

SUPPORTING SPREADSHEETS
FOR
INFORMATION COLLECTION
COSTS FOR SECTION 316(b) PHASE III
FOR NEW OFFSHORE OIL AND GAS
EXTRACTION FACILITIES

November 2013

(APPENDIX)

**Exhibit A.1 (New Permits)
Facility Cost and Burden Estimates for NPDES Permit Application Activities**

**Exhibit A.1a
Start-up Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Read and Understand Rule	6	6	6	18	12	12	0	0	0	0	0	1	25	\$1,717	\$0	\$0	450	\$30,906	
Mobilization/Planning	6	6	6	18	4	8	0	0	0	0	0	1	13	\$757	\$0	\$0	234	\$13,626	
Training	6	6	6	18	2	2	0	0	0	0	0	1	5	\$307	\$0	\$0	90	\$5,526	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$60	\$0	-	\$1,080	
Totals	6	6	6	18	18	22	0	0	0	0	0	3	43	\$2,781	\$0	\$60	\$2,841	774	\$51,138

**Exhibit A.1b
Permit Application Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Statement of Compliance Option Selected	6	6	6	18	1	0	0	0	0	0	0	1	2	\$124	\$0	\$0	36	\$2,232	
Source Water Physical Data	6	6	6	18	1	3	8	0	0	0	0	0	12	\$545	\$0	\$0	216	\$9,810	
Configuration and Location of CWIS	6	6	6	18	1	1	2	0	0	0	0	0	4	\$221	\$0	\$0	72	\$3,978	
Facility Water Balance Diagram	6	6	6	18	1	1	1	0	0	0	0	0	3	\$181	\$0	\$0	54	\$3,258	
CWIS Operation Narrative	6	6	6	18	3	8	0	0	0	0	0	0	11	\$633	\$0	\$0	198	\$11,394	
Engineering Calculations	6	6	6	18	2	6	0	0	0	0	0	0	8	\$450	\$0	\$0	144	\$8,100	
Submit Materials for Review by Permitting Authority	6	6	6	18	0	0	0	0	0	0	0	6	6	\$150	\$0	\$0	108	\$2,700	
Recordkeeping	6	6	6	18	1	1	1	0	0	0	0	2	5	\$231	\$0	\$0	90	\$4,158	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$160	\$0	-	\$2,880	
Totals	6	6	6	18									51	\$2,535	\$0	\$160	\$2,695	918	\$48,510

Water balance diagram is assumed to be taken from the facility design report. The hours reported here are for incorporation of the diagram(s) in the permit.

**Exhibit A.1c
Source Water Body Flow Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Gather Information Characterizing Flow	6	6	6	18	0	8	0	0	0	0	0	0	8	\$336	\$0	\$0	144	\$6,048	
Perform Engineering Calculations	6	6	6	18	4	12	4	0	0	0	0	0	20	\$1,060	\$0	\$0	360	\$19,080	
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	4	4	\$100	\$0	\$0	72	\$1,800	
Recordkeeping	6	6	6	18	0	4	0	0	0	0	0	2	6	\$218	\$0	\$0	108	\$3,924	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$90	\$0	-	\$1,620	
Totals	6	6	6	18									38	\$1,714	\$0	\$90	\$1,804	684	\$32,472

**Exhibit A.1d
CWIS Velocity Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Gather Data and Develop Narrative	6	6	6	18	16	40	0	0	0	0	0	0	56	\$3,264	\$0	\$0	1,008	\$58,752	
Perform Engineering Calculations	6	6	6	18	8	32	4	0	0	0	0	0	44	\$2,296	\$0	\$0	792	\$41,328	
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	16	16	\$400	\$0	\$0	288	\$7,200	
Revise Based on Director review	6	6	6	18	4	16	0	0	0	0	0	0	20	\$1,068	\$0	\$0	360	\$19,224	
Recordkeeping	6	6	6	18	2	4	0	0	0	0	0	8	14	\$566	\$0	\$0	252	\$10,188	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$490	\$0	-	\$8,820	
Totals	6	6	6	18									150	\$7,594	\$490	\$8,084	2,700	\$145,512	

**Exhibit A.1e
Design and Construction Technology Plan**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate															
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25								B
	Level of Effort (hrs)																			
Delineate Hydraulic Zone of Influence	6	6	6	18	1	1	2	0	0	0	0	0	4	\$221		\$0		72	\$3,978	
Perform Engineering Calculations (Impingement)	6	6	6	18	1	2	0	0	0	0	0	0	3	\$183		\$0		54	\$3,294	
Perform Engineering Calculations (Entrainment)	1	1	1	3	1	2	0	0	0	0	0	0	3	\$183		\$0		9	\$549	
Document that Technologies Are Optimal	6	6	6	18	0	8	0	0	0	0	0	6	14	\$486		\$0		252	\$8,748	
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	6	6	\$150		\$0		108	\$2,700	
Recordkeeping	6	6	6	18	1	1	0	0	0	0	0	6	8	\$291		\$0		144	\$5,238	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0		\$160		-	\$2,880	
Totals	6	6	6	18									36	\$1,362		\$160	\$1,522	639	\$27,387	

**Exhibit A.1f
Source Water Baseline Biological Characterization Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Avg. Burden Per Facility over 3 yrs	Avg. Labor Cost per Facility for 3 yrs	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate															
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25								B
	Level of Effort (hrs)																			
Install Remote Monitoring Device for Impingement Monitoring	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$24,540	\$0		-	\$441,720	
Use Regional Study Results for Individual Facility Studies	6	6	6	18	40	80	0	2	4	0	0	0	126	\$7,714	\$0	\$0		2,268	\$138,852	
Finalize Individual Study based on Director review	6	6	6	18	8	24	0	0	0	0	0	8	40	\$2,000	\$0	\$0		720	\$36,000	
Totals	6	6	6	18									166	\$9,714	\$24,540	\$0	\$34,254	2,988	\$616,572	

Total Labor Burden, Labor Cost, Capital Costs and O&M Costs for All NPDES Application Activities

Totals	Facilities (Respondents)																Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total														
													8,703	\$921,591				

* The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

**Exhibit A.1 (Renewals)
Facility Cost and Burden Estimates for NPDES Permit Application Activities**

**Exhibit A.1a
Start-up Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
Read and Understand Rule	6	6	6	18	4	4	0	0	0	0	0	0	8	\$564	\$0	\$0		144	\$10,152
Mobilization/Planning	6	6	6	18	1	2	0	0	0	0	0	0	3	\$183	\$0	\$0		54	\$3,294
Training	6	6	6	18	1	1	0	0	0	0	0	0	2	\$141	\$0	\$0		36	\$2,538
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$90	\$0		-	\$1,080
Totals	6	6	6	18	6	7	0	0	0	0	0	0	13	\$888	\$0	\$60	\$948	234	\$17,064

**Exhibit A.1b (Renewals)
Permit Application Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
Statement of Compliance Option Selected	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0
Source Water Physical Data	6	6	6	18	0	1	2	0	0	0	0	0	3	\$122	\$0	\$0		54	\$2,196
Configuration and Location of CWIS	6	6	6	18	0	0	1	0	0	0	0	0	1	\$40	\$0	\$0		18	\$720
Facility Water Balance Diagram	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0
CWIS Operation Narrative	6	6	6	18	1	2	0	0	0	0	0	0	3	\$183	\$0	\$0		54	\$3,294
Engineering Calculations	6	6	6	18	1	2	0	0	0	0	0	0	3	\$183	\$0	\$0		54	\$3,294
Submit Materials for Review by Permitting Authority	6	6	6	18	0	0	0	0	0	0	0	0	2	\$50	\$0	\$0		36	\$900
Recordkeeping	6	6	6	18	0	0	0	0	0	0	0	0	1	\$25	\$0	\$0		18	\$450
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$160	\$0		-	\$2,880
Totals	6	6	6	18									13	\$603	\$0	\$160	\$763	234	\$13,734

Water balance diagram is assumed to be taken from the facility design report. The hours reported here are for incorporation of the diagram(s) in the permit.

**Exhibit A.1c (Renewals)
Source Water Body Flow Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
Gather Information Characterizing Flow	6	6	6	18	0	2	0	0	0	0	0	0	2	\$84	\$0	\$0		36	\$1,512
Perform Engineering Calculations	6	6	6	18	1	4	1	0	0	0	0	0	6	\$307	\$0	\$0		108	\$5,526
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	0	1	\$25	\$0	\$0		18	\$450
Recordkeeping	6	6	6	18	0	1	0	0	0	0	0	0	2	\$67	\$0	\$0		36	\$1,206
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$90	\$0		-	\$1,620
Totals	6	6	6	18									11	\$483	\$0	\$90	\$573	198	\$10,314

**Exhibit A.1d (Renewals)
CWIS Velocity Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	Assumed Loaded Hourly Rate														
	A				\$99	\$42	\$40	\$101	\$48	\$60	\$32	\$25							
Gather Data and Develop Narrative	6	6	6	18	5	12	0	0	0	0	0	0	17	\$999		\$0		306	\$17,982
Perform Engineering Calculations	6	6	6	18	2	10	1	0	0	0	0	0	13	\$658		\$0		234	\$11,844
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	0	5	\$125	\$0	\$0		90	\$2,250
Revise Based on Director review	6	6	6	18	1	5	0	0	0	0	0	0	6	\$309	\$0	\$0		108	\$5,562
Recordkeeping	6	6	6	18	1	1	0	0	0	0	0	0	4	\$191	\$0	\$0		72	\$3,438
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$490	\$0		-	\$8,820
Totals	6	6	6	18									45	\$2,282		\$490	\$2,772	810	\$49,896

**Exhibit A.1e (Renewals)
Design and Construction Technology Plan**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	\$99	\$42	\$40	Assumed Loaded Hourly Rate											
	A				Level of Effort (hrs)				\$101	\$48	\$60	\$32							
Delineate Hydraulic Zone of Influence	6	6	6	18	1	1	1	0	0	0	0	0	3	\$181		\$0		54	\$3,258
Perform Engineering Calculations (Impingement)	6	6	6	18	1	1	0	0	0	0	0	0	2	\$141		\$0		36	\$2,538
Perform Engineering Calculations (Entrainment)	1	1	1	3	1	1	0	0	0	0	0	0	2	\$141		\$0		6	\$423
Document that Technologies Are Optimal	6	6	6	18	0	4	0	0	0	0	0	3	7	\$243		\$0		126	\$4,374
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	3	3	\$75		\$0		54	\$1,350
Recordkeeping	6	6	6	18	1	1	0	0	0	0	0	3	5	\$216		\$0		90	\$3,888
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0		\$160		-	\$2,880
Totals	6	6	6	18									20	\$ 879.50		\$160	\$1,040	366	\$18,711

**Exhibit A.1f (Renewals)
Source Water Baseline Biological Characterization Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Avg. Burden Per Facility over 3 yrs	Avg. Labor Cost per Facility for 3 yrs	Capital Cost per Facility	O&M Cost per Facility	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total	\$99	\$42	\$40	Assumed Loaded Hourly Rate											
	A				Level of Effort (hrs)				\$101	\$48	\$60	\$32							
Use Regional Study Results for Individual Facility Studies	6	6	6	18	12	24	0	1	1	0	0	0	38	\$2,345	\$0	\$0		684	\$42,210
Finalize Individual Study based on Director review	6	6	6	18	2	7	0	0	0	0	0	2	11	\$542	\$0	\$0		198	\$9,756
Totals	6	6	6	6									49	\$ 2,887.00	\$ -	\$ -	\$ 2,887	882	\$51,966

Total Labor Burden, Labor Cost, Capital Costs and O&M Costs for All NPDES Application Activities

	Facilities (Respondents)				Total Burden (hrs.)	Total Initial Cost
	2014	2015	2016	Total		
Totals					2,724	\$161,685

* The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

**Exhibit A.2
Facility Cost and Burden Estimates for Annual Activities**

**Exhibit A.2a
Biological Monitoring for Impingement**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate							Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)
	\$99	\$42	\$101	\$48	\$60	\$32	\$25	B	C	D	C+D						
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Monthly Sample Collection	36	42	48	48	0	0	0	144	0	144	0	288	\$11,520	\$0		36,288	\$1,451,520
Operation & Maintenance of Remote Monitoring	36	42	48	48	0	0	0	0	0	0	0	0	\$0	\$12,270		-	\$1,546,020
Review of Video for Taxonomic Identification	36	42	48	48	0	0	12	96	0	48	0	156	\$7,356	\$0	19,656	\$926,856	
Perform Statistical Analysis	36	42	48	48	12	4	6	0	36	0	0	58	\$4,122	\$0	7,308	\$519,372	
Recordkeeping	36	42	48	48	1	1	1	7	1	0	16	28	\$1,086	\$0	3,478	\$136,874	
Other Direct Costs	36	42	48	48	0	0	0	0	0	0	0	0	\$0	\$840	-	\$105,840	
Totals	36	42	48	48	13	5	19	247	37	192	16	530	\$24,084	\$13,110	\$37,194	66,730	\$4,686,482

**Exhibit A.2b
Biological Monitoring for Entrainment**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate							Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)
	\$99	\$42	\$101	\$48	\$60	\$32	\$25	B	C	D	C+D						
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Helicopter Transportation to and from Facility	7	8	9	9	0	0	0	0	0	0	0	0	\$0	\$14,720		-	\$353,280
Monthly Sample Collection	7	8	9	9	0	0	0	144	0	144	0	288	\$11,520	\$0	6,912	\$276,480	
Marine Biota	7	8	9	9	0	0	0	0	0	0	0	0	\$0	\$3,830		-	\$91,920
Perform Statistical Analysis	7	8	9	9	12	4	6	0	36	0	0	58	\$4,122	\$0	1,392	\$98,928	
Recordkeeping	7	8	9	9	1	1	1	4	1	0	16	24	\$924	\$0	583	\$22,183	
Other Direct Costs	7	8	9	9	0	0	0	0	0	0	0	0	\$0	\$840		-	\$20,160
Totals	7	8	9	9	13	5	7	148	37	144	16	370	\$16,566	\$19,390	\$35,956	8,887	\$862,951

**Exhibit A.2c
Biological Monitoring for Entrainment (Alaska)**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate							Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)
	\$99	\$42	\$101	\$48	\$60	\$32	\$25	B	C	D	C+D						
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Helicopter Transportation to and from Facility in Alaska	1	1	1	1	0	0	0	0	0	0	0	0	\$0	\$22,080		-	\$66,240
Monthly Sample Collection	1	1	1	1	0	0	0	216	0	216	0	432	\$17,280	\$0	1,296	\$51,840	
Marine Biota	1	1	1	1	0	0	0	0	0	0	0	0	\$0	\$3,830		-	\$11,490
Perform Statistical Analysis	1	1	1	1	12	4	6	0	36	0	0	58	\$4,122	\$0	174	\$12,366	
Recordkeeping	1	1	1	1	1	1	1	6	1	0	16	26	\$1,020	\$0	79	\$3,061	
Other Direct Costs	1	1	1	1	0	0	0	0	0	0	0	0	\$0	\$840		-	\$2,520
Totals	1	1	1	1	13	0	7	222	37	216	16	516	\$22,422	\$26,750	\$49,172	1,549	\$147,517

**Exhibit A.2d
Velocity Monitoring**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate						Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)	
	A				\$99	\$42	\$101	\$48	\$60	\$32							\$25
	Level of Effort (hrs)																
Monitor Average Through Technology	37	43	49	49	2	100	0	0	0	0	0	102	\$4,398	\$0		13,158	\$567,342
Analyze Data	37	43	49	49	4	40	0	0	0	0	0	44	\$2,076	\$0		5,676	\$267,804
Recordkeeping	37	43	49	49	1	8	0	0	0	0	8	17	\$635	\$0		2,193	\$81,915
Other Direct Costs	37	43	49	49	0	0	0	0	0	0	0	0	\$0	\$610		-	\$78,690
Totals	37	43	49	49	7	148	0	0	0	0	8	163	\$7,109	\$610	\$7,719	21,027	\$995,751

**Exhibit A.2e
Visual Inspections**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate						Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)	
	A				\$99	\$42	\$101	\$48	\$60	\$32							\$25
	Level of Effort (hrs)																
Visually Inspect All Installed Technologies	36	42	48	48	24	208	0	0	0	0	0	232	\$11,112	\$0		29,232	\$1,400,112
Recordkeeping	36	42	48	48	3	16	0	0	0	0	2	21	\$1,019	\$0		2,646	\$128,394
Totals	36	42	48	48	27	224	0	0	0	0	2	253	\$12,131	\$0	\$0	31,878	\$1,528,506

**Exhibit A.2f
Yearly Status Report Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	2014	2015	2016	Total	Assumed Loaded Hourly Rate						Burden (hrs)	Labor Cost	O & M Costs	Total Costs**	Burden (hrs.)	Total Cost (\$)	
	A				\$99	\$42	\$101	\$48	\$60	\$32							\$25
	Level of Effort (hrs)																
Report on Inspection and Maintenance	37	43	49	49	16	16	0	0	0	0	0	32	\$2,256	\$0		4,128	\$291,024
Detail Biological Monitoring Results	37	43	49	49	12	16	8	8	12	0	0	56	\$3,772	\$0		7,224	\$486,588
Detail Velocity Monitoring Results	37	43	49	49	8	16	0	0	0	0	0	24	\$1,464	\$0		3,096	\$188,856
Compile and Submit Report	37	43	49	49	40	40	0	0	0	0	16	96	\$6,040	\$0		12,384	\$779,160
Recordkeeping	37	43	49	49	2	2	1	1	1	0	8	15	\$691	\$0		1,935	\$89,139
Other Direct Costs	37	43	49	49	0	0	0	0	0	0	0	0	\$0	\$970		-	\$125,130
Totals	37	43	49	49	78	90	9	9	13	0	24	223	\$14,223	\$970	\$15,193	28,767	\$1,959,897

Total Cost for All NPDES Application Activities

	Facilities				Total Burden (hrs.)	Total Annual Cost
	2014	2015	2016	Total		
Totals					158,838	\$10,181,104

Exhibit A.3
Reserved for Future Use

Exhibit A.4
Director Burden and Cost Estimates for Activities

Exhibit A.4a
EPA Regional Office Start-up Activities

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Director	Labor Cost per Director	ODCs lump sum*	Total Cost Per Director	Total Burden (hrs.)	Total Initial Cost
		Technical	Technica	I						
		Assumed Loaded Hourly Rate								
	A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)
Read and Understand Rule	-	12	12	0	24	\$1,224	\$0		-	\$0
Mobilization/Planning	-	24	16	0	40	\$2,144	\$0		-	\$0
Training	-	4	32	0	36	\$1,472	\$0		-	\$0
Other Direct Costs	-	0	0	0	-	\$0	\$60		-	\$0
Totals	-	40	60	0	100	\$4,840	\$60	\$4,900	-	\$0

Exhibit A.4b
EPA Regional Office Permit Issuance Activities

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technica	I						
		Assumed Loaded Hourly Rate								
	A	\$64	\$38	\$30	B	C	D	C+D	A*B	A*(C+D)
Review Source Water Physical Data	18	2	6	0	8	\$356	\$0		144	\$6,408
Review CWIS Data	18	6	18	0	24	\$1,068	\$0		432	\$19,224
Review Source Water Body Flow Information	18	2	6	0	8	\$356	\$0		144	\$6,408
Review CWIS Velocity Information	18	16	16	0	32	\$1,632	\$0		576	\$29,376
Review Design and Construction Technology Plan	18	24	8	0	32	\$1,840	\$0		576	\$33,120
Review Source Water Baseline Biological Characterization Study	18	40	25	0	65	\$3,510	\$0		1,170	\$63,180
Determine Monitoring Frequency	18	2	6	0	8	\$356	\$0		144	\$6,408
Determine Record keeping and Reporting Frequency	18	2	6	0	8	\$356	\$0		144	\$6,408
Considering Public Comments	18	16	16	0	32	\$1,632	\$0		576	\$29,376
Issuing Permit	18	1	6	1	8	\$322	\$0		144	\$5,796
Permit Record Keeping	18	1	1	2	4	\$162	\$0		72	\$2,916
Other Direct Costs	18	0	0	0	-	\$0	\$390		-	\$7,020
Totals	18	112	114	3	229	11,590	390	\$11,980	4,122	\$215,640

Exhibit A.4c
Annual EPA Regional Office Activities

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Annual Cost
		Technical	Technica	I						
		Assumed Loaded Hourly Rate								
	A	\$64	\$38	\$30	B	C	D	C+D	A*B	A*(C+D)
Review of Yearly Status Report	129	6	12	0	18	\$840	\$0		2,322	\$108,360
Compliance Tracking	129	4	12	0	16	\$712	\$0		2,064	\$91,848
Determination on Monitoring Frequency Reduction	129	4	8	0	12	\$560	\$0		1,548	\$72,240
Record Keeping	129	1	2	1	4	\$170	\$0		516	\$21,930
Other Direct Costs	129	0	0	0	-	\$0	\$30		-	\$3,870
Totals	129	15	34	1	50	\$2,282	\$30	\$2,312	6,450	\$298,248

Total Burden and Cost for All EPA Regional Office Activities

									Total Burden (hrs.)	Total Initial Cost
Totals									10,572	\$513,888

Exhibit A.4b (Renewals)

Director Burden and Cost Estimates for Permit Renewal

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost*
		Assumed Loaded Hourly Rate								
		\$64	\$38	\$30						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	18	2	0	2	4	\$188	\$0		72	\$3,384
Review CWIS Data	18	5	0	7	12	\$530	\$0		216	\$9,540
Review Source Water Body Flow Information	18	2	0	2	4	\$188	\$0		72	\$3,384
Review CWIS Velocity Information	18	5	0	10	15	\$620	\$0		270	\$11,160
Review Design and Construction Technology Plan	18	2	0	10	12	\$428	\$0		216	\$7,704
Review Source Water Baseline Biological Characterization Study	18	8	0	20	28	\$1,112	\$0		504	\$20,016
Determine Monitoring Frequency	18	2	0	2	4	\$188	\$0		72	\$3,384
Determine Record keeping and Reporting Frequency	18	2	0	2	4	\$188	\$0		72	\$3,384
Considering Public Comments	18	5	0	10	15	\$620	\$0		270	\$11,160
Issuing Permit	18	2	0	2	4	\$188	\$0		72	\$3,384
Permit Record Keeping	18	0	1	1	2	\$68	\$0		36	\$1,224
Totals	18	35	1	68	104	4,318	\$390	\$4,318	1,872	\$77,724

Exhibit A.4 (Fed)
Federal Burden and Cost Estimates for Activities

Exhibit A.4 (Fed)a
Federal Permit Program Oversight Activities

Activity	Federal (Responses)	Senior Technical	Junior Technical	Clerical	Burden per permit Review	Labor Cost per Permit Review	ODCs lump sum*	Total Cost per Permit Review	Total Burden (hrs.)	Total Initial Cost *
		Assumed Loaded Hourly Rate								
		\$64	\$38	\$30						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	-	0	0	0	-	\$0			-	\$0
Review CWIS Data	-	0	0	0	-	\$0			-	\$0
Review Source Water Body Flow Information	-	0	0	0	-	\$0			-	\$0
Review CWIS Velocity Information	-	0	0	0	-	\$0			-	\$0
Review Design and Construction Technology Plan	-	0	0	0	-	\$0			-	\$0
Review Source Water Baseline Biological Characterization Study	-	0	0	0	-	\$0			-	\$0
Review the Monitoring Frequency	-	0	0	0	-	\$0			-	\$0
Permit Record Keeping	-	0	0	0	-	\$0			-	\$0
Totals	-	0	0	0	0	\$0	\$0	\$0	-	\$0

**Exhibit A.5
Respondents for the ICR Approval Period Year by Year by Activity**

Facilities

	Year 1	Year 2	Year 3	Annual Average ¹
	2014	2015	2016	
Start-up Activities	12	12	12	12
Permit Application Activities	12	12	12	12
Source Water Body Flow Information	12	12	12	12
CWIS Velocity Information	12	12	12	12
Design and Construction Technology Plan (Impingement Only)	10	10	10	10
Design and Construction Technology Plan (Entrainment Only)	0	0	0	0
Design and Construction Technology Plan (Impingement & Entrainment)	2	2	2	2
Use Regional Study Results for Individual Facility Studies	12	12	12	12
Biological Monitoring for Impingement	36	42	48	42
Biological Monitoring for Entrainment	7	8	9	8
Biological Monitoring for Entrainment (Alaska)	1	1	1	1
Velocity Monitoring	37	43	49	43
Visual Inspections	36	42	48	42
Yearly Status Report Activities	37	43	49	43
Respondents	49	55	61	55

Directors

	Year 1	Year 2	Year 3	Annual Average ²
	2014	2015	2016	
EPA Regional Office Start-up Activities	0	0	0	0
EPA Regional Office Permit Issuance Activities				
Review Permit Application Information	2	2	3	2
Review Source Water Body Flow Information	2	2	3	2
Review CWIS Velocity Information	2	2	3	2
Review Design and Construction Technology Plan	2	2	3	2
Review Source Water Baseline Biological Characterization Study	2	2	3	2
Determine Monitoring Frequency	2	2	3	2
Determine Permit Requirements and Issue Permit	2	2	3	2
Annual EPA Regional Office Activities				
Review of Yearly Status Report	3	3	3	3
Compliance Tracking	3	3	3	3
Determination on Monitoring Frequency Reduction	3	3	3	3
Record Keeping	3	3	3	3
Respondents	3	3	3	3

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	2014	2015	2016	
Facilities	49	55	61	55
Directors	3	3	3	3
Yearly Total	52	58	64	58

[1] Each facility is one respondent. One respondent may be involved in more than one activity; however, in order to avoid double-counting, the maximum number of respondents expected to be involved in the rule activities annually is assumed to be the number of respondents for that year.

[2] Each Director is one respondent.

Exhibit A.6

Responses for the ICR Approval Period Year by Year by Activity

Facilities

	Year 1	Year 2	Year 3	Annual Average
	2014	2015	2016	
Start-up Activities	12	12	12	12
Permit Application Activities	12	12	12	12
Source Water Body Flow Information	12	12	12	12
CWIS Velocity Information	12	12	12	12
Design and Construction Technology Plan (Impingement Only)	10	10	10	10
Design and Construction Technology Plan (Entrainment Only)	0	0	0	0
Design and Construction Technology Plan (Impingement & Entrainment)	2	2	2	2
Use Regional Study Results for Individual Facility Studies	12	12	12	12
Biological Monitoring for Impingement	36	42	48	42
Biological Monitoring for Entrainment	7	8	9	8
Biological Monitoring for Entrainment (Alaska)	1	1	1	1
Velocity Monitoring	37	43	49	43
Visual Inspections	36	42	48	42
Yearly Status Report Activities	37	43	49	43
Responses	226	251	276	251

Directors

	Year 1	Year 2	Year 3	Annual Average
	2014	2015	2016	
EPA Regional Office Start-up Activities	0	0	0	0
EPA Regional Office Permit Issuance Activities				
Review Permit Application Information	12	12	12	12
Review Source Water Body Flow Information	12	12	12	12
Review CWIS Velocity Information	12	12	12	12
Review Design and Construction Technology Plan	12	12	12	12
Review Source Water Baseline Biological Characterization Study	6	6	6	6
Determine Monitoring Frequency	12	12	12	12
Determine Permit Requirements and Issue Permit	12	12	12	12
Annual EPA Regional Office Activities				
Review of Yearly Status Report	37	43	49	43
Compliance Tracking	37	43	49	43
Determination on Monitoring Frequency Reduction	37	43	49	43
Record Keeping	37	43	49	43
Responses	226	250	274	250

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	2014	2015	2016	
Facilities	226	251	276	251
Directors	226	250	274	250
Yearly Total	452	501	550	501

Exhibit A.7
Hourly Burden for the ICR Approval Period Year by Year
for Facilities

Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
NPDES Permit Application Activities					
Start-up Activities	A1a	336	336	336	336
Permit Application Activities	A1b	384	384	384	384
Source Water Body Flow Information	A1c	294	294	294	294
CWIS Velocity Information	A1d	1,170	1,170	1,170	1,170
Design and Construction Technology Plan (Impingement Only)	A1e	275	275	275	275
Design and Construction Technology Plan (Impingement & Entrainment)	A1e	60	60	60	60
Use Regional Study Results for Individual Facility Studies	A1f	1,290	1,290	1,290	1,290
NPDES Permit Application Activity Total		3,809	3,809	3,809	3,809
Annual Activities					
Biological Monitoring for Impingement	A2a	19,066	22,243	25,421	22,243
Biological Monitoring for Entrainment	A2b	2,592	2,962	3,333	2,962
Biological Monitoring for Entrainment (Alaska)	A2c	516	516	516	516
Velocity Monitoring	A2d	6,031	7,009	7,987	7,009
Visual Inspections	A2e	9,108	10,626	12,144	10,626
Yearly Status Report Activities	A2f	8,251	9,589	10,927	9,589
Annual Activity Yearly Labor Total		45,564	52,946	60,328	52,946
Yearly Labor Total		49,373	56,755	64,137	56,755

Exhibit A.8

Hourly Burden for the ICR Approval Period Year by Year for Directors and Federal Government

EPA Regional Offices Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
EPA Regional Office Start-up Activities	A4a	0	0	0	0
EPA Regional Office Permit Issuance Activities	A4b	1,998	1,998	1,998	1,998
Annual EPA Regional Office Activities	A4e	1,850	2,150	2,450	2,150
Yearly Total		3,848	4,148	4,448	4,148

Federal Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
Federal Permit Program Oversight Activities	A4(fed)a	0	0	0	0
Yearly Total		0	0	0	0

Exhibit A.9
Costs for the ICR Approval Period Year by Year
for Facilities

Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
NPDES Permit Application Activities					
Start-up Activities	A1a	\$22,014	\$22,014	\$22,014	\$22,014
Permit Application Activities	A1b	\$18,828	\$18,828	\$18,828	\$18,828
Source Water Body Flow Information	A1c	\$13,182	\$13,182	\$13,182	\$13,182
CWIS Velocity Information	A1d	\$59,256	\$59,256	\$59,256	\$59,256
Design and Construction Technology Plan (Impingement Only)	A1e	\$10,935	\$10,935	\$10,935	\$10,935
Design and Construction Technology Plan (Impingement & Entrainment)	A1e	\$2,511	\$2,511	\$2,511	\$2,511
Use Regional Study Results for Individual Facility Studies	A1f	\$75,606	\$75,606	\$75,606	\$75,606
NPDES Permit Application Activity Total		\$202,332	\$202,332	\$202,332	\$202,332
Annual Activities					
Biological Monitoring for Impingement	A2a	\$867,035	\$1,011,541	\$1,156,046	\$1,011,541
Biological Monitoring for Entrainment	A2b	\$115,964	\$132,530	\$149,097	\$132,530
Biological Monitoring for Entrainment (Alaska)	A2c	\$22,422	\$22,422	\$22,422	\$22,422
Velocity Monitoring	A2d	\$263,033	\$305,687	\$348,341	\$305,687
Visual Inspections	A2e	\$436,716	\$509,502	\$582,288	\$509,502
Yearly Status Report Activities	A2f	\$526,251	\$611,589	\$696,927	\$611,589
Annual Activity Yearly Labor Total		\$2,231,421	\$2,593,271	\$2,955,121	\$2,593,271
Yearly Labor Total		\$2,433,753	\$2,795,603	\$3,157,453	\$2,795,603

Facility O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
NPDES Application					
Install Remote Monitoring Device for Impingement Monitoring	A.1f	\$147,240	\$147,240	\$147,240	\$147,240
Other Direct Costs	A.1a-g	\$11,520	\$11,520	\$11,520	\$11,520
Annual					
Operation & Maintenance of Remote Monitoring Device	A.2a	\$441,720	\$515,340	\$588,960	\$515,340
Helicopter Transportation to and from Facility	A.2c	\$103,040	\$117,760	\$132,480	\$117,760
Helicopter Transportation to and from Facility in Alaska	A.2d	\$22,080	\$22,080	\$22,080	\$22,080
Laboratory Identifies & Enumerates Entrained Marine Biota	A.2c&d	\$30,640	\$34,470	\$38,300	\$34,470
Other Direct Costs	A.2a-g	\$95,420	\$110,780	\$126,140	\$110,780
Equipment Cost Subtotal		\$714,080	\$802,420	\$890,760	\$802,420
Laboratory Analysis Subtotal		\$30,640	\$34,470	\$38,300	\$34,470
Other Direct Costs Subtotal		\$106,940	\$122,300	\$137,660	\$122,300
Yearly O&M Total		\$851,660	\$959,190	\$1,066,720	\$959,190

Exhibit A.10

**Costs for the ICR Approval Period Year by Year
for EPA Regional Offices and Federal Government**

EPA Regional Office Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
EPA Regional Office Start-up Activities	A4a	\$0	\$0	\$0	\$0
EPA Regional Office Permit Issuance Activities	A4b	\$95,448	\$95,448	\$95,448	\$95,448
Annual EPA Regional Office Activities	A4e	\$84,434	\$98,126	\$111,818	\$98,126
Yearly Total		\$179,882	\$193,574	\$207,266	\$193,574

EPA Regional Office O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
Start-Up & NPDES Application					
Annual Other Direct Costs	A4a-b	\$4,680	\$4,680	\$4,680	\$4,680
Other Direct Costs	A4c-d	\$1,110	\$1,290	\$1,470	\$1,290
Yearly O&M Cost Total		\$5,790	\$5,970	\$6,150	\$5,970

Federal Labor Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
Federal Permit Program Oversight Activities	A4(fed)a	0	0	0	\$0
Yearly Total		\$0	\$0	\$0	\$0

Federal O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2014	2015	2016	
Federal Permit Program Oversight ODCs	A4(fed)a	\$0	\$0	\$0	\$0
Yearly Total		\$0	\$0	\$0	\$0

Exhibit A.11

Summary of the Burden, Respondents, Responses, and Costs for the ICR Approval Period by Year and Annual Averages

Facilities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total ¹
		2014	2015	2016		
Burden (hours)	A7	49,373	56,755	64,137	56,755	170,265
Respondents (number)	A5	49	55	61	55	61
Responses (number)	A6	226	251	276	251	753
Costs (labor)	A9	\$2,433,753	\$2,795,603	\$3,157,453	\$2,795,603	\$8,386,810
Costs (Equipment)	A9	\$714,080	\$802,420	\$890,760	\$802,420	\$2,407,260
Costs (Lab Analysis)	A9	\$30,640	\$34,470	\$38,300	\$34,470	\$103,410
Costs (Other Direct Costs)	A9	\$106,940	\$122,300	\$137,660	\$122,300	\$366,900
Total Costs		\$3,285,413	\$3,754,793	\$4,224,173	\$3,754,793	\$11,264,380

[1] Each facility is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of facilities that must perform one or more activities during the ICR approval period.

EPA Regional Offices

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total ¹
		2014	2015	2016		
Burden (hours)	A8	3,848	4,148	4,448	4,148	12,444
Respondents (number)	A5	3	3	3	3	3
Responses (number)	A6	226	250	274	250	750
Costs (labor)	A10	\$179,882	\$193,574	\$207,266	\$193,574	\$580,722
Costs (Other Direct Costs)	A10	\$5,790	\$5,970	\$6,150	\$5,970	\$17,910
Total Costs		\$185,672	\$199,544	\$213,416	\$199,544	\$598,632

[1] Each director is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of directors that must perform one or more activities during the ICR approval period.

Federal Government

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		2014	2015	2016		
Burden (hours)	A8	-	-	-	-	-
Costs (labor)	A10	\$0	\$0	\$0	\$0	\$0
Costs (O&M)	A10	\$0	\$0	\$0	\$0	\$0
Total Costs		\$0	\$0	\$0	\$0	\$0

Totals for Respondents (Facilities Only)*

	Annual Average	Three Year Total
Total Respondent Burden (hours)	56,755	170,265
Total Respondents (number)	55	61
Total Respondent Labor Costs	\$2,795,603	\$8,386,810
Total Respondent Capital and O&M Costs	\$959,190	\$2,877,570
Total Respondent Cost for All Activities	\$3,754,793	\$11,264,380

* Totals for annual averages may not match exactly due to rounding discrepancies