HON	All facilities	1/3 of facilities	2/3 of facilities
# HON Facilities	207	69	138

Flare Management Plan - One-time cost	
Parameter	**Value**
Avg. Cost Per Facility	**$17,744**

CECPI 2016 -> 2021
541.7
708

Flare Monitor Costs			
Monitoring Equipment	**Capital Equipment Cost ($/flare)**	**Annualized Cost ($/yr/flare)**	**Number of Flares Impacted**
H2 Analyzer	46,000	29,600	64
Calorimeter	135,000	37,100	282
Flare Gas Flow Monitor	565,600	97,700	281
Steam Controls/Flow Monitor	879,200	150,200	136
Air Controls/Flow Monitor	210,800	64,600	17
Avg. Cost Per Facility			

PRD Work Practice & Monitor		
Parameter	**Capital Cost**	**Annual Cost**
PRD Work Practice		
Implement Prevention Measures	$13,700,000	$1,360,000
Root Cause Analysis & Corrective Action	$0	$5,700,000
PRD Monitor	$3,140,000	$413,000
Total	**$16,840,000**	**$7,473,000**
# facilities with atmospheric PRDs	207	
Avg. Cost Per Facility	**$81,353**	**$36,101**

HEX El Paso Method Monitor & Repair		
Parameter	**Capital Cost**	**Annual Cost**
Total	$770,046	$228,040
# facilities with HEX	207	
Avg. Cost Per Facility	**$3,720**	**$1,102**

Carbon Adsorber Monitoring and Performance Test		
Parameter	**Capital Cost**	**Annual Cost**
Total	$32,500	$3,500
# facilities with Adsorber	2	
Avg. Cost Per Facility	**$16,250**	**$1,750**

Pressure Vessel Monitoring		
Parameter	**Capital Cost**	**Annual Cost**
Total	$77,665	$72,910
# facilities with Pressure Vessel	209	
Avg. Cost Per Facility	**$372**	**$349**

Storage Vessel Planned Routine Maintenance		
Parameter	**Capital Cost**	**Annual Cost**
Total	$2,637,440	$456,480
# facilities with Pressure Vessel	209	
Avg. Cost Per Facility	**$12,619**	**$2,184**

Dioxin/Furan Monitoring & Performance Testing		
Parameter	**Capital Cost**	**Annual Cost**
Total	$11,760,000	$6,825,000
# facilities producing chlorinated compoun	21	
Avg. Cost Per Facility	**$560,000**	**$325,000**

Fenceline Monitoring		
Parameter	**Capital Cost**	
Total	$9,753,500	$32,055,000
# facilities impacted	126	
Avg. Cost Per Facility	**$77,409**	**$254,405**

Process Vent TRE and Maintenance Vent Requirements		
Parameter	**Capital Cost**	**Annual Cost**
Revising the standard from a TRE calculation to control of all vent streams	$8,208,893	$20,571,661
Maintenance vent requirements	$0	$95,095
# facilities impacted	209	
Avg. Cost Per Facility	**$39,277**	**$98,884**

Industry Wages

May 2021 National Industry-Specific Occupational Employment and Wage Estimates
NAICS 325000 - Chemical Manufacturing

Category	Occupation Code	Mean hourly rate ($/hr)	Fringe Benefit Loading Rate
Technical	17-2112	48.21	1.5
Management	11-9041	76.83	1.5
Clerical	43-9061	21.51	1.5

https://www.bls.gov/oes/2021/may/naics3_325000.htm

EPA Wages		
	Hourly Mean Wage	**With Fringe & Overhead**
(GS- 12, step 1) - Tech.	32.02	$51.23
(GS- 13, step 5) - Mgmt.	43.15	$69.04
(GS-6, step 3) - Cler.	17.33	$27.73

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/

HON w/ EtO
ETO Facilities w/ Flares
Facilities w/ Equip. Leaks
Facilities w/ HEX
Facilities w/ PV & SV
Facilities w/ Wastewater

1.31

Nationwide Capital Equipment Cost ($)	Nationwide Total Annualized Cost ($/yr)
$2,944,000	$1,894,400
$38,070,000	$10,462,200
$158,933,600	$27,453,700
$119,571,200	$20,427,200
$3,583,600	$1,098,200
$1,560,881	**$296,308**

ETO Process Vent & Storage Vessel RTO
Parameter
Total
facilities that need an RTO
Avg. Cost Per Facility

HEX ETO Modified El Paso Method Monito
Parameter
Total
facilities with HEX ETO
Avg. Cost Per Facility

Equipment Leaks ETO (valves & connector
Parameter
Total
facilities with HEX ETO
Avg. Cost Per Facility

Overhead and Profit Rate	Loaded Rate ($/hr)
1.4	101.24
1.4	161.34
1.4	45.17

All facilities	1/3 of facilities	2/3 of facilities
9	3	6
17	6	11
3	1	2
14	5	9
17	6	11

Capital Cost	Annual Cost
$10,205,000	$5,276,000
7	
$1,457,857	**$753,714**

ETO Process Vents and Tanks - Monitoring & Testing	
Parameter	**Value**
Monitor Capital Cost	**$23,200**
Monitor Annual Cost	**$4,900**
Initial Testing	**$38,302**
Testing: 5-yr Re-test	**$19,151**

or & Repair

Capital Cost	Annual Cost
$43,250	$188,792
3	
$14,417	**$62,931**

rs 100 ppm, pumps 500 ppm, monthly monitoring)

Capital Cost	Annual Cost
$177,392	$3,533,021
17	
$10,435	**$207,825**

Capital/Startup and O&M Costs				
(A) Source & Monitor Type	(B) Capital/Startup Costs for One Respondent	(C) Number of Respondents with Capital/Startup Costs	(D) Total Capital/ Startup Cost (B X C)	(E) Annual Cost (O&M and Capital) for One Respondent
Flare Monitors	$1,560,881	209	$326,224,129	$296,308
PRD Work Practice & Monitors	$81,353	209	$17,002,777	$36,101
Heat Exchangers - El Paso Method Monitors and Repair	$3,720	209	$777,480	$1,102
Carbon Adsorber Monitors & Performance Test [b]	$16,250	2	$32,500	$1,750
Pressure Vessel Monitors	$372	209	$77,748	$349
Storage Vessel Planned Routine Maintenance	$12,619	209	$2,637,371	$2,184
Dioxin/Furan Monitors & Performance Test [c]	$560,000	21	$11,760,000	$325,000
Fenceline Monitoring [d]	$77,409	126	$9,753,534	$254,405
Process Vent TRE and Maintenance Vent Requirements	$39,277	209	$8,208,893	$98,884
Ethylene Oxide Heat Exchangers - El Paso Method Monitors and Repair [e]	$14,417	3	$43,250	$62,931
Ethylene Oxide Equipment Leaks Monitors	$10,435	17	$177,392	$207,825
Ethylene Oxide Process Vents & Storage Tanks - Control Device [e]	$1,457,857	7	$10,205,000	$753,714
Ethylene Oxide Process Vents & Storage Tanks - Control Device Monitor [e]	$23,200	7	$162,400	$4,900
Ethylene Oxide Process Vents & Storage Tanks - Control Device Testing [e]	$38,302	7	$268,114	$0
TOTAL			**$387,330,588**	

(a) Within a given year, there are a maximum of 209 respondents per information collection activity.

(b) We estimate 2 respondents operate carbon adsorbers.

(c) We estimate 21 respondents operate facilities that produce chlorinated compounds.

(d) We estimate 126 respondents will be required to conduct fenceline monitoring.

(e) We estimate there are a maximum of 17 respondents that operate equipment in ethylene oxide service.

Total Annual Responses				
(A) Information Collection Activity	(B) Number of Respondents	(C) Number of Responses	(D) Number of Existing Respondents That Keep Records But Do Not Submit Reports	(E) Total Annual Responses (Over 3-Yr Period) E=(BxC)+D

Notification of Compliance Status				
Flares	209	1	0	209
PRDs	209	1	0	209
Process Vents	209	1	0	209
Storage Vessels	209	1	0	209
Carbon Adsorbers	2	1	0	2
Ethylene Oxide Wastewater Group 1	17	1	0	17
Ethylene Oxide Process Vents & Storage Tanks	7	1	0	7
Ethylene Oxide Equipment Leaks	17	1	0	17
Periodic Reports				
Flares	209	2	0	418
PRDs	209	2	0	418
Maintenance Vents	209	2	0	418
Bypass Lines	0	2	0	0
HEX El Paso Method	209	2	0	418
Storage Vessel Routine Maintenance	209	2	0	418
Carbon Adsorbers	2	2	0	4
Pressure Vessels	209	2	0	418
Ethylene Oxide Wastewater Group 1	17	2	0	34
Ethylene Oxide Process Vents & Storage Tanks	7	2	0	14
Ethylene Oxide Equipment Leaks	17	2	0	34
Fenceline Monitoring				
Site-specific monitoring plan	126	1	0	126
Corrective action plan	126	1	0	126
Quarterly reports	126	4	0	504
TOTAL				**4,229**

(F) Number of Respondents[a]	(G) Total Annual Cost, (E X F)
209	$61,928,372
209	$7,545,109
209	$230,318
2	$3,500
209	$72,941
209	$456,456
21	$6,825,000
126	$32,055,030
209	$20,666,756
3	$188,792
17	$3,533,021
7	$5,276,000
7	$34,300
7	NA
	$138,815,595

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
1. Applications	NA										
2. Surveys and Studies	NA										
3. Reporting Requirements											
A. Read Rule [c]	24	$0	1	24	207.66	4,984	498	249	5,731	$567,281	$0
B. Required Activities											
1. Flare Monitors [d]											
a. Capital Cost	0	$1,560,881	1	0	0.66	0	0	0	0	$0	$1,030,181
b. Annualized Cost	0	$296,308	1	0	0.66	0	0	0	0	$0	$195,563
2. PRD Monitor											
a. Capital Cost	0	$81,353	1	0	0.66	0	0	0	0	$0	$53,693
b. Annualized Cost	0	$36,101	1	0	0.66	0	0	0	0	$0	$23,827
3. HEX El Paso Method											
a. Capital Cost	0	$3,720	1	0	0.66	0	0	0	0	$0	$2,455
b. Annualized Cost	0	$1,102	1	0	0.66	0	0	0	0	$0	$727
4. Carbon Adsorber Monitoring and Performance Test [e]											
a. Capital Cost	0	$16,250	1	0	0.66	0	0	0	0	$0	$10,725
b. Annualized Cost	0	$1,750	1	0	0.66	0	0	0	0	$0	$1,155
5. Pressure Vessel Monitoring											
a. Capital Cost	0	$372	1	0	0.66	0	0	0	0	$0	$246
b. Annualized Cost	0	$349	1	0	0.66	0	0	0	0	$0	$230
6. Storage Vessel Planned Routine Maintenance Control											
a. Capital Cost	0	$12,619	1	0	0.66	0	0	0	0	$0	$8,329
b. Annualized Cost	0	$2,184	1	0	0.66	0	0	0	0	$0	$1,441
7. Dioxin/Furan Monitoring and Performance Test [f]											
a. Capital Cost	0	$560,000	1	0	0.66	0	0	0	0	$0	$369,600
b. Annualized Cost	0	$325,000	1	0	0.66	0	0	0	0	$0	$214,500
8. Fenceline Monitoring [g]											
a. Capital Cost	0	$77,409	1	0	0.66	0	0	0	0	$0	$51,090
b. Annualized Cost	0	$254,405	1	0	0.66	0	0	0	0	$0	$167,907
9. Process Vent - TRE Removal and Maintenance Vent Control											
a. Capital Cost	0	$39,277	1	0	0.66	0	0	0	0	$0	$25,923
b. Annualized Cost	0	$98,884	1	0	0.66	0	0	0	0	$0	$65,263
10. Ethylene Oxide Process Vents & Storage Tanks - Control Device [h]											
a. Capital Cost	0	$1,457,857	1	0	0	0	0	0	0	$0	$0
b. Annualized Cost	0	$753,714	1	0	0	0	0	0	0	$0	$0
11. Ethylene Oxide Process Vents & Storage Tanks - Control Device Monitor [h]											
a. Capital Cost	0	$23,200	1	0	0	0	0	0	0	$0	$0
b. Annualized Cost	0	$4,900	1	0	0	0	0	0	0	$0	$0
12. Ethylene Oxide Process Vents & Storage Tanks - Control Device Testing [h]											

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
a. Initial Testing	0	$38,302	1	0	0	0	0	0	0	$0	$0
b. Re-Testing [i]	0	$0	1	0	0	0	0	0	0	$0	$0
13. Ethylene Oxide HEX Modified El Paso Method [h]											
a. Capital Cost	0	$14,417	1	0	0	0	0	0	0	$0	$0
b. Annualized Cost	0	$62,931	1	0	0	0	0	0	0	$0	$0
14. Ethylene Oxide Equipment Leaks [h]											
a. Capital Cost	0	$10,435	1	0	0	0	0	0	0	$0	$0
b. Annualized Cost	0	$207,825	1	0	0	0	0	0	0	$0	$0
C. Create Information	Inc. in 3B										
D. Gather Information	Inc. in 3E										
E. Report Preparation											
1. Notification of Compliance Status											
a. Flares	5	$0	1	5	0.66	3	0	0	4	$376	$0
b. PRDs	15	$0	1	15	0.66	10	1	0	11	$1,127	$0
c. Process Vents	10	$0	1	10	0.66	7	1	0	8	$751	$0
d. Storage Vessels	10	$0	1	10	0.66	7	1	0	8	$751	$0
e. Carbon Adsorbers [e]	5	$0	1	5	0.66	3	0	0	4	$376	$0
f. Ethylene Oxide Wastewater Group 1 [h]	4	$0	1	4	0	0	0	0	0	$0	$0
g. Ethylene Oxide Process Vents & Tanks [h]	4	$0	1	4	0	0	0	0	0	$0	$0
h. Ethylene Oxide Eq. Leaks	4	$0	1	4	0	0	0	0	0	$0	$0
2. Periodic Report											
a. Flares	5	$0	2	10	0.66	7	1	0	8	$751	$0
b. PRDs	10	$0	2	20	0.66	13	1	1	15	$1,502	$0
c. Maintenance Vents	4	$0	2	8	0.66	5	1	0	6	$601	$0
d. Bypass Lines [j]	4	$0	2	8	0.00	0	0	0	0	$0	$0
e. HEX El Paso Method	3	$0	2	6	0.66	4	0	0	5	$451	$0
f. Storage Vessel Routine Maintenance	3	$0	2	6	0.66	4	0	0	5	$451	$0
g. Carbon Adsorbers [e]	3	$0	2	6	0.66	4	0	0	5	$451	$0
h. Pressure Vessels	4	$0	2	8	0.66	5	1	0	6	$601	$0
i. Ethylene Oxide Process Vents [h]	4	$0	2	8	0	0	0	0	0	$0	$0
j. Ethylene Oxide Eq. Leaks	4	$0	2	8	0	0	0	0	0	$0	$0
k. Ethylene Oxide Wastewater Group 1 [h]	4	$0	2	8	0	0	0	0	0	$0	$0
3. Fenceline Monitoring [g]											
a. Site specific monitoring plan	10	$0	1	10	0.66	7	1	0	8	$751	$0
b. Corrective action plan	10	$0	1	10	0	0	0	0	0	$0	$0
c. Quarterly reports	4	$0	4	16	0.66	11	1	1	12	$1,202	$0
Reporting Subtotal						***5,073***	***507***	***254***	***5,834***	***$577,423***	***$670,615***

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
4. Recordkeeping Requirements											
A. Read Instructions	Inc. in 3.A										
B. Implement Activities	NA										
C. Develop Record System	NA										
D. Record information											
1. Ethylene Oxide Flare Load [h]	1	$0	12	12	0	0	0	0	0	$0	$0
2. Flares	0.4	$0	365	146	0.66	96	10	5	111	$10,968	$0
3. PRDs	10	$0	1	10	0.66	7	1	0	8	$751	$0
4. HEX El Paso Method [k]	0	$0	1	0	0.66	0	0	0	0	$0	$0
5. Maintenance Vents	1	$0	1	1	0.66	1	0	0	1	$75	$0
6. Bypass Lines [j]	0	$0	1	0	0.00	0	0	0	0	$0	$0
7. Ethylene Oxide Process Vents & Tanks [h]	2	$0	1	2	0	0	0	0	0	$0	$0
8. Flare Management Plan	75	$0	1	75	0.66	50	5	2	57	$5,634	$0
9. Tank Degassing	3	$0	1	3	0.66	2	0	0	2	$225	$0
10. Parameter monitoring for adsorbers, condensers, and carbon adsorbers [e]	1	$0	1	1	0.66	1	0	0	1	$75	$0
11. Dioxin/Furan concentration [f]	1	$0	1	1	0.66	1	0	0	1	$75	$0
12. Pressure Vessels	2	$0	1	2	0.66	1	0	0	2	$150	$0
13. Ethylene Oxide Equipment Leak	10	$0	1	10	0	0	0	0	0	$0	$0
14. Ethylene Oxide Wastewater Group 1 [h]	10	$0	1	10	0	0	0	0	0	$0	$0
15. Fenceline Monitoring - Meteorological data [g]	0.4	$0	365	146	0.66	96	10	5	111	$10,968	$0
16. Fenceline Monitoring - Sampling	1	$0	365	365	0.66	241	24	12	277	$27,420	$0
E. Personnel Training [c]	16	$0	1	16	207.66	3,323	332	166	3,821	$378,187	$0
F. Time for Audits	NA										
Recordkeeping Subtotal						***3,818***	***382***	***191***	***4,390***	***$434,528***	***$0***
TOTAL						**8,891**	**889**	**445**	**10,224**	**$1,011,951**	**$670,615**

	Total Hours	Labor	Non-Labor	Total
Summary of Respondent Burden	10,224	$1,011,951	$670,615	$1,682,566

Initial Capital and Startup	$1,653,611
Annualized Capital/Start-up and O & M	$670,615

Footnotes:

(a) We have assumed that there are approximately 207 existing respondents, with 2 additional sources becoming subject to the rule over the three-year period of this ICR. We assume that one-third of the existing facilities would begin complying in year 2 and the remaining two-thirds of the existing facilities in year 3.

(b) This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical, and $45.17 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occupational Employment and Wage Estimates for NAICS 325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1.5 and an Overhead and Profit Rate of 1.4 (Mean Hourly Rate * Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

(c) This is a one-time cost.

(d) Includes costs for the following monitoring equipment: H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor.

(e) We estimate 2 respondents operate carbon adsorbers.

(f) We estimate 21 respondents operate facilities that produce chlorinated compounds.

Table 1 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)

(g) We estimate 126 respondents will be required to conduct fenceline monitoring. All 126 facilities would begin complying with requirements in year 2 and submit corrective action plans in year 3.

(h) Only applicable to facilities with ethylene oxide emissions. We assume these facilities will begin complying in year 2. Note, there are not startup/capital & O&M costs for wastewater, and no additional recordkeeping & reporting costs for HEX systems in ethylene oxide service. These are assumed to be included with all HEX systems.

(i) Retests only occur after five years from the intial performance test, and thus would not occur over the period covered by this ICR.

(j) Assumed that bypass lines were not used during the 3-year period, so costs for bypass lines would not be incurred.

(k) Assumed recordkeeping hours are comparable to previously required water methods, and assigned 0 additional hours to implement the El Paso Method.

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
1. Applications	NA										
2. Surveys and Studies	NA										
3. Reporting Requirements											
A. Read Rule [c]	24	$0	1	24	0.66	16	2	1	18	$1,803	$0
B. Required Activities											
1. Flare Monitors [d]											
a. Capital Cost	0	$1,560,881	1	0	70.33	0	0	0	0	$0	$109,776,761
b. Annualized Cost	0	$296,308	1	0	70.33	0	0	0	0	$0	$20,839,342
2. PRD Monitor											
a. Capital Cost	0	$81,353	1	0	70.33	0	0	0	0	$0	$5,721,556
b. Annualized Cost	0	$36,101	1	0	70.33	0	0	0	0	$0	$2,538,983
3. HEX El Paso Method											
a. Capital Cost	0	$3,720	1	0	70.33	0	0	0	0	$0	$261,628
b. Annualized Cost	0	$1,102	1	0	70.33	0	0	0	0	$0	$77,504
4. Carbon Adsorber Monitoring and Performance Test [e]											
a. Capital Cost	0	$16,250	1	0	2	0	0	0	0	$0	$32,500
b. Annualized Cost	0	$1,750	1	0	2	0	0	0	0	$0	$3,500
5. Pressure Vessel Monitoring											
a. Capital Cost	0	$372	1	0	70.33	0	0	0	0	$0	$26,163
b. Annualized Cost	0	$349	1	0	70.33	0	0	0	0	$0	$24,545
6. Storage Vessel Planned Routine Maintenance Control											
a. Capital Cost	0	$12,619	1	0	70.33	0	0	0	0	$0	$887,494
b. Annualized Cost	0	$2,184	1	0	70.33	0	0	0	0	$0	$153,601
7. Dioxin/Furan Monitoring and Performance Test [f]											
a. Capital Cost	0	$560,000	1	0	21	0	0	0	0	$0	$11,760,000
b. Annualized Cost	0	$325,000	1	0	21	0	0	0	0	$0	$6,825,000
8. Fenceline Monitoring [g]											
a. Capital Cost	0	$77,409	1	0	126	0	0	0	0	$0	$9,753,534
b. Annualized Cost	0	$254,405	1	0	126	0	0	0	0	$0	$32,055,030
9. Process Vent - TRE Removal and Maintenance Vent Control											
a. Capital Cost	0	$39,277	1	0	70.33	0	0	0	0	$0	$2,762,351
b. Annualized Cost	0	$98,884	1	0	70.33	0	0	0	0	$0	$6,954,512
10. Ethylene Oxide Process Vents & Storage Tanks - Control Device [h]											
a. Capital Cost	0	$1,457,857	1	0	7	0	0	0	0	$0	$10,205,000
b. Annualized Cost	0	$753,714	1	0	7	0	0	0	0	$0	$5,276,000
11. Ethylene Oxide Process Vents & Storage Tanks - Control Device Monitor [h]											
a. Capital Cost	0	$23,200	1	0	7	0	0	0	0	$0	$162,400
b. Annualized Cost	0	$4,900	1	0	7	0	0	0	0	$0	$34,300
12. Ethylene Oxide Process Vents & Storage Tanks - Control Device Testing [h]											

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
a. Initial Testing	0	$38,302	1	0	7	0	0	0	0	$0	$268,114
b. Re-Testing [i]	0	$0	1	0	0	0	0	0	0	$0	$0
13. Ethylene Oxide HEX Modified El Paso Method [h]											
a. Capital Cost	0	$14,417	1	0	3	0	0	0	0	$0	$43,250
b. Annualized Cost	0	$62,931	1	0	3	0	0	0	0	$0	$188,792
14. Ethylene Oxide Equipment Leaks [h]											
a. Capital Cost	0	$10,435	1	0	17	0	0	0	0	$0	$177,392
b. Annualized Cost	0	$207,825	1	0	17	0	0	0	0	$0	$3,533,021
C. Create Information	Inc. in 3B										
D. Gather Information	Inc. in 3E										
E. Report Preparation											
1. Notification of Compliance Status											
a. Flares	5	$0	1	5	70.33	352	35	18	404	$40,026	$0
b. PRDs	15	$0	1	15	70.33	1,055	105	53	1,213	$120,079	$0
c. Process Vents	10	$0	1	10	70.33	703	70	35	809	$80,052	$0
d. Storage Vessels	10	$0	1	10	70.33	703	70	35	809	$80,052	$0
e. Carbon Adsorbers [e]	5	$0	1	5	2.00	10	1	1	12	$1,138	$0
f. Ethylene Oxide Wastewater Group 1 [h]	4	$0	1	4	17	68	7	3	78	$7,740	$0
g. Ethylene Oxide Process Vents & Tanks [h]	4	$0	1	4	7	28	3	1	32	$3,187	$0
h. Ethylene Oxide Eq. Leaks	4	$0	1	4	17	68	7	3	78	$7,740	$0
2. Periodic Report											
a. Flares	5	$0	2	10	70.33	703	70	35	809	$80,052	$0
b. PRDs	10	$0	2	20	70.33	1,407	141	70	1,618	$160,105	$0
c. Maintenance Vents	4	$0	2	8	70.33	563	56	28	647	$64,042	$0
d. Bypass Lines [j]	4	$0	2	8	0.00	0	0	0	0	$0	$0
e. HEX El Paso Method	3	$0	2	6	70.33	422	42	21	485	$48,031	$0
f. Storage Vessel Routine Maintenance	3	$0	2	6	70.33	422	42	21	485	$48,031	$0
g. Carbon Adsorbers [e]	3	$0	2	6	2	12	1	1	14	$1,366	$0
h. Pressure Vessels	4	$0	2	8	70.33	563	56	28	647	$64,042	$0
i. Ethylene Oxide Process Vents [h]	4	$0	2	8	7	56	6	3	64	$6,374	$0
j. Ethylene Oxide Eq. Leaks	4	$0	2	8	17	136	14	7	156	$15,480	$0
k. Ethylene Oxide Wastewater Group 1 [h]	4	$0	2	8	17	136	14	7	156	$15,480	$0
3. Fenceline Monitoring [g]											
a. Site-Specific monitoring plan	10	$0	1	10	126	1,260	126	63	1,449	$143,418	$0
b. Corrective action plan	10	$0	1	10	0	0	0	0	0	$0	$0
c. Quarterly reports	4	$0	4	16	126	2,016	202	101	2,318	$229,469	$0
Reporting Subtotal						***10,698***	***1,070***	***535***	***12,303***	***$1,217,707***	***$78,504,129***

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)
4. Recordkeeping Requirements											
A. Read Instructions	Inc. in 3.A										
B. Implement Activities	NA										
C. Develop Record System	NA										
D. Record information											
1. Ethylene Oxide Flare Load [h]	1	$0	12	12	9	108	11	5	124	$12,293	$0
2. Flares	0.4	$0	365	146	70.33	10,268	1,027	513	11,808	$1,168,765	$0
3. PRDs	10	$0	1	10	70.33	703	70	35	809	$80,052	$0
4. HEX El Paso Method [k]	0	$0	1	0	0	0	0	0	0	$0	$0
5. Maintenance Vents	1	$0	1	1	70.33	70	7	4	81	$8,005	$0
6. Bypass Lines [j]	0	$0	1	0	0	0	0	0	0	$0	$0
7. Ethylene Oxide Process Vents & Tanks [h]	2	$0	1	2	7	14	1	1	16	$1,594	$0
8. Flare Management Plan	75	$0	1	75	70.33	5,275	527	264	6,066	$600,393	$0
9. Tank Degassing	3	$0	1	3	70.33	211	21	11	243	$24,016	$0
10. Parameter monitoring for adsorbers, condensers, and carbon adsorbers [e]	1	$0	1	1	2	2	0	0	2	$228	$0
11. Dioxin/Furan concentration [f]	1	$0	1	1	21	21	2	1	24	$2,390	$0
12. Pressure Vessels	2	$0	1	2	70.33	141	14	7	162	$16,010	$0
13. Ethylene Oxide Equipment Leak	10	$0	1	10	17	170	17	9	196	$19,350	$0
14. Ethylene Oxide Wastewater Group 1 [h]	10	$0	1	10	17	170	17	9	196	$19,350	$0
15. Fenceline Monitoring - Meteorological data [g]	0.4	$0	365	146	126	18,396	1,840	920	21,155	$2,093,906	$0
16. Fenceline Monitoring - Sampling	1	$0	365	365	126	45,990	4,599	2,300	52,889	$5,234,766	$0
E. Personnel Training [c]	16	$0	1	16	0.66	11	1	1	12	$1,202	$0
F. Time for Audits	NA										
Recordkeeping Subtotal						***81,550***	***8,155***	***4,077***	***93,782***	***$9,282,320***	***$0***
TOTAL						**92,248**	**9,225**	**4,612**	**106,085**	**$10,500,027**	**$78,504,129**

	Total Hours	Labor	Non-Labor	Total
Summary of Respondent Burden	106,085	$10,500,027	$78,504,129	$89,004,156

Initial Capital and Startup	$116,192,262
Annualized Capital/Start-up and O & M	$78,504,129

Footnotes:

(a) We have assumed that there are approximately 207 existing respondents, with 2 additional sources becoming subject to the rule over the three-year period of this ICR. We assume that one-third of the existing facilities would begin complying in year 2 and the remaining two-thirds of the existing facilities in year 3.

(b) This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical, and $45.17 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occupational Employment and Wage Estimates for NAICS 325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1.5 and an Overhead and Profit Rate of 1.4 (Mean Hourly Rate * Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

(c) This is a one-time cost.

(d) Includes costs for the following monitoring equipment: H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor.

(e) We estimate 2 respondents operate carbon adsorbers.

(f) We estimate 21 respondents operate facilities that produce chlorinated compounds.

(g) We estimate 126 respondents will be required to conduct fenceline monitoring. All 126 facilities would begin complying with requirements in year 2 and submit corrective action plans in year 3.

Table 2 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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 [a]	(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 [b]	(K) Total Non-Labor Costs Per Year (B x C x E)

(h) Only applicable to facilities with ethylene oxide emissions. We assume these facilities will begin complying in year 2. Note, there are not startup/capital & O&M costs for wastewater, and no additional recordkeeping & reporting costs for HEX systems in ethylene oxide service. These are assumed to be included with all HEX systems.

(i) Retests only occur after five years from the intial performance test, and thus would not occur over the period covered by this ICR.

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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)
1. Applications	NA										
2. Surveys and Studies	NA										
3. Reporting Requirements											
A. Read Rule [c]	24	$0	1	24	0.66	16	2	1	18	$1,803	$0
B. Required Activities											
1. Flare Monitors [d]											
a. Capital Cost	0	$1,560,881	1	0	140	0	0	0	0	$0	$218,523,340
b. Annualized Cost	0	$296,308	1	0	140	0	0	0	0	$0	$41,483,120
2. PRD Monitor											
a. Capital Cost	0	$81,353	1	0	140	0	0	0	0	$0	$11,389,420
b. Annualized Cost	0	$36,101	1	0	140	0	0	0	0	$0	$5,054,140
3. HEX El Paso Method											
a. Capital Cost	0	$3,720	1	0	140	0	0	0	0	$0	$520,800
b. Annualized Cost	0	$1,102	1	0	140	0	0	0	0	$0	$154,280
4. Carbon Adsorber Monitoring and Performance Test [e]											
a. Capital Cost	0	$16,250	1	0	2	0	0	0	0	$0	$32,500
b. Annualized Cost	0	$1,750	1	0	2	0	0	0	0	$0	$3,500
5. Pressure Vessel Monitoring											
a. Capital Cost	0	$372	1	0	140	0	0	0	0	$0	$52,080
b. Annualized Cost	0	$349	1	0	140	0	0	0	0	$0	$48,860
6. Storage Vessel Planned Routine Maintenance Control											
a. Capital Cost	0	$12,619	1	0	140	0	0	0	0	$0	$1,766,660
b. Annualized Cost	0	$2,184	1	0	140	0	0	0	0	$0	$305,760
7. Dioxin/Furan Monitoring and Performance Test [f]											
a. Capital Cost	0	$560,000	1	0	21	0	0	0	0	$0	$11,760,000
b. Annualized Cost	0	$325,000	1	0	21	0	0	0	0	$0	$6,825,000
8. Fenceline Monitoring [g]											
a. Capital Cost	0	$77,409	1	0	126	0	0	0	0	$0	$9,753,534
b. Annualized Cost	0	$254,405	1	0	126	0	0	0	0	$0	$32,055,030
9. Process Vent - TRE Removal and Maintenance Vent Control											
a. Capital Cost	0	$39,277	1	0	140	0	0	0	0	$0	$5,498,780
b. Annualized Cost	0	$98,884	1	0	140	0	0	0	0	$0	$13,843,760
10. Ethylene Oxide Process Vents & Storage Tanks - Control Device [h]											
a. Capital Cost	0	$1,457,857	1	0	7	0	0	0	0	$0	$10,205,000
b. Annualized Cost	0	$753,714	1	0	7	0	0	0	0	$0	$5,276,000
11. Ethylene Oxide Process Vents & Storage Tanks - Control Device Monitor [h]											
a. Capital Cost	0	$23,200	1	0	7	0	0	0	0	$0	$162,400
b. Annualized Cost	0	$4,900	1	0	7	0	0	0	0	$0	$34,300
12. Ethylene Oxide Process Vents & Storage Tanks - Control Device Testing [h]											

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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)
a. Initial Testing	0	$38,302	1	0	7	0	0	0	0	$0	$268,114
b. Re-Testing [i]	0	$0	1	0	0	0	0	0	0	$0	$0
13. Ethylene Oxide HEX Modified El Paso Method [h]											
a. Capital Cost	0	$14,417	1	0	3	0	0	0	0	$0	$43,250
b. Annualized Cost	0	$62,931	1	0	3	0	0	0	0	$0	$188,792
14. Ethylene Oxide Equipment Leaks [h]											
a. Capital Cost	0	$10,435	1	0	17	0	0	0	0	$0	$177,392
b. Annualized Cost	0	$207,825	1	0	17	0	0	0	0	$0	$3,533,021
C. Create Information	Inc. in 3B										
D. Gather Information	Inc. in 3E										
E. Report Preparation											
1. Notification of Compliance Status											
a. Flares	5	$0	1	5	140	700	70	35	805	$79,677	$0
b. PRDs	15	$0	1	15	140	2,100	210	105	2,415	$239,030	$0
c. Process Vents	10	$0	1	10	140	1,400	140	70	1,610	$159,354	$0
d. Storage Vessels	10	$0	1	10	140	1,400	140	70	1,610	$159,354	$0
e. Carbon Adsorbers [e]	5	$0	1	5	2	10	1	1	12	$1,138	$0
f. Ethylene Oxide Wastewater Group 1 [h]	4	$0	1	4	17	68	7	3	78	$7,740	$0
g. Ethylene Oxide Process Vents & Tanks [h]	4	$0	1	4	7	28	3	1	32	$3,187	$0
h. Ethylene Oxide Eq. Leaks	4	$0	1	4	17	68	7	3	78	$7,740	$0
2. Periodic Report											
a. Flares	5	$0	2	10	140	1,400	140	70	1,610	$159,354	$0
b. PRDs	10	$0	2	20	140	2,800	280	140	3,220	$318,707	$0
c. Maintenance Vents	4	$0	2	8	140	1,120	112	56	1,288	$127,483	$0
d. Bypass Lines [j]	4	$0	2	8	0	0	0	0	0	$0	$0
e. HEX El Paso Method	3	$0	2	6	140	840	84	42	966	$95,612	$0
f. Storage Vessel Routine Maintenance	3	$0	2	6	140	840	84	42	966	$95,612	$0
g. Carbon Adsorbers [e]	3	$0	2	6	2	12	1	1	14	$1,366	$0
h. Pressure Vessels	4	$0	2	8	140	1,120	112	56	1,288	$127,483	$0
i. Ethylene Oxide Process Vents [h]	4	$0	2	8	7	56	6	3	64	$6,374	$0
j. Ethylene Oxide Eq. Leaks	4	$0	2	8	17	136	14	7	156	$15,480	$0
k. Ethylene Oxide Wastewater Group 1 [h]	4	$0	2	8	17	136	14	7	156	$15,480	$0
3. Fenceline Monitoring [g]											
a. Site Specific monitoring plan	10	$0	1	10	126	1,260	126	63	1,449	$143,418	$0
b. Corrective action plan	10	$0	1	10	126	1,260	126	63	1,449	$143,418	$0
c. Quarterly reports	4	$0	4	16	126	2,016	202	101	2,318	$229,469	$0
Reporting Subtotal						***18,786***	***1,879***	***939***	***21,604***	***$2,138,279***	***$108,805,563***

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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)
4. Recordkeeping Requirements											
A. Read Instructions	Inc. in 3.A										
B. Implement Activities	NA										
C. Develop Record System	NA										
D. Record information											
1. Ethylene Oxide Flare Load [h]	1	$0	12	12	9	108	11	5	124	$12,293	$0
2. Flares	0.4	$0	365	146	140	20,440	2,044	1,022	23,506	$2,326,563	$0
3. PRDs	10	$0	1	10	140	1,400	140	70	1,610	$159,354	$0
4. HEX El Paso Method [k]	0	$0	1	0	0	0	0	0	0	$0	$0
5. Maintenance Vents	1	$0	1	1	140	140	14	7	161	$15,935	$0
6. Bypass Lines [j]	0	$0	1	0	0	0	0	0	0	$0	$0
7. Ethylene Oxide Process Vents & Tanks [h]	2	$0	1	2	7	14	1	1	16	$1,594	$0
8. Flare Management Plan	75	$0	1	75	140	10,500	1,050	525	12,075	$1,195,152	$0
9. Tank Degassing	3	$0	1	3	140	420	42	21	483	$47,806	$0
10. Parameter monitoring for adsorbers, condensers, and carbon adsorbers [e]	1	$0	1	1	2	2	0	0	2	$228	$0
11. Dioxin/Furan concentration [f]	1	$0	1	1	21	21	2	1	24	$2,390	$0
12. Pressure Vessels	2	$0	1	2	140	280	28	14	322	$31,871	$0
13. Ethylene Oxide Equipment Leak	10	$0	1	10	17	170	17	9	196	$19,350	$0
14. Ethylene Oxide Wastewater Group 1 [h]	10	$0	1	10	17	170	17	9	196	$19,350	$0
15. Fenceline Monitoring - Meteorological data [g]	0.4	$0	365	146	126	18,396	1,840	920	21,155	$2,093,906	$0
16. Fenceline Monitoring - Sampling	1	$0	365	365	126	45,990	4,599	2,300	52,889	$5,234,766	$0
E. Personnel Training [c]	16	$0	1	16	0.66	11	1	1	12	$1,202	$0
F. Time for Audits	NA										
Recordkeeping Subtotal						***98,062***	***9,806***	***4,903***	***112,771***	***$11,161,760***	***$0***
TOTAL						**116,847**	**11,685**	**5,842**	**134,375**	**$13,300,039**	**$108,805,563**

	Total Hours	Labor	Non-Labor	Total
Summary of Respondent Burden	134,375	$13,300,039	$108,805,563	$122,105,602

Initial Capital and Startup	$230,865,877
Annualized Capital/Start-up and O & M	$108,805,563

Footnotes:

(a) We have assumed that there are approximately 207 existing respondents, with 2 additional sources becoming subject to the rule over the three-year period of this ICR. We assume that one-third of the existing facilities would begin complying in year 2 and the remaining two-thirds of the existing facilities in year 3.

(b) This ICR uses the following labor rates for privately-owned sources: $161.34 for managerial, $101.24 for technical, and $45.17 for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, May 2021, National Industry-Specific Occupational Employment and Wage Estimates for NAICS 325000 - Chemical Manufacturing. These rates have been adjusted using a Fringe Benefit Loading Rate of 1.5 and an Overhead and Profit Rate of 1.4 (Mean Hourly Rate * Fringe Benefit Loading Rate * Overhead and Profit Rate = Loaded Rate) to account for varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

(c) This is a one-time cost.

(d) Includes costs for the following monitoring equipment: H2 analyzer, calorimeter, flare gas flow monitor, steam controls/flow monitor, and air controls/flow monitor.

(e) We estimate 2 respondents operate carbon adsorbers.

(f) We estimate 21 respondents operate facilities that produce chlorinated compounds.

(g) We estimate 126 respondents will be required to conduct fenceline monitoring. All 126 facilities would begin complying with requirements in year 2 and submit corrective action plans in year 3.

Table 3 - Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON 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)

(h) Only applicable to facilities with ethylene oxide emissions. We assume these facilities will begin complying in year 2. Note, there are not startup/capital & O&M costs for wastewater, and no additional recordkeeping & reporting costs for HEX systems in ethylene oxide service. These are assumed to be included with all HEX systems.

(i) Retests only occur after five years from the intial performance test, and thus would not occur over the period covered by this ICR.

Table 4 - Summary of Annual Respondent Burden and Cost of Recordkeeping and Reporting Requirements for the HON RTR

Year	Technical Hours	Clerical Hours	Management Hours	Total Labor Hours	Labor Costs	Non-Labor (Annualized Capital/Startup and O&M) Costs	Total Costs
1	8,891	889	445	10,224	$1,011,951	$670,615	$1,682,566
2	92,248	9,225	4,612	106,085	$10,500,027	$78,504,129	$89,004,156
3	116,847	11,685	5,842	134,375	$13,300,039	$108,805,563	$122,105,602
Total	217,986	21,799	10,899	250,684	$24,812,017	$187,980,307	$212,792,324
Average	72,662	7,266	3,633	83,561	$8,270,672	$62,660,102	$70,930,775

Table 5 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the HON RTR - Year 1

Burden Item	(A) Number of Occurrences Per Year	(B) Technical Hours Per Occurrence	(C) Tech Hours Per Year (C=A x B)	(D) Management Hours Per Year (D = C x 0.05)	(E) Clerical Hours Per Year (E = C x 0.1)	(F) Total Hours Per Year (C+D+E)	(G) Total Cost Per Year [b]
1. Applications	not applicable						
2. Read and Understand Rule Requirements [a]	45	24	1080	54	108	1242	$62,053
3. Required Activities							
A. Observe stack tests	1	16	21	1	2	24	$1,213
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							
1. Review notification of compliance status							
a. Flares	1	2	1	0	0	2	$76
b. PRDs	1	2	1	0	0	2	$76
c. Process Vents	1	2	1	0	0	2	$76
d. Storage Vessels	1	2	1	0	0	2	$76
e. Carbon Adsorbers	1	2	1	0	0	2	$76
f. Ethylene Oxide Wastewater Group 1	0	2	0	0	0	0	$0
g. Ethylene Oxide Process Vents & Tanks	0	2	0	0	0	0	$0
h. Ethylene Oxide Eq. Leaks	0	2	0	0	0	0	$0
2. Review periodic reports							
a. Flares	1	2	3	0	0	3	$152
b. PRDs	1	2	3	0	0	3	$152
c. Maintenance Vents	1	2	3	0	0	3	$152
d. Bypass Lines	0	2	0	0	0	0	$0
e. HEX El Paso Method	1	2	3	0	0	3	$152
f. Storage Vessel Routine Maintenance	1	2	3	0	0	3	$152
g. Carbon Adsorbers	1	2	3	0	0	3	$152
h. Pressure Vessels	1	2	3	0	0	3	$152
i. Ethylene Oxide Process Vents	0	2	0	0	0	0	$0
j. Ethylene Oxide Equipment Leaks	0	2	0	0	0	0	$0
k. Ethylene Oxide Wastewater Group 1	0	2	0	0	0	0	$0
3. Review flare management plan	1	5	3	0	0	4	$190
4. Fenceline Monitoring							
a. Site specific monitoring plan	1	5	3	0	0	4	$190
b. Corrective action plan	0	5	0	0	0	0	$0
c. Quarterly reports	3	2	5	0	1	6	$303
F. Prepare annual summary report	1	10	10	1	1	12	$575
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * $75 per diem) + ($600 per rou				$881	per trip		$1,163
TOTAL			1148	57	115	1320	$67,128

Footnotes:

(a) Number of occurrences is the number of states and EPA Regions with affected sources (35 states + 10 EPA regions = 45 respondents).

(b) These rates are from the Office of Personnel Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.

Table 6 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the HON RTR - Year 2

Burden Item	(A) Number of Occurrences Per Year	(B) Technical Hours Per Occurrence	(C) Tech Hours Per Year (C=A x B)	(D) Management Hours Per Year (D = C x 0.05)	(E) Clerical Hours Per Year (E = C x 0.1)	(F) Total Hours Per Year (C+D+E)	(G) Total Cost Per Year [b]
1. Applications	not applicable						
2. Read and Understand Rule Requirements [a]	0	24	0	0	0	0	$0
3. Required Activities							
A. Observe stack tests	30	16	480	24	48	552	$27,579
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							
1. Review notification of compliance status							
a. Flares	70	2	141	7	14	162	$8,082
b. PRDs	70	2	141	7	14	162	$8,082
c. Process Vents	70	2	141	7	14	162	$8,082
d. Storage Vessels	70	2	141	7	14	162	$8,082
e. Carbon Adsorbers	2	2	4	0	0	5	$230
f. Ethylene Oxide Wastewater Group 1	17	2	34	2	3	39	$1,954
g. Ethylene Oxide Process Vents & Tanks	7	2	14	1	1	16	$804
h. Ethylene Oxide Eq. Leaks	17	2	34	2	3	39	$1,954
2. Review periodic reports							
a. Flares	141	2	281	14	28	324	$16,164
b. PRDs	141	2	281	14	28	324	$16,164
c. Maintenance Vents	141	2	281	14	28	324	$16,164
d. Bypass Lines	0	2	0	0	0	0	$0
e. HEX El Paso Method	141	2	281	14	28	324	$16,164
f. Storage Vessel Routine Maintenance	141	2	281	14	28	324	$16,164
g. Carbon Adsorbers	4	2	8	0	1	9	$460
h. Pressure Vessels	141	2	281	14	28	324	$16,164
i. Ethylene Oxide Process Vents	14	2	28	1	3	32	$1,609
j. Ethylene Oxide Equipment Leaks	34	2	68	3	7	78	$3,907
k. Ethylene Oxide Wastewater Group 1	34	2	68	3	7	78	$3,907
3. Review flare management plan	70	5	352	18	35	404	$20,205
4. Fenceline Monitoring							
a. Site specific monitoring plan	126	5	630	32	63	725	$36,198
b. Corrective action plan	0	5	0	0	0	0	$0
c. Quarterly reports	504	2	1008	50	101	1159	$57,916
F. Prepare annual summary report	1	10	10	1	1	12	$575
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * $75 per diem) + ($600 per rou				$881	per trip		$26,438
TOTAL			4988	249	499	5736	$313,044

Footnotes:

(a) Number of occurrences is the number of states and EPA Regions with affected sources (35 states + 10 EPA regions = 45 respondents).

(b) These rates are from the Office of Personnel Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.

Table 7 - Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the HON RTR - Year 3

Burden Item	(A) Number of Occurrences Per Year	(B) Technical Hours Per Occurrence	(C) Tech Hours Per Year (C=A x B)	(D) Management Hours Per Year (D = C x 0.05)	(E) Clerical Hours Per Year (E = C x 0.1)	(F) Total Hours Per Year (C+D+E)	(G) Total Cost Per Year [b]
1. Applications	not applicable						
2. Read and Understand Rule Requirements [a]	0	24	0	0	0	0	$0
3. Required Activities							
A. Observe stack tests	30	16	480	24	48	552	$27,579
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							
1. Review notification of compliance status							
a. Flares	140	2	280	14	28	322	$16,088
b. PRDs	140	2	280	14	28	322	$16,088
c. Process Vents	140	2	280	14	28	322	$16,088
d. Storage Vessels	140	2	280	14	28	322	$16,088
e. Carbon Adsorbers	2	2	4	0	0	5	$230
f. Ethylene Oxide Wastewater Group 1	17	2	34	2	3	39	$1,954
g. Ethylene Oxide Process Vents & Tanks	7	2	14	1	1	16	$804
h. Ethylene Oxide Eq. Leaks	17	2	34	2	3	39	$1,954
2. Review periodic reports							
a. Flares	280	2	560	28	56	644	$32,176
b. PRDs	280	2	560	28	56	644	$32,176
c. Maintenance Vents	280	2	560	28	56	644	$32,176
d. Bypass Lines	0	2	0	0	0	0	$0
e. HEX El Paso Method	280	2	560	28	56	644	$32,176
f. Storage Vessel Routine Maintenance	280	2	560	28	56	644	$32,176
g. Carbon Adsorbers	4	2	8	0	1	9	$460
h. Pressure Vessels	280	2	560	28	56	644	$32,176
i. Ethylene Oxide Process Vents	14	2	28	1	3	32	$1,609
j. Ethylene Oxide Equipment Leaks	34	2	68	3	7	78	$3,907
k. Ethylene Oxide Wastewater Group 1	34	2	68	3	7	78	$3,907
3. Review flare management plan	140	5	700	35	70	805	$40,220
4. Fenceline Monitoring							
a. Site specific monitoring plan	126	5	630	32	63	725	$36,198
b. Corrective action plan	126	5	630	32	63	725	$36,198
c. Quarterly reports	504	2	1008	50	101	1159	$57,916
F. Prepare annual summary report	1	10	10	1	1	12	$575
4. Travel expenses: (1 person * 30 hours per year / 8 hours per day * $75 per diem) + ($600 per rou				$881	per trip		$26,438
TOTAL			8196	410	820	9425	$497,353

Footnotes:

(a) Number of occurrences is the number of states and EPA Regions with affected sources (35 states + 10 EPA regions = 45 respondents).

(b) These rates are from the Office of Personnel Management (OPM), 2021 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees.

Table 8 - Summary of Annual Agency Burden and Cost of Recordkeeping and Reporting Requirements for the HON RTR

Year	Technical Hours	Management Hours	Clerical Hours	Total Hours	Labor Costs	Non-Labor Costs	Total Costs
1	1,148	57	115	1,320	$67,128	$0	$67,128
2	4,988	249	499	5,736	$313,044	$0	$313,044
3	8,196	410	820	9,425	$497,353	$0	$497,353
Total	14,332	717	1,433	16,482	$877,526	$0	$877,526
Average	4,777	239	478	5,494	$292,509	$0	$292,509