		Flares		
	All Facilities	Flare Count	#Facilities	
Number of Existing	177	27	16	
Number of New	4	0	0	
Total	181			

Leak Detection and Repair Program (Method 21)			
Parameter	Capital Cost		Annual Cost
Nationwide Cost	\$ -	\$	29,651
Estimate of current uncontrolled OLD FXRT subject to LDAR :			149
# Facilities with applicable tanks			85
AVERAGE PER FACILITY	#DIV/0!	\$	349

HAP Content Monitoring for tanks less than 5% HAP		Current rule has EPA Method 311 required t
Parameter	Value	
Number of tanks assumed to be <5% HAP:	90	
Once every 5 year testing cost/tank:	\$1,257	7
Total cost every 5 years (\$):	\$113,126	
# Facilities	40	set equal to facilities purchasing VP analyze
Avg. Cost Per Facility	\$2,828	
Assumed fraction of tanks <5% HAP that change contents every year	0.02	
Estimated tanks per year with retest for <5% HAP content:	2	
Total tank retest cost per year:	\$2,514	

VP Monitoring		Compliance measure: initial and repeating $\epsilon$
Parameter	Value	
ASTM D2879 analyzer cost (\$)	\$7,440	
Annualized Analyzer cost (\$/yr)	\$964	
Number of facilities purchasing analyzer:	40	Assumes half of the 79 facilities assumed to
FXRT>5,000 gallons subject to LDAR because they are below 95% control VP thresholds	91	(Assumes all EFRs and IFRs are at controlled
Testing labor cost/tank	\$182	
Total annual labor cost (\$/yr):	\$16,538	
# Facilities with vapor testing	40	set equal to facilities purchasing VP analyze
Average annual labor cost per facility (\$/yr)	\$413	
# Retests	2	assume retests occur at separate facilities
Average annual labor cost per retest (\$/yr)	\$182	

Connectors monitoring (leak definition of 500 ppmv)		
	By Model	

Option	тсі	Incremental TAC w/o Recovery Credits	No. of Affected Facilities
Small model requiring admin costs	\$3,038	\$417	0
Medium model requiring admin costs	\$13,693	\$6,642	57
Large model requiring admin costs	\$49,209	\$11,938	13
Small model requiring no admin costs	\$1,184	\$177	105
Medium model requiring no admin costs	\$11,839	\$1,765	4
Large model requiring no admin costs	\$47,354	\$7,062	1
	•	Total	180
		Avg per facility:	

Flare Management Plan - One-time cost		
Parameter	Value	
Cost Per Flare		
Total Flares		
Avg. Cost Per Facility (16 facilities)		
Avg. Cost Per Facility (all existing facilities)		

\*\*RLSO indicates paragraph (o) of 63.670 doesn't apply if operators choose to follow provisions of 63.670 to show compliance (which is what we're assuming they'll do), so removed from burden estimate.

Flare Monitor Costs (costs pulled from Flare Impacts memo)

Monitoring Equipment	Capital Equipment Cost (\$/flare)	Annualized Cost (\$/yr/flare)	Number of Flares Impacted
Engineering Calculation Costs (Dedicated Flares)*	7,000	13,160	27
Avg. Cost Per Facility			

<sup>\*</sup>We assume that the owner or operator would likely follow the provisions at 40 CFR 63.670(i)(4) and (k)(2)(ii) in order to determine compa 15-minute block average basis. These provisions allow use of a continuous pressure/temperature monitoring system and engineering camonitoring options also specified in 40 CFR part 63, subpart CC.

# Industry Wages

May 2016 National Industry-Specific Occupational Employment and Wage Estimates NAICS 325000 - Chemical Manufacturing

Category	Occupation Code	Title	2016 Wage
Technical	17-2081	Environmental Enginee	49.95
Clerical	43-0000	Office and Administrati	20.66
Managerial	11-9041	Architectural and Engi	68.36

https://www.bls.gov/oes/2016/may/naics3\_325000.htm

EPA Wages			
		With Fringe & Overhead	
(GS- 12, step 1) - Tech.	29.76		\$47.62
(GS- 13, step 5) - Mgmt.	40.1		\$64.16
(GS-6, step 3) - Cler.	16.1		\$25.76

https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/GS\_h.pdf or https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/

# FXRT beneath VP cutoffs
171 0
<u> </u>
for initial applicability with <5% HAP. Propose repeating test every 5 years or with tank content changes
r
every 5 years or with tank content changes to ensure which control regime the tank falls under (i.e., below or above 95% cor
be larger OLD will need to purchase an analyzer and may have tanks below regulatory threshold vapor pressures
level, no further improvements necessary)
r
these costs are not included in burden, but facility count of 180 is
National National

Tanks

TCI	Incremental TAC w/o Recovery Credits
\$0	\$0
\$780,497	\$378,572
\$639,711	\$155,194
\$124,305	\$18,537
\$47,354	\$7,062
\$47,354	\$7,062
\$1,639,221	\$566,428
\$9,110	\$3,150

Nationwide Capital Equipment Cost (\$)	Nationwide Total Annualized Cost (\$/yr)
\$189,000	\$355,320
\$12,000	\$22,000

27 flares are at 16 facilities

pliance with the flare tip velocity standard on alculations in lieu of the more intricate

Loaded	Wage
	104.90
	43.39
	143.5



	Can	ital/Startup a	nd O&M Costs
	Сар	itai/Startup a	ilu Oxivi Custs
(A)	(B)	(C)	(D)
Source & Monitor Type	Capital/Startup Costs for One Respondent	Number of Respondents with Capital/Startup Costs	Total Capital/ Startup Cost (B X C)
Storage Tanks - HAP Content			
Initial Monitoring	\$0	0	\$0
Retest	\$0	0	\$0
Storage Tanks - Vapor Pressure			
Monitor	\$7,440	40	\$297,600
Initial Monitoring	\$0	0	\$0
Retest	\$0	0	\$0
Flare Monitors	\$12,000	16	\$192,000
TOTAL			\$489,600

<sup>(</sup>a) Within a given year, there are a maximum of 40 respondents for storage tanks and 16 responde

	Total Annua	l Responses	
(A)	(B)	(C)	(D)
Information Collection Activity	Number of Respondents	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports
Notification of Compliance Status			
Storage Tanks	40	1	0
Connectors	180	1	0
Flares	16	1	0
Periodic Reports			
Storage Tanks	53	2	0
Connectors	240	2	0
Flares	21	2	0
TOTAL			

(E)	(F)	(G)
Annual Cost (O&M and Capital) for One Respondent	Number of Respondents <sup>a</sup>	Total Annual Cost, (E X F)
\$2,828	40	\$113,120
\$1,257	4	\$5,028
\$964	53	\$51,066
\$413	40	\$16,520
\$182	4	\$728
\$22,000	21	\$462,000
		\$648,462

ents for flares, however the values in column F reflect the sum of these respondents for years 2 and 3.

(E)
Total Annual Responses E=(BxC)+D
40
180
16
106
480
42
864

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 1

					-					l			
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
1. Applications	NA												
2. Surveys and Studies	NA												
Reporting Requirements													
A. Read Rule	24	\$0	1	24	181	4,344	434	217	4,996	\$505,691	\$0	0	a, b
B. Required Activities													
Storage Tanks													
a. HAP Content Monitoring (Method 311)													
i. Initial Monitoring	0	\$2,828	1	0	0	0	0	0	0	\$0	\$0	0	c,d
ii. Retest for Changing Tank Contents	0	\$1,257	1	0	0	0	0	0	0	\$0	\$0	0	h
b. VP Monitoring - ASTM D2879 analyzer purchase													
i. Capital Cost	0	\$7,440	1	0	0	0	0	0	0	\$0	\$0	0	c,d
ii. Annualized Cost	0	\$964	1	0	0	0	0	0	0	\$0	\$0	0	c,d
c. VP Monitoring													
i. Initial Monitoring	0	\$413	1	0	0	0	0	0	0	\$0	\$0	0	c,d
ii. Retest for Changing Tank Contents	0	\$182	1	0	0	0	0	0	0	\$0	\$0	0	h
Flare Monitoring													
a. Capital Cost	0	\$12,000	1	0	0	0	0	0	0	\$0	\$0	0	c,e,f
b. Annualized Cost	0	\$22,000	1	0	0	0	0	0	0	\$0	\$0	0	c,e,f
C. Create Information	Inc. in 3B												
D. Gather Information	Inc. in 3E												
E. Report Remarking of Compliance													
Status													
a. Storage Tanks	1	\$0	1	1	0	0	0	0	0	\$0	\$0	0	c,d
b. Connectors	4	\$0	1	4	0	0	0	0	0	\$0	\$0	0	c,g
c. Flares	5	\$0	1	5	0	0	0	0	0	\$0	\$0	0	c,f
Compliance Report													
a. Storage Tanks	1	\$0	2	2	0	0	0	0	0	\$0	\$0	0	c,d
b. Connectors	4	\$0	2	8	0	0	0	0	0	\$0	\$0	0	c,g
c. Flares	5	\$0	2	10	0	0	0	0	0	\$0	\$0	0	c,f
Reporting Subtotal						4,344	434	217	4,996	\$505,691	\$0	0	

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 1

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
Recordkeeping Requirements													
A. Read Instructions	Inc. in 3.A												
B. Implement Activities	NA												
C. Develop Record System	NA												
D. Record information													
Storage Tanks	5	\$0	1	5	0	0	0	0	0	\$0	\$0	0	c,d
2. Connectors	8	\$0	1	8	0	0	0	0	0	\$0	\$0	0	c,g
3. Flares	0.4	\$0	365	146	0	0	0	0	0	\$0	\$0	0	c,f
Flow events from bypass lines	25	\$0	1	25	0	0	0	0	0	\$0	\$0	0	i
E. Personnel Training	16	\$0	1	16	181	2,896	290	145	3,330	\$337,127	\$0	0	
F. Time for Audits	NA												
Recordkeeping Subtotal						2,896	290	145	3,330	\$337,127	\$0	0	
TOTAL						7,240	724	362	8,326	\$842,818	\$0	0	
								Total Hours	Labor	Non-Labor	Total	]	
					Summary of Re	espondent Bu	ırden	8,326	\$842,818	\$0	\$842,818		
					Initial Capital a	nd Startup	<u> </u>	<u> </u>	<u> </u>	<u> </u>	\$505,691		
					Annualized Ca	oital/Start-up	and O & M				\$0		

- (a) There are 177 currently operating facilities, and 4 facilities are expected to commence operations within three years after promulgation of the rule. As such, costs are estimated for 181 facilities.
- (b) This is a one-time cost (e.g., to read rule or develop plan).
- (c) Assumed facilities will read the rule and perform certain one-time activities (e.g., personnel training) in year 1. Assumed that one-third of the facilities would begin complying in year 2 and the remaining two-thirds of the facilities in year 3
- (d) Assumed 40 facilities would have storage tanks applicable to HAP content monitoring and vapor pressure monitoring requirements.
- (e) Flare monitoring includes costs for continuous pressure/temperature monitoring system and engineering calculations in lieu of the more intricate monitoring options (e.g. H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor).
- (f) 16 facilities have flares applicable to monitoring requirements.
- (g) 180 facilities are subject to connector monitoring requirements.
- (h) Assumed 2 tanks (i.e., facilities) would change tanks contents within a year.
- (i) Assumed that bypass lines were not used during the 3-year period, so costs for bypass lines would not be incurred.

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 2

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
Applications	NA												
Surveys and Studies	NA												
Reporting Requirements													
A. Read Rule	24	\$0	1	24	0	0	0	0	0	\$0	\$0	0	a, b
B. Required Activities													
Storage Tanks													
a. HAP Content Monitoring (Method 311)													
i. Initial Monitoring	0	\$2,828	1	0	13	0	0	0	0	\$0	\$36,764	0	c,d
ii. Retest for Changing Tank Contents	0	\$1,257	1	0	2	0	0	0	0	\$0	\$2,514	0	h
b. VP Monitoring - ASTM D2879 analyzer purchase													
i. Capital Cost	0	\$7,440	1	0	13	0	0	0	0	\$0	\$96,720	0	c,d
ii. Annualized Cost	0	\$964	1	0	13	0	0	0	0	\$0	\$12,526	0	c,d
c. VP Monitoring													
i. Initial Monitoring	0	\$413	1	0	13	0	0	0	0	\$0	\$5,369	0	c,d
ii. Retest for Changing Tank Contents	0	\$182	1	0	2	0	0	0	0	\$0	\$364	0	h
2. Flare Monitoring													
a. Capital Cost	0	\$12,000	1	0	5	0	0	0	0	\$0	\$60,000	0	c,e,f
b. Annualized Cost	0	\$22,000	1	0	5	0	0	0	0	\$0	\$110,000	0	c,e,f
C. Create Information	Inc. in 3B												
D. Gather Information	Inc. in 3E												
E. Report Remarking of Compliance													
Status													
a. Storage Tanks	1	\$0	1	1	13	13	1	1	15	\$1,513	\$0	13	c,d
b. Connectors	4	\$0	1	4	60	240	24	12	276	\$27,939	\$0	60	c,g
c. Flares	5	\$0	1	5	5	25	3	1	29	\$2,910	\$0	5	c,f
2. Compliance Report													
a. Storage Tanks	1	\$0	2	2	13	26	3	1	30	\$3,027	\$0	26	c,d
b. Connectors	4	\$0	2	8	60	480	48	24	552	\$55,877	\$0	120	c,g
c. Flares	5	\$0	2	10	5	50	5	3	58	\$5,821	\$0	10	c,f
Reporting Subtotal						834	83	42	959	\$97,087	\$167,537	234	

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 2

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
Recordkeeping Requirements													
A. Read Instructions	Inc. in 3.A												
B. Implement Activities	NA												
C. Develop Record System	NA												
D. Record information													
Storage Tanks	5	\$0	1	5	13	65	7	3	75	\$7,567	\$0	0	c,d
2. Connectors	8	\$0	1	8	60	480	48	24	552	\$55,877	\$0	0	c,g
3. Flares	0.4	\$0	365	146	5	730	73	37	840	\$84,980	\$0	0	c,f
Flow events from bypass lines	25	\$0	1	25	0	0	0	0	0	\$0	\$0	0	i
E. Personnel Training	16	\$0	1	16	0	0	0	0	0	\$0	\$0	0	
F. Time for Audits	NA												
Recordkeeping Subtotal						1,275	128	64	1,466	\$148,424	\$0	0	
TOTAL						2,109	211	105	2,425	\$245,511	\$167,537	234	
								Total Hours	Labor	Non-Labor	Total	1	
					Summary of Re	spondent Bu	ırden	2,425	\$245,511	\$167,537	\$413,048	]	
					Initial Capital a	nd Startup					\$156,720		
					Annualized Ca		and O & M				\$167,537	1	

- (a) There are 177 currently operating facilities, and 4 facilities are expected to commence operations within three years after promulgation of the rule. As such, costs are estimated for 181 facilities.
- (b) This is a one-time cost (e.g., to read rule or develop plan).
- (c) Assumed facilities will read the rule and perform certain one-time activities (e.g., personnel training) in year 1. Assumed that one-third of the facilities would begin complying in year 2 and the remaining two-thirds of the facilities in year 3
- (d) Assumed 40 facilities would have storage tanks applicable to HAP content monitoring and vapor pressure monitoring requirements.
- (e) Flare monitoring includes costs for continuous pressure/temperature monitoring system and engineering calculations in lieu of the more intricate monitoring options (e.g. H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor).
- (f) 16 facilities have flares applicable to monitoring requirements.
- (g) 180 facilities are subject to connector monitoring requirements.
- (h) Assumed 2 tanks (i.e., facilities) would change tanks contents within a year.
- (i) Assumed that bypass lines were not used during the 3-year period, so costs for bypass lines would not be incurred.

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 3

					1			1		T	1		_
Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
Applications	NA												
2. Surveys and Studies	NA												
Reporting Requirements													
A. Read Rule	24	\$0	1	24	0	0	0	0	0	\$0	\$0	0	a, b
B. Required Activities													
Storage Tanks													
a. HAP Content Monitoring (Method 311)													
i. Initial Monitoring	0	\$2,828	1	0	27	0	0	0	0	\$0	\$76,356	0	c,d
ii. Retest for Changing Tank Contents	0	\$1,257	1	0	2	0	0	0	0	\$0	\$2,514	0	h
b. VP Monitoring - ASTM D2879 analyzer purchase													
i. Capital Cost	0	\$7,440	1	0	27	0	0	0	0	\$0	\$200,880	0	c,d
ii. Annualized Cost	0	\$964	1	0	40	0	0	0	0	\$0	\$38,541	0	c,d
c. VP Monitoring													
i. Initial Monitoring	0	\$413	1	0	27	0	0	0	0	\$0	\$11,151	0	c,d
ii. Retest for Changing Tank Contents	0	\$182	1	0	2	0	0	0	0	\$0	\$364	0	h
Flare Monitoring													
a. Capital Cost	0	\$12,000	1	0	11	0	0	0	0	\$0	\$132,000	0	c,e,f
b. Annualized Cost	0	\$22,000	1	0	16	0	0	0	0	\$0	\$352,000	0	c,e,f
C. Create Information	Inc. in 3B	,									,		
D. Gather Information	Inc. in 3E												
E. Report Remaration of Compliance													
Status													
a. Storage Tanks	1	\$0	1	1	27	27	3	1	31	\$3,143	\$0	27	c,d
b. Connectors	4	\$0	1	4	120	480	48	24	552	\$55,877	\$0	120	c,g
c. Flares	5	\$0	1	5	11	55	6	3	63	\$6,403	\$0	11	c,f
Compliance Report													Ė
a. Storage Tanks	1	\$0	2	2	40	80	8	4	92	\$9,313	\$0	80	c,d
b. Connectors	4	\$0	2	8	180	1440	144	72	1656	\$167,632	\$0	360	c,g
c. Flares	5	\$0	2	10	16	160	16	8	184	\$18,626	\$0	32	c,f
Reporting Subtotal	-			-	-	2.242	224	112	2,578	\$260.994	\$480.925	630	

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 3

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Non-Labor Costs Per Occurrence	(C) Number of Occurrences Per Respondent Per Year	(D) Technical Hours per Respondent Per Year (A X C)	(E) Number of Respondents Per Year	(F) Technical Hours per Year (D X E)	(G) Clerical Hours per Year (F X 0.1)	(H) Management Hours per Year (F X .05)	(I) Total Hours per Year (F + G + H)	(J) Total Labor Costs Per Year	(K) Total Non- Labor Costs Per Year (B x C x E)	(L) Total Number of Responses per Year (C X E)	Footnotes
Recordkeeping Requirements													
A. Read Instructions	Inc. in 3.A												
B. Implement Activities	NA												
C. Develop Record System	NA												
D. Record information													
Storage Tanks	5	\$0	1	5	40	200	20	10	230	\$23,282	\$0	0	c,d
2. Connectors	8	\$0	1	8	180	1,440	144	72	1,656	\$167,632	\$0	0	c,g
3. Flares	0.4	\$0	365	146	16	2,336	234	117	2,686	\$271,937	\$0	0	c,f
Flow events from bypass lines	25	\$0	1	25	0	0	0	0	0	\$0	\$0	0	i
E. Personnel Training	16	\$0	1	16	0	0	0	0	0	\$0	\$0	0	
F. Time for Audits	NA												
Recordkeeping Subtotal						3,976	398	199	4,572	\$462,851	\$0	0	
TOTAL						6,218	622	311	7,151	\$723,845	\$480,925	630	
								Total Hours	Labor	Non-Labor	Total		
					Summary of Re	spondent Bu	ırden	7,151	\$723,845	\$480,925	\$1,204,770		
					Initial Capital a	nd Startup					\$332,880		
					Annualized Ca		and O & M				\$480,925		

- (a) There are 177 currently operating facilities, and 4 facilities are expected to commence operations within three years after promulgation of the rule. As such, costs are estimated for 181 facilities.
- (b) This is a one-time cost (e.g., to read rule or develop plan).
- (c) Assumed facilities will read the rule and perform certain one-time activities (e.g., personnel training) in year 1. Assumed that one-third of the facilities would begin complying in year 2 and the remaining two-thirds of the facilities in year 3
- (d) Assumed 40 facilities would have storage tanks applicable to HAP content monitoring and vapor pressure monitoring requirements.
- (e) Flare monitoring includes costs for continuous pressure/temperature monitoring system and engineering calculations in lieu of the more intricate monitoring options (e.g. H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor).
- (f) 16 facilities have flares applicable to monitoring requirements.
- (g) 180 facilities are subject to connector monitoring requirements.
- (h) Assumed 2 tanks (i.e., facilities) would change tanks contents within a year.
- (i) Assumed that bypass lines were not used during the 3-year period, so costs for bypass lines would not be incurred.

Table 4 - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR

the Organic Educa Distribution (Non Sussaine) in the								
Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Costs	Non-Labor (Annualized Capital/Startup and O&M) Costs	Total Costs	
1	7,240	724	362	8,326	\$842,818	\$0	\$842,818	
2	2,109	211	105	2,425	\$245,511	\$167,537	\$413,048	
3	6,218	622	311	7,151	\$723,845	\$480,925	\$1,204,770	
Total	15,567	1,557	778	17,902	\$1,812,174	\$648,462	\$2,460,636	
Average	5,189	519	259	5,967	\$604,058	\$216,154	\$820,212	
Year	Number of Respondents	Number of Responses	Reporting Hours	Recordkeeping Hours	Total Hours	Hours per Response	Hours Per Respondent	
1	181	0	4,996	3,330	8,326		46	
2	60	234	959	1,466	2,425	10	40	
3	180	630	2,578	4,572	7,151	11	40	
Total	421	864	8,533	9,369	17,902	21	43	
Average	140	288	2,844	3,123	5,967	21	43	

Table 5 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 1

	Gasonne	RIR - Year .	5						
	(A)	(B)	(C)	(D)	(E)	(F)	(G)		
Burden Item	Number of Occurrences Per Year	Technical Hours Per Occurrence	Tech Hours Per Year (C=A x B)	Management Hours Per Year (D = C x 0.05)		Total Hours Per Year (C+D+E)	Total Cost Per Year	Footnotes	
1. Applications				not applicable					
2. Read and Understand Rule Requirements	46	24	1104	55	110	1270	\$58,954	a	
3. Required Activities					-				
A. Observe stack tests	0	16	0	0	0	0	\$0		
B. Excess emissions Enforcement Activities	0	24	0	0	0	0	\$0		
C. Create Information	not applicable								
D. Gather Information	not applicable								
E. Report Reviews									
Review notification of compliance status									
a. Storage Tanks	0	2	0	0	0	0	\$0		
b. Connectors	0	2	0	0	0	0	\$0		
c. Flares	0	2	0	0	0	0	\$0		
2. Review compliance reports			0	0	0	0	\$0		
a. Storage Tanks	0	2	0	0	0	0	\$0		
b. Connectors	0	2	0	0	0	0	\$0		
c. Flares	0	2	0	0	0	0	\$0		
F. Prepare annual summary report	1	10	10	1	1	12	\$534		
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$	375 per diem) + (	\$600 per round	trip) =	\$0	per trip		\$0		
TOTAL			1114	56	111	1281	\$59,488		

a Number of occurrences is the number of states and EPA Regions with affected sources (36 states + 10 EPA regions = 46 respondents).

Table 6 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 2

	Gasonne	KIK- TEAL	_					
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Burden Item	Number of Occurrences Per Year	Technical Hours Per Occurrence	Tech Hours Per Year (C=A x B)	Management Hours Per Year (D = C x 0.05)		Total Hours Per Year (C+D+E)	Total Cost Per Year	Footnotes
1. Applications				not applicable				
2. Read and Understand Rule Requirements	0	24	0	0	0	0	\$0	
3. Required Activities								
A. Observe stack tests	0	16	0	0	0	0	\$0	
B. Excess emissions Enforcement Activities	0	24	0	0	0	0	\$0	
C. Create Information	not applicable							
D. Gather Information	not applicable							
E. Report Reviews								
Review notification of compliance status								
a. Storage Tanks	13	2	26	1	3	30	\$1,388	
b. Connectors	60	2	120	6	12	138	\$6,408	
c. Flares	5	2	10	1	1	12	\$534	
2. Review compliance reports			0	0	0	0	\$0	
a. Storage Tanks	26	2	52	3	5	60	\$2,777	
b. Connectors	120	2	240	12	24	276	\$12,816	
c. Flares	10	2	20	1	2	23	\$1,068	
F. Prepare annual summary report	1	10	10	1	1	12	\$534	
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$	375 per diem) + (	\$600 per round	trip) =	\$0	per trip		\$0	
TOTAL			478	24	48	550	\$25,525	

Table 7 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR - Year 3

	Gasonne	RIR - Year .	,					
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Burden Item	Number of Occurrences Per Year	Technical Hours Per Occurrence	Tech Hours Per Year (C=A x B)	Management Hours Per Year (D = C x 0.05)		Total Hours Per Year (C+D+E)	Total Cost Per Year	Footnotes
1. Applications				not applicable				
2. Read and Understand Rule Requirements	0	24	0	0	0	0	\$0	
Required Activities								
A. Observe stack tests	0	16	0	0	0	0	\$0	
B. Excess emissions Enforcement Activities	0	24	0	0	0	0	\$0	
C. Create Information	not applicable							
D. Gather Information	not applicable							
E. Report Reviews								
Review notification of compliance status								
a. Storage Tanks	27	2	54	3	5	62	\$2,884	
b. Connectors	120	2	240	12	24	276	\$12,816	
c. Flares	11	2	22	1	2	25	\$1,175	
2. Review compliance reports			0	0	0	0	\$0	
a. Storage Tanks	80	2	160	8	16	184	\$8,544	
b. Connectors	360	2	720	36	72	828	\$38,448	
c. Flares	32	2	64	3	6	74	\$3,418	
F. Prepare annual summary report	1	10	10	1	1	12	\$534	
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * \$	75 per diem) + (	\$600 per round	trip) =	\$0	per trip		\$0	
TOTAL			1270	64	127	1461	\$67,818	

Table 8 - Summary of Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the Organic Liquid Distribution (Non-Gasoline) RTR

Vasu	Technical	Managarant	Clarical Haves	Tatal Harma	Labar Casta	Non-Labor	Total Coata
Year	Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Costs	Total Costs
1	1,114	56	111	1,281	\$59,488	\$0	\$59,488
2	478	24	48	550	\$25,525	\$0	\$25,525
3	1,270	64	127	1,461	\$67,818	\$0	\$67,818
Total	2,862	143	286	3,291	\$152,831	\$0	\$152,831
Average	954	48	95	1,097	\$50,944	\$0	\$50,944