

Chapter 12 Miscellaneous Information

Section A. Estimation of Costs and Time Requirements

In the Summer of 1994, a survey of selected Pretreatment programs was conducted. The goal was to survey the time requirements and costs associated with pretreatment programs. This information may be helpful for developing pretreatment programs to estimate necessary resources. The data may also be useful for approved programs for comparison against the surveyed programs.

Surveyed Programs Summary

Time	Average	Minimum	Maximum	Median	Per SIU
Number of SIUs	8.6	1	18	8	
Draft Enforcement Response Plan	28.7hrs	4 hrs	80 hrs	22 hrs	
Draft Sewer Use Ordinance (SUO)	101.9 hrs	8 hrs	300 hrs	80 hrs	
Administer SUO (Annual)	9.6 hrs	5 hrs	20 hrs	8 hrs	
Long Term Monitoring Plan (Draft)	41.8 hrs	4 hrs	120 hrs	40 hrs	
Long Term Monitoring Plan(Annual)	87.6 hrs	10 hrs	624 hrs	24 hrs	
Transcribe Data/ Judge Compliance	168.1 hrs	4 hrs	768 hrs	100 hrs	19.5 hrs
Headworks Analysis(HWA) (Draft)	46.2 hrs	4 hrs	208 hrs	36 hrs	
HWA (Annual Modification if necessary)	16.5 hrs	0 hrs	56 hrs	10 hrs	
Permits (Draft)	94.4 hrs	1.5 hrs	416 hrs	80 hrs	11 hrs
Permits (Annual)	20.7 hrs	1 hr	80 hrs	12 hrs	2.3 hrs
Inspection of Industry	55.2 hrs	10.5 hrs	208 hrs	35 hrs	6.4 hrs
Semi Annual Report	35.3 hrs	4.5 hrs	83 hrs	32 hrs	4.1 hrs
Set-up/Retrieval of Sampler(Annual)	130 hrs	2 hrs	875 hrs	61 hrs	15.1 hrs
Enforcement (Annual)	20.4 hrs	1 hrs	96 hrs	12.5 hrs	2.4 hrs
Industrial Waste Survey	79.4 hrs	2 hrs	400 hrs	40 hrs	
Industrial Waste Survey (Annual)	17.8 hrs	4 hrs	40 hrs	16 hrs	
Costs					
Vehicle Miles	5890	450	16000	3500	685
Vehicle Cost(Estimated at \$.28 mi)	\$1649	\$126	\$4480	\$910	\$192
Number of Samplers	3.9	1	11	3	.5
Sampler Initial Cost	\$7402	\$1200	\$42350	\$3800	\$861
Sampler Maintenance (Annual)	\$532	\$50	\$2000	\$300	\$62
Postage	\$152	\$12	\$720	\$100	\$18
Office Equipment (Initial)	\$3200	\$200	\$10961	\$2900	
Office Equipment (Annual)	\$283	\$25	\$1500	\$200	
Safety Equipment (Initial)	\$1263	\$40	\$7000	\$500	\$147

Chapter 12 Miscellaneous Information

Section A. Estimation of Costs and Time Requirements

Safety Equipment (Annual)	\$129	\$20	\$500	\$100	\$15
Consultant (Initial) (if used)	\$29725	\$1000	\$92000	\$12950	
Consultant (Annual)	\$4500	\$1000	\$10000	\$3000	
pH meter/Thermometer etc.(Initial)	\$573	\$100	\$1800	\$500	\$67
pH meter/Thermometer etc.(Annual)	\$157	\$10	\$300	\$135	\$18
Training / Publications (Initial)	\$710	\$0	\$2000	\$600	
Training / Publications (Annual)	\$516	\$100	\$2000	\$500	
Legal Fees (excluding City Attorney)	\$1001	\$0	\$4200	\$205	
Public Notice	\$63	\$0	\$170	\$50	
Sample Bottles (Annual)	\$278	\$0	\$800	\$200	\$32

Laboratory Costs (per Test)	Average	Minimum	Maximum	Median
Arsenic	\$19.80	\$10.00	\$30.00	\$20.00
BOD	\$18.50	\$5.00	\$35.00	\$18.50
TSS	\$10.50	\$5.00	\$20.00	\$10.00
Cadmium	\$15.70	\$8.00	\$30.00	\$13.50
Chromium	\$15.70	\$8.00	\$50.00	\$13.50
Copper	\$12.60	\$7.00	\$20.00	\$12.40
Lead	\$13.90	\$10.00	\$25.00	\$15.00
Mercury	\$21.40	\$5.00	\$35.00	\$20.00
Molybdenum	\$17.80	\$10.00	\$30.00	\$15.00
Nickel	\$15.10	\$8.00	\$45.00	\$12.90
Zinc	\$12.70	\$7.00	\$20.00	\$12.40
pH	\$5.30	\$2.00	\$15.00	\$12.40

Limited Data

OCPSF	\$450	\$300	\$450	\$450
TTO	\$777	\$475	\$1200	\$720
Cyanide	\$26.30	\$18.00	\$35.00	\$27.50
Oil & Grease	\$29.00	\$20.00	\$45.00	\$22.00
Silver	\$15.20	\$9.00	\$30.00	\$13.50
Ammonia	\$18.20	\$15.00	\$22.50	\$18.75
Toxicity	\$479	\$300	\$658	\$479
Priority Pollutant Scan	\$1703	\$1010	\$2100	\$2000

Wide Ranges in Laboratory Costs may be due to differences in Detection Limits Achieved, Methods Used or Other Services Provided by Lab