EMITTING PROCESS IN YOUR FACILITY.

SECTION 1

PROCESS DATA

DEVICE I.D.: 1

SIC: 2951

CONFIDENTIAL (Y/N): N

IF Y CHECK SMALL BOXES AS APPROPRIATE

PROCESS EQUIPMENT DESCRIPTION: STORAGE BUNKERS C

FUEL TYPE/OTHER PROCESS INFO: C

NOTE USE ONE SPACE FOR EACH DECIMAL POINT

TOTAL YEARLY PROCESS RATE (UNITS/YR)	MAXIMUM HOURLY PROCESS RATE (UNITS/HR)	PROCESS UNITS	HRS/DAY	DAYS/WEEK	WKS/YEAR
2.00E-01 C	3.06E-05 C	P 044 C	24 C	7 C	52 C

RELATIVE MONTHLY ACTIVITY (%) C

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.3	3.1	2.7	3.1	10.2	13.9	15.5	20.3	14.9	4.8	5.6	4.6

OFC USE ONLY

SECTION 2

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
1175	98 C	3.95E+01 C	7.91E+00

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/PART	HOURLY MAX EMISSIONS (LBS/HOUR)
036 C	C	90.0 C	F C	1.21E-03

ACTION CODE:

ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
1332214	98 C	6.28E-04 C	1.26E-04

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/PART	HOURLY MAX EMISSIONS (LBS/HOUR)
036 C	C	90.0 C	F C	1.92E-08

ACTION CODE:

ALLOWABLE EMIS LBS/YR (OPTIONAL):

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA	FORM PRO SIDE A

FOR OFFICE USE ONLY

PROCESS DESCRIPTION: C

SCC NO: 3-05-002-01

COUNTY ID: AIR BASIN:

ACTION CODE

PROD 1 (OPTIONAL)

PROD 2 (OPTIONAL)

FACILITY ID:

STOP FILL OUT ANY SUPPLEMENTAL PROCESS FORM(S) FOR THIS PROCESS FIRST. THEN FILL OUT THIS PAGE, SUBMITTING ONE FOR EACH EMITTING PROCESS IN YOUR FACILITY.

SECTION 1

PROCESS DATA

DEVICE I.D.: 2

SIC: 2951

CONFIDENTIAL (Y/N): N
IF Y CHECK SMALL BOXES AS APPROPRIATE

PROCESS EQUIPMENT DESCRIPTION: DRYER/MIXER SYSTEM C

FUEL TYPE/OTHER PROCESS INFO: DIESEL FUEL C

NOTE USE ONE SPACE FOR EACH DECIMAL POINT

TOTAL YEARLY PROCESS RATE (UNITS/YR)	MAXIMUM HOURLY PROCESS RATE (UNITS/HR)	PROCESS UNITS	HRS/ DAY	DAYS/ WEEK	WKS/ YEAR
2.10E+05 C	225 C	P 118 C	8 C	5 C	26.3 C

RELATIVE MONTHLY ACTIVITY (%) C

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.3	3.1	2.7	3.1	10.2	13.9	15.5	20.3	14.9	4.8	5.6	4.6

OPC USE ONLY

ACTION CODE

ALLOWABLE EMIS LBS/YR (OPTIONAL)

ACTION CODE

ALLOWABLE EMIS LBS/YR (OPTIONAL)

SECTION 2

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
7440382	1 C	6.60E-08 C	1.39E-02

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012 C	040 C	C	F C	1.48E-05

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
7440417	99 C	7.50E-08 C	1.58E-02

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012 C	040 C	C	F C	1.69E-05

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. *DATE:* 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OFC USE ONLY
CO:
FACID

DEVICE ID: 2 DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7440439	98	1.20E-07	2.52E-02	012	040		F	2.70E-05	
	7440473	1	5.20E-07	1.09E-01	012	040		F	1.17E-04	
	18540299	1	8.60E-08	1.81E-02	012	040		F	1.93E-05	
	7440508	1	1.10E-06	2.31E-01	012	040		F	2.47E-04	
	7439921	1	2.30E-06	4.84E-01	012	040		F	5.17E-04	

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OPC USE ONLY
CO: _____
FACID _____

DEVICE ID: 2 — DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7439965	1	9.20E-07	1.93E-01	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.07E-04

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7439976	99	3.60E-07	7.57E-02	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	8.10E-05

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7440020	1	5.40E-07	1.14E-01	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.21E-04

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7782492	98	8.90E-07	1.87E-01	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.00E-04

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	7440666	1	6.70E-06	1.41E+00	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.51E-03

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OFC USE ONLY
CO:
FACID

DEVICE ID: 2 — DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	AUDIT METAL 7440439	1	1.90E-07	4.00E-02	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	4.28E-05

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	1150	1	1.22E-05	2.57E+00	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.75E-03

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	56553	1	6.30E-09	1.32E-03	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.42E-06

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	205992	1	4.50E-09	9.46E-04	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.01E-06

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	207089	1	1.10E-09	2.31E-04	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.47E-07

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OFC USE ONLY
CO:
FACID

DEVICE ID: 2 DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	50328	1	3.10E-10	6.52E-05	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	6.97E-08

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	53703	99	9.50E-11	2.00E-05	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.14E-08

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	193395	1	3.00E-10	6.31E-05	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	6.75E-08

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	91203	1	1.10E-05	2.31E+00	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.47E-03

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	50000	1	2.40E-04	5.05E+01	

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	5.40E-02

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OFC USE ONLY
CO.:
FACID:

DEVICE ID: 2 DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE:
ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
71432	99	4.90E-04	1.03E+02

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.10E-01

ACTION CODE:
ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
108883	6	7.12E-06	1.50E+00

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.60E-03

ACTION CODE:
ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
1210	6	2.59E-06	5.44E-01

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	5.82E-04

ACTION CODE:
ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
7782505	2	6.84E-03	1.44E+03

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	1.54E+00

ACTION CODE:
ALLOWABLE EMIS LBS/YR (OPTIONAL):

EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)
1175	98	1.17E-02	2.45E+03

*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)
012	040		F	2.62E+00

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT PROCESS AND EMITTENTS DATA (ADDITIONAL EMITTENTS)	FORM PRO SIDE B

OPC USE ONLY
CO:
FACID

DEVICE ID: 2 DIESEL FUEL

EMITTENT DATA / EMISSIONS

ACTION CODE	EMITTENT ID	EST METH	ACTUAL EMISSIONS FACTOR (LBS/UNIT)	ANNUAL AVERAGE EMISSIONS (LBS/YR)	*CONTROL PRIMARY	EQPT CODES* SECONDARY	OVERALL CONTROL EFF (%)	FULL/ PART	HOURLY MAX EMISSIONS (LBS/HOUR)	ALLOWABLE EMIS LBS/YR (OPTIONAL)
	1332214	98	1.85E-07	3.89E-02	012	040		F	4.17E-05	
	1165	4	1.61E-09	3.38E-04	012	040		F	3.62E-07	

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. DATE: 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT SUPPLEMENTAL PROCESS PARAMETER FORM STATIONARY COMBUSTION	FORM S-CMB

FOR OFFICE USE ONLY

CO: AB:

FACID:

SCC:

COMPANY NAME INDUSTRIAL ASPHALT

DEVICE ID: 2

PLEASE COPY THIS FORM AS MANY TIMES AS NECESSARY FOR YOUR FACILITY.
PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS FORM.

FUEL & FEEDSTOCK COMPOSITION

UNCONVENTIONAL FUELS & FEEDSTOCKS:

INDICATE WITH A CHECKMARK ANY UNCONVENTIONAL FUELS OR FEEDSTOCKS USED IN YOUR FACILITY AT THE DEVICE ID INDICATED ABOVE. DESCRIBE BRIEFLY THE NATURE OF SUCH FUEL OR FEEDSTOCK IN THE SPACE PROVIDED.
ALSO SUMMARIZE THIS FEEDSTOCK INFORMATION IN THE DATA FIELD, "FUEL TYPE/OTHER PROCESS INFO" ON CORE FORM PRO.

____ MUNICIPAL WASTE ____

____ HOSPITAL WASTE ____

____ HAZARDOUS WASTE ____

____ WASTE OIL ____

____ WASTE SOLVENT ____

____ AGRICULTURAL DEBRIS ____

____ TIRES

X OTHER (PLEASE SPECIFY): DIESEL FUEL

REPORT USE OF AUXILIARY FUEL WITH THESE FEEDSTOCKS IN ACCORDANCE WITH THE STATIONARY COMBUSTION REPORTING INSTRUCTIONS FOR THIS FORM, S-CMB.

FUEL & FEEDSTOCK ANALYSIS

COMPLETE THIS PART FOR EACH FUEL AND FEEDSTOCK USED AT THE DEVICE ID INDICATED ABOVE FOR WHICH A FUEL ANALYSIS WAS PERFORMED.

(IN WEIGHT %):

SULFUR: 0.11

(IN PARTS-PER-MILLION BY WEIGHT (PPMW) OR (MG/KG):

		CHROMIUM VI:	<20.5	PHOSPHORUS:	
ARSENIC:	<0.25	COPPER:	25.1	RADIONUCLIDES:	
BERYLLIUM:	<0.32	FLUORINE:		SELENIUM:	<0.25
BROMINE:		LEAD:	<1.84	ZINC:	18.3
CADMIUM:	<0.29	MANGANESE:	1.22		
CHLORINE:	0.06%	MERCURY:	<0.39		
		NICKEL:	254		

REPORT EMISSIONS IN SECTION 2 OF CORE FORM PRO

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. *DATE:* 5 / 25 / 93

EMISSION YEAR 1992	AIR TOXICS EMISSION DATA SYSTEM REVIEW AND UPDATE REPORT SUPPLEMENTAL PROCESS PARAMETER FORM SUBSTANCES USED, PRODUCED, OR OTHERWISE PRESENT	FORM S-UP

FOR OFFICE USE ONLY
CO: AB: FACID:

FACILITY NAME INDUSTRIAL ASPHALT

PLEASE COPY THIS FORM AS AMNY TIMES AS NECESSARY FOR YOUR FACILITY.
PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS FORM.

ALL AFFECTED FACILITIES:USE THIS FORM TO REPORT SUBSTANCES LISTED IN APPENDIX A-II WHICH ARE USED, PRODUCED, OR OTHERWISE PRESENT.

*FACILITIES SUBJECT TO SECTION 93303:*ALSO USE THIS FORM TO REPORT SUBSTANCES IN APPENDIX A-I WHICH ARE BELOW THE APPLICABLE DEGREE OF ACCURACY.

FACILITIES SUBJECT TO SECTION 93308(C):ALSO USE THIS FORM TO REPORT SUBSTANCES IN APPENDIX A-I WHICH ARE USED, PRODUCED OR OTHERWISE PRESENT.

FOR EACH LISTED SUBSTANCE REPORTED WITH THIS FORM, PLEASE INDICATE (Y/N) WHETHER IT *IS USED, PRODUCED OR OTHERWISE* PRESENT WITHIN YOUR FACILTIY.

"USED" REFERS TO SUBSTANCES WHICH ARE INGREDIENTS IN ANY ACTIVITY OR PROCESS AT YOUR FACILITY.
"PRODUCED" REFERS TO SUBSTANCES WHICH ARE THE RESULT OF ANY ACTIVITY OR PROCESS TAKING PLACE IN YOUR FACILITY.
"OTHERWISE PRESENT" REFERS TO SUBSTANCES PRESENT IN ANY OTHER WAY IN AN ACTIVITY OR PROCESS, SUCH AS BY-PRODUCTS OR REACTION INTERMEDIATES WHICH APPEAR TEMPORARILY DURING PROCESSING. PLEASE SPECIFY THE NATURE OF THE PRESENCE OF THE SUBSTANCE.

LISTED SUBSTANCE EMITTENT ID	*USED*	*PRODUCED*	*OTHERWISE PRESENT*	*(SPECIFY)*
1332214	(Y)	( )	( )	STORAGE BUNKERS AND DRYER.
	( )	( )	( )	
108883	( )	(Y)	( )	DRYER.
	( )	( )	( )	
1210	( )	(Y)	( )	DRYER.
	( )	( )	( )	
1165	( )	(Y)	( )	DRYER.
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
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	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	
	( )	( )	( )	

NAME: ANTOINE ASSIOUN, ENGINEERING - SCIENCE, INC. *DATE:* 5 / 25 / 93

DOCUMENTATION SUPPORTING EMISSION CALCULATIONS

Device Number: 1
Device Name: STORAGE BUNKERS
No. of Devices: 4
Permit to Operate: NONE

Control Equipment: Wet Suppression
Estimation Method: Emission Factor
Gnrl Subst Quantd: Particulate
Yearly Emis Est Equatn: [(F1*Da)+(F2*Di)]*(1-CE)*A*Mr
Hourly Emis Est Equatn: F1*(1-CE)*A*Mr/24

Parameter Symbols/Names	Values	
Da = Total Yearly Active Days	238	days/yr
Di = Total Yearly Inactive Days	127	days/yr
A = Number of Acres	0.2	Acres
F1 = Storage Bunker Emis. Factor for Active Days	6.3	lbs/acre/day
F2 = Storage Bunker Emis. Factor for Inactive Days	1.7	lbs/acre/day
CE = Control Eff	90%	
Mr = Speciation Factor	(see below)	lbs/lb

Emittent Species Name and CAS #		Speciation Factor (lbs/lb)	Emission Factor (lbs/acre/yr)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Crystalline Silica 1175	98<	2.31E-01	3.95E+01	7.91E+00	1.21E-03
Asbestos 1332214	98<	3.66E-06	6.28E-04	1.26E-04	1.92E-08

Device Number: 2
Device Name: DRYER/MIXER SYSTEM DIESEL FUEL
No. of Devices: 1
Permit to Operate: 5010050101

Control Equipment: Cyclone + Baghouse
Estimation Method: Source Test
Yearly Emis Est Equatn: P*Efl
Hourly Emis Est Equatn: M*Efl

Parameter Symbols/Names	Values	
P = Sanger Yrly Asphalt Prod. Rate	2.10E+05	tons/yr
M = Sanger Max Hrly Production Rate	225	tons/hr
Efl =Pala Actual Tested Emission Factor	(see below)	lbs/ton

Emittent Species Name and CAS #		Emission Factor (lbs/ton)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Heavy Metals:				
Arsenic 7440382		6.60E-08	1.39E-02	1.48E-05
Beryllium 7440417	99<	7.50E-08	1.58E-02	1.69E-05
Cadmium 7440439	98<	1.20E-07	2.52E-02	2.70E-05
Chromium (total) 7440473		5.20E-07	1.09E-01	1.17E-04
Chromium (hex.) 18540299		8.60E-08	1.81E-02	1.93E-05
Copper 7440508		1.10E-06	2.31E-01	2.47E-04
Lead 7439921		2.30E-06	4.84E-01	5.17E-04
Manganese 7439965		9.20E-07	1.93E-01	2.07E-04
Mercury 7439976	99<	3.60E-07	7.57E-02	8.10E-05
Nickel 7440020		5.40E-07	1.14E-01	1.21E-04
Selenium 7782492	98<	8.90E-07	1.87E-01	2.00E-04
Zinc 7440666		6.70E-06	1.41E+00	1.51E-03
Cadmium (Audit) 7440439		1.90E-07	4.00E-02	4.28E-05
PAHs:				
Total 1150		1.22E-05	2.57E+00	2.75E-03
Benz[a]anthracene 56553		6.30E-09	1.32E-03	1.42E-06
Benzo[b]fluranthene 205992		4.50E-09	9.46E-04	1.01E-06
Benzo[k]fluoranthene 207089		1.10E-09	2.31E-04	2.47E-07
Benzo[a]pyrene 50328		3.10E-10	6.52E-05	6.97E-08

Dibenzo[a,h]anth. 53703	99<	9.50E-11	2.00E-05	2.14E-08
Indeno[1,2,3,-cd]pyrene 193395		3.00E-10	6.31E-05	6.75E-08
Naphthalene 91203		1.10E-05	2.31E+00	2.47E-03
Formaldehyde 50000		2.40E-04	5.05E+01	5.40E-02
Benzene 71432	99<	4.90E-04	1.03E+02	1.10E-01

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Estimation Method: Emission Factor
Yearly Emis Est Equatn: P*EFi
Hourly Emis Est Equatn: M*EFi
Emission Factor: EFi = EFv*F/P

Parameter Symbols/Names			Values	
F = Yearly Diesel Fuel Burned			340.2	1000 gal/yr
EFv = Ventura County Emission Factors			(see below)	lbs/1000 gal

Emittent Species Name and CAS #	Ventura Co. Emis. Factor (lbs/1000 gla)	Emission Factor (lbs/ton)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Toluene 108883	4.40E-03	7.12E-06	1.50E+00	1.60E-03
Xylenes 1210	1.60E-03	2.59E-06	5.44E-01	5.82E-04

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Estimation Method: Fuel Analysis
Yearly Emis Est Equatn: k*F*C
Hourly Emis Est Equatn: K*Fm*C
Max. Hrly Fuel Usage: Fm = F*M/P
Emission Factor: Ef = (Yearly Emissions)/P

Parameter Symbols/Names	Values	
k = Weight of Diesel Fuel	7.05	lb/gal
F = Yearly Diesel Fuel Burned	340200	gal/yr
Fm = Max. Hourly Diesel Fuel Burned	363.9782977	gal/hr
C = Concentration in fuel	(see below)	% (wt.)
Ef = (Yearly Emissions)/P = Emission Factor		

Emittent Species Name and CAS #	Concentratn in Fuel	Emission Factor (lbs/ton)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Chlorine 7782505	6.00E-04	6.84E-03	1.44E+03	1.54E+00

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Estimation Method: Emission Factor + Analysis of Fugitive Dust Sample
Yearly Emis Est Equatn: P*Ef*Sfi
Hourly Emis Est Equatn: M*Ef*Sfi

Parameter Symbols/Names	Values	
Ef= Particulate Emission Factor*	0.0508	lbs/ton
Sfi = Speciation Factor	(see below)	ppm

* Sanger particulate compliance test result performed in July, 1987 and EPA AP-42 App. C2-10, 10/86

Emittent Species Name and CAS #		Speciation Factor (lbs/lb)	Emission Factor (lbs/ton)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Crystalline Silica 1175	98<	2.31E-01	1.17E-02	2.45E+03	2.62E+00
Asbestos 1332214	98<	3.66E-06	1.85E-07	3.89E-02	4.17E-05
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Estimation Method: Emission Factor + Analysis of Fugitive Dust Sample
Yearly Emis Est Equatn: P*Ef*Sf
Hourly Emis Est Equatn: M*Ef*Sf

Parameter Symbols/Names	Values	
Ef= Particulate Emission Factor*	0.0506	lbs/ton
Sf = Speciation Factor	(see below)	Curi/lb

* Sanger particulate compliance test result performed in July, 1987 and EPA AP-42 App. C2-10, 10/86

Species Name and CAS #	Factor (Curi/lb)	Factor (Curi/ton)	Emissions (Curi/yr)	Emissions (Curi/hr)
Radionuclides 1165	3.18E-08	1.61E-09	3.38E-04	3.62E-07

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SUMMARY OF PLANT EMISSIONS:

Emitted Species Name	Degree of Accuracy (lbs/yr)	Annual Avg Emissions (lbs/yr)	Hourly Max Emissions (lbs/hr)
Crystalline Silica	100	2.46E+03	2.63E+00
Asbestos	100	3.91E-02	4.17E-05
Arsenic	1	1.39E-02	1.48E-05
Beryllium	1	1.58E-02	1.69E-05
Cadmium	1	2.52E-02	2.70E-05
Chromium (total)	100	1.09E-01	1.17E-04
Chromium (hexavalent)	0.1	1.81E-02	1.93E-05
Copper	100	2.31E-01	2.47E-04
Lead	10	4.84E-01	5.17E-04
Manganese	100	1.93E-01	2.07E-04
Mercury	10	7.57E-02	8.10E-05
Nickel	1	1.14E-01	1.21E-04
Selenium	100	1.87E-01	2.00E-04
Zinc	100	1.41E+00	1.51E-03
PAHs:			
Total	100	2.57E+00	2.75E-03
Benz[a]anthracene	100	1.32E-03	1.42E-06
Benzo[b]fluranthene	100	9.46E-04	1.01E-06
Benzo[k]fluoranthene	100	2.31E-04	2.47E-07
Benzo[a]pyrene	1	6.52E-05	6.97E-08
Dibenzo[a,h]anthracene	100	2.00E-05	2.14E-08
Indeno[1,2,3,-cd]pyrene	100	6.31E-05	6.75E-08
Naphthalene	100	2.31E+00	2.47E-03
Formaldehyde	100	5.05E+01	5.40E-02
Benzene	10	1.03E+02	1.10E-01
Toluene	100	1.50E+00	1.60E-03
Xylene	100	5.44E-01	5.82E-04
Chlorine	10	1.44E+03	1.54E+00
Radionuclides	100	3.38E-04	3.62E-07

SANGER-SS.WK1

POOLED SOURCE TEST REPORT AND FUEL AND MATERIAL ANALYSIS