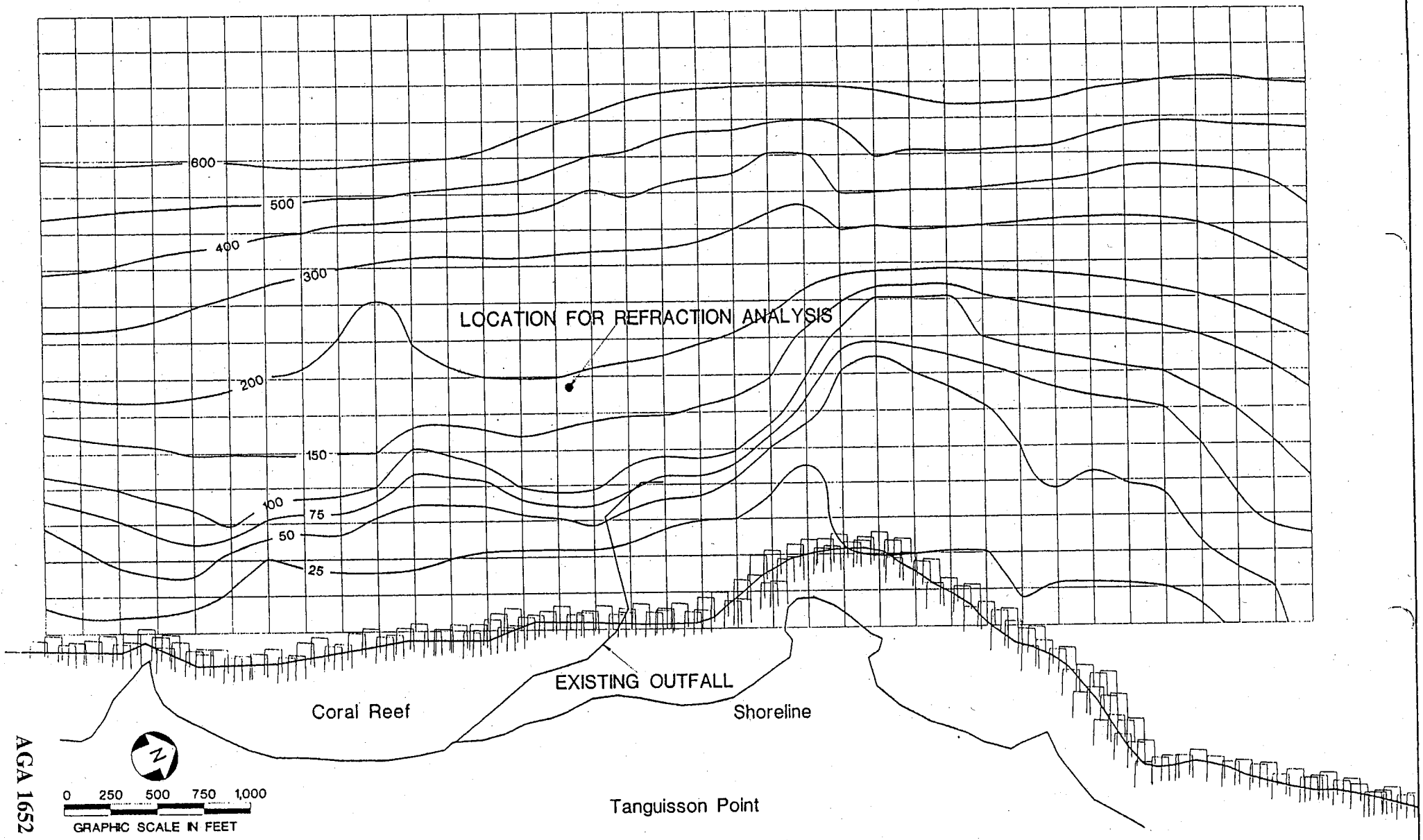
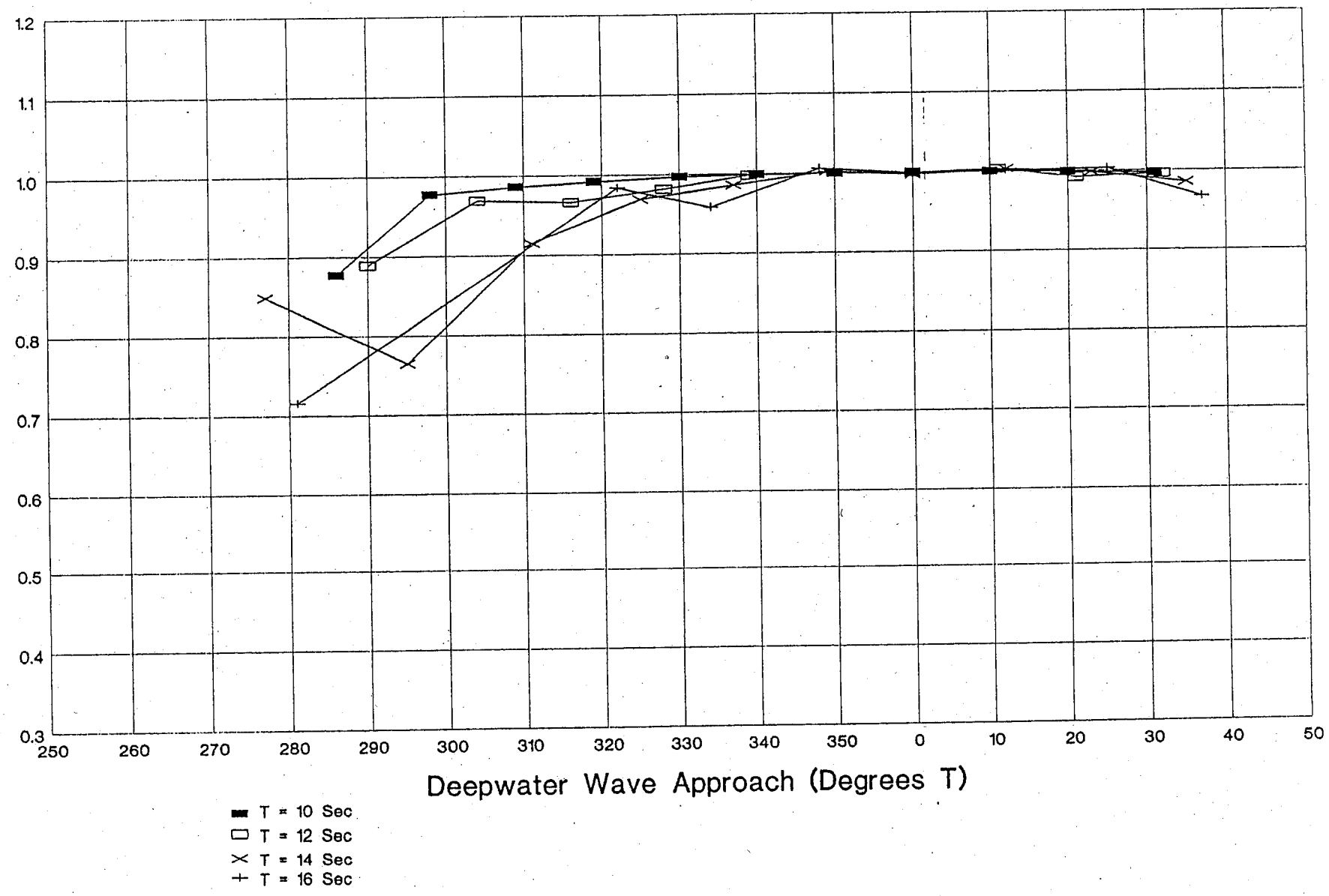


AGA 1652

Edward K. Noda and Associates, Inc.	Northern District Sewage Treatment Plant Outfall Extension	Wave Refraction Model Grid Area	FIGURE



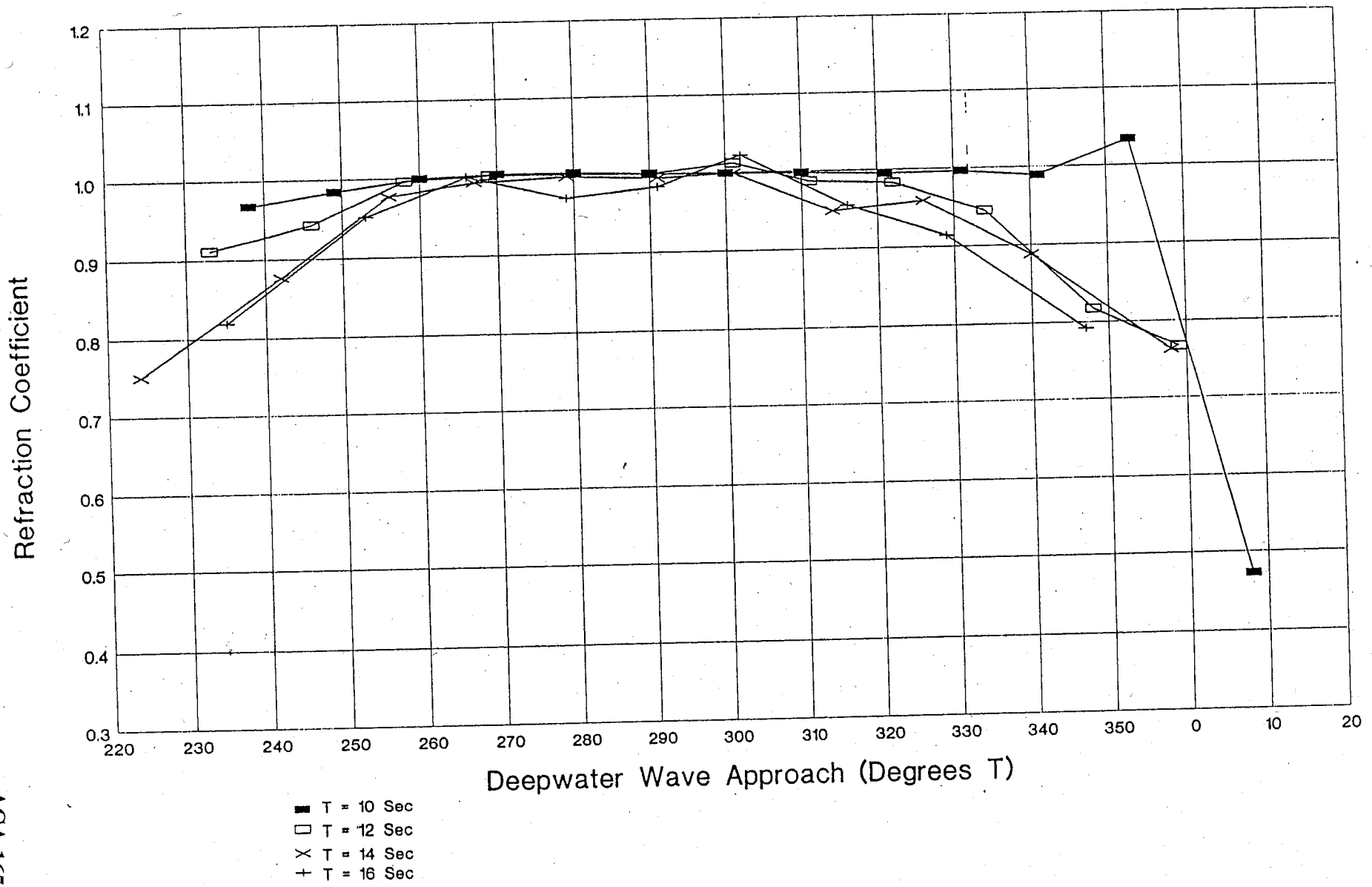
AGA 1653

Edward K. Noda & Associates, Inc.

Agana Sewage Treatment Plant Outfall Extension

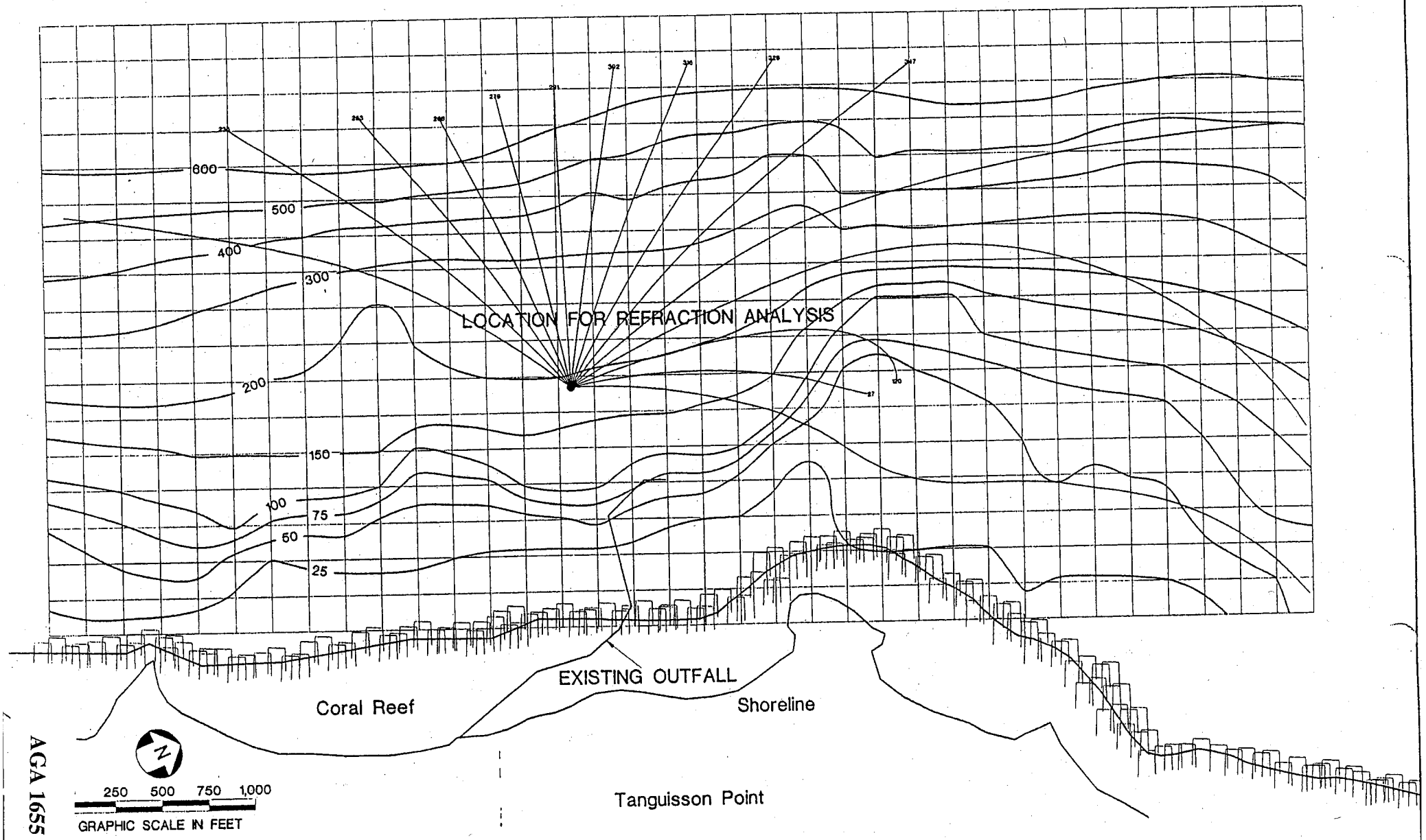
Wave Refraction Coefficients

FIGURE



AGA 1654

Edward K. Noda and Associates, Inc.	Northern District Sewage Treatment Plant Outfall Extension	Wave Refraction Coefficients	FIGURE



AGA 1655

Edward K. Noda and Associates, Inc.

Northern District Sewage Treatment Plant Outfall Extension

Wave Refraction Model Grid Area

PERIOD = 16 sec Ho = 1 foot

FIGURE

NEARSHORE POINT X=249071 Y=-93861 WAVE PERIOD T=16.0
DEPTH AT X,Y =185.9 C(X,Y)= 65.8 Ldeep= 1310.7 Cdeep= 81.9
Dmin=20.0 Dmax=655.48(Dmax/Ldeep= .50) Stepsz(Ds/L)= .10 Nmax=200
Brel= .05 Hdeep= 1.00

RAY NO. 1 Theta(Degrees)=143.00
RAY NO. 2 Theta(Degrees)=133.00
RAY NO. 3 Theta(Degrees)=123.00
RAY NO. 4 Theta(Degrees)=113.00
RAY NO. 5 Theta(Degrees)=103.00
RAY NO. 6 Theta(Degrees)= 93.00
RAY NO. 7 Theta(Degrees)= 83.00
RAY NO. 8 Theta(Degrees)= 73.00
RAY NO. 9 Theta(Degrees)= 63.00
RAY NO. 10 Theta(Degrees)= 53.00
RAY NO. 11 Theta(Degrees)= 43.00
RAY NO. 12 Theta(Degrees)= 33.00
RAY NO. 13 Theta(Degrees)= 23.00
RAY NO. 14 Theta(Degrees)= 13.00
RAY NO. 15 Theta(Degrees)= 3.00

CALCULATIONS FOR RAY NO. 1

CALCULATIONS FOR RAY NO. 2

Xi=249142 Yi=-93795 Depth=196.6 Kr= .819 Ks= .913 Bo= 65.3 Bs= 97.3

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
247295	-92457	652.0	147.6	81.6	.990	1.000	.990	0.0
247405	-92527	635.0	147.5	81.6	.989	1.000	.989	0.0
247515	-92597	621.5	147.4	81.5	.988	.999	.987	0.0
247625	-92667	591.5	147.3	81.4	.985	.997	.982	0.0
247734	-92738	550.0	147.0	81.1	.980	.995	.974	0.0
247842	-92808	503.2	146.6	80.7	.973	.991	.964	0.0
247948	-92879	456.1	145.9	80.1	.964	.984	.948	0.0
248052	-92951	403.1	144.8	79.0	.951	.973	.925	0.0
248153	-93024	352.1	143.6	77.4	.939	.958	.899	0.0
248250	-93097	319.1	142.5	76.1	.930	.946	.880	0.0
248344	-93171	288.9	141.1	74.5	.923	.934	.862	0.0
248434	-93245	267.8	139.8	73.2	.919	.922	.847	0.0
248521	-93321	254.9	138.5	72.3	.917	.913	.837	0.0
248606	-93397	242.8	137.2	71.3	.915	.903	.826	0.0
248688	-93474	227.5	136.3	70.1	.914	.891	.814	0.0
248768	-93552	222.4	135.5	69.6	.913	.878	.802	0.0
248846	-93630	216.6	134.9	69.1	.913	.863	.788	0.0
248923	-93707	208.5	134.5	68.3	.913	.848	.774	0.0
248998	-93785	202.6	134.1	67.7	.913	.834	.762	0.0
249071	-93861	185.9	133.0	65.8	.914	.819	.749	0.0
249071	-93861	185.9	133.0	65.8	.914	.819	.749	0.0

DEEPWATER THETA(DEGREES TRUE) = 235.34

CALCULATIONS FOR RAY NO. 3

Xi=249132 Yi=-93822 Depth=192.0 Kr= .951 Ks= .914 Bo= 65.4 Bs= 72.3

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
247997	-92440	651.1	130.4	81.6	.990	1.000	.990	0.0
248082	-92539	625.3	130.4	81.5	.988	1.000	.988	0.0
248166	-92638	585.9	130.3	81.3	.984	1.000	.984	0.0
248250	-92737	525.4	130.1	80.9	.976	.999	.975	0.0
248332	-92835	463.2	129.7	80.2	.965	.997	.962	0.0
248412	-92933	397.5	129.0	78.9	.950	.993	.943	0.0
248489	-93029	341.2	128.0	77.0	.936	.986	.922	0.0
248562	-93125	308.0	127.2	75.5	.928	.980	.909	0.0
248633	-93220	281.0	126.1	74.0	.922	.972	.896	0.0

248701	-93315	260.9	125.3	72.7	.918	.965	.886	0.0
248766	-93408	238.4	124.6	71.0	.915	.959	.877	0.0
248830	-93500	228.7	124.3	70.2	.914	.956	.873	0.0
248892	-93592	219.0	124.0	69.3	.913	.953	.870	0.0
248953	-93683	210.9	123.8	68.5	.913	.952	.869	0.0
249013	-93773	202.9	123.5	67.7	.913	.952	.869	0.0
249071	-93861	185.9	123.0	65.8	.914	.951	.869	0.0
249071	-93861	185.9	123.0	65.8	.914	.951	.869	0.0

DEEPWATER THETA(DEGREES TRUE) = 252.51

CALCULATIONS FOR RAY NO. 4

Xi=249131 Yi=-93835 Depth=189.3 Kr=1.000 Ks= .914 Bo= 65.3 Bs= 65.3

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
248420	-92469	628.0	117.2	81.5	.988	1.000	.988	0.0
248479	-92585	601.7	117.1	81.4	.986	1.000	.986	0.0
248538	-92700	535.6	117.0	81.0	.978	1.000	.977	0.0
248596	-92815	457.8	116.8	80.1	.964	.999	.963	0.0
248653	-92927	393.5	116.3	78.7	.949	.999	.948	0.0
248707	-93038	339.7	115.6	77.0	.935	.998	.934	0.0
248758	-93147	304.1	115.0	75.3	.927	.997	.924	0.0
248807	-93254	273.2	114.3	73.5	.920	.994	.915	0.0
248854	-93359	247.4	113.8	71.7	.916	.990	.907	0.0
248899	-93462	231.2	113.5	70.4	.914	.986	.902	0.0
248943	-93564	220.6	113.4	69.4	.913	.984	.899	0.0
248987	-93665	211.5	113.2	68.6	.913	.986	.900	0.0
249030	-93764	202.9	113.3	67.7	.913	.992	.906	0.0
249071	-93861	185.9	113.0	65.8	.914	1.000	.914	0.0
249071	-93861	185.9	113.0	65.8	.914	1.000	.914	0.0

DEEPWATER THETA(DEGREES TRUE) = 265.81

CALCULATIONS FOR RAY NO. 5

Xi=249139 Yi=-93845 Depth=187.1 Kr= .971 Ks= .914 Bo= 65.3 Bs= 69.3

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
248704	-92362	638.1	104.2	81.6	.989	1.000	.989	0.0
248736	-92488	603.7	104.2	81.4	.986	1.000	.986	0.0
248768	-92614	568.9	104.2	81.3	.982	1.000	.982	0.0
248800	-92739	497.6	104.2	80.6	.972	.998	.970	0.0
248831	-92863	424.5	104.2	79.5	.956	.995	.952	0.0
248862	-92983	361.2	104.1	77.8	.941	.992	.933	0.0
248891	-93101	317.2	103.9	76.0	.930	.988	.918	0.0
248919	-93216	278.9	103.7	73.9	.921	.983	.906	0.0
248946	-93328	252.2	103.5	72.1	.917	.979	.898	0.0
248972	-93438	232.0	103.4	70.5	.914	.976	.892	0.0
248998	-93546	221.2	103.3	69.5	.913	.973	.888	0.0
249023	-93653	212.7	103.0	68.7	.913	.971	.887	0.0
249047	-93758	202.6	103.0	67.7	.913	.970	.886	0.0
249071	-93861	185.9	103.0	65.8	.914	.971	.888	0.0
249071	-93861	185.9	103.0	65.8	.914	.971	.888	0.0

DEEPWATER THETA(DEGREES TRUE) = 278.80

CALCULATIONS FOR RAY NO. 6

Xi=249138 Yi=-93857 Depth=184.7 Kr= .983 Ks= .914 Bo= 65.3 Bs= 67.5

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
249005	-92320	630.6	91.7	81.5	.989	1.000	.989	0.0
249009	-92450	587.7	91.8	81.4	.984	1.000	.984	0.0
249013	-92580	537.9	91.9	81.0	.978	1.000	.978	0.0

249018	-92708	472.3	92.0	80.3	.967	1.000	.966	0.0
249022	-92835	408.9	92.4	79.1	.953	.999	.952	0.0
249028	-92959	361.8	92.7	77.8	.941	.997	.939	0.0
249034	-93080	318.4	92.7	76.0	.930	.996	.926	0.0
249039	-93199	279.7	92.7	73.9	.921	.994	.916	0.0
249045	-93314	253.6	92.8	72.2	.917	.992	.910	0.0
249050	-93426	231.6	92.8	70.4	.914	.991	.906	0.0
249056	-93538	223.4	92.8	69.7	.913	.989	.903	0.0
249061	-93648	214.1	92.6	68.8	.913	.986	.900	0.0
249066	-93756	202.1	92.7	67.6	.913	.984	.899	0.0
249071	-93861	185.9	93.0	65.8	.914	.983	.899	0.0
249071	-93861	185.9	93.0	65.8	.914	.983	.899	0.0

DEEPWATER THETA(DEGREES TRUE) = 291.27

CALCULATIONS FOR RAY NO. 7

Xi=249133 Yi=-93869 Depth=182.7 Kr=1.022 Ks= .915 Bo= 65.3 Bs= 62.5

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
249317	-92212	633.0	80.9	81.6	.989	1.000	.989	0.0
249296	-92341	595.0	80.9	81.4	.985	1.000	.985	0.0
249276	-92469	548.0	81.0	81.1	.980	1.000	.979	0.0
249256	-92596	497.7	81.1	80.6	.972	1.000	.971	0.0
249236	-92722	434.0	81.2	79.7	.959	1.000	.959	0.0
249217	-92846	377.9	81.0	78.3	.945	1.001	.946	0.0
249197	-92968	347.5	81.0	77.3	.937	1.003	.940	0.0
249178	-93088	312.6	81.3	75.8	.929	1.005	.934	0.0
249161	-93205	275.8	81.6	73.7	.921	1.008	.928	0.0
249144	-93318	250.6	81.9	71.9	.916	1.011	.926	0.0
249129	-93430	231.1	82.2	70.4	.914	1.014	.927	0.0
249114	-93540	221.9	82.3	69.6	.913	1.017	.929	0.0
249099	-93649	214.9	82.2	68.9	.913	1.021	.932	0.0
249084	-93757	201.3	82.4	67.5	.913	1.022	.933	0.0
249071	-93861	185.9	83.0	65.8	.914	1.022	.935	0.0
249071	-93861	185.9	83.0	65.8	.914	1.022	.935	0.0

DEEPWATER THETA(DEGREES TRUE) = 302.19

CALCULATIONS FOR RAY NO. 8

Xi=249140 Yi=-93882 Depth=179.8 Kr= .955 Ks= .915 Bo= 65.3 Bs= 71.7

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
249702	-92187	621.9	66.6	81.5	.988	1.000	.988	0.0
249650	-92306	573.9	66.7	81.3	.983	1.000	.983	0.0
249599	-92425	528.6	66.8	81.0	.977	.999	.976	0.0
249549	-92544	487.6	67.2	80.5	.970	.998	.968	0.0
249499	-92662	448.5	67.6	79.9	.962	.998	.960	0.0
249452	-92780	414.3	68.2	79.3	.954	.997	.952	0.0
249406	-92896	378.2	68.8	78.3	.945	.996	.941	0.0
249362	-93011	337.5	69.3	76.9	.935	.994	.929	0.0
249320	-93124	300.1	69.8	75.1	.926	.990	.917	0.0
249280	-93234	266.6	70.5	73.1	.919	.986	.906	0.0
249243	-93342	244.1	71.1	71.4	.915	.982	.899	0.0
249207	-93448	228.7	71.5	70.2	.914	.981	.896	0.0
249171	-93554	222.7	71.5	69.6	.913	.979	.894	0.0
249137	-93658	211.5	71.6	68.6	.913	.973	.888	0.0
249103	-93761	202.9	72.1	67.7	.913	.964	.880	0.0
249071	-93861	185.9	73.0	65.8	.914	.955	.873	0.0
249071	-93861	185.9	73.0	65.8	.914	.955	.873	0.0

DEEPWATER THETA(DEGREES TRUE) = 316.45

CALCULATIONS FOR RAY NO. 9

Xi=249141 Yi=-93896 Depth=177.0 Kr= .914 Ks= .916 Bo= 65.3 Bs= 78.1

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
250165	-92154	623.9	53.9	81.5	.988	1.000	.988	0.0
250089	-92259	585.0	54.0	81.3	.984	1.000	.984	0.0
250013	-92364	542.5	54.1	81.1	.979	.998	.977	0.0
249937	-92468	499.2	54.3	80.7	.972	.996	.968	0.0
249863	-92573	452.9	54.6	80.0	.963	.992	.955	0.0
249790	-92676	413.5	55.0	79.2	.954	.988	.942	0.0
249718	-92779	382.6	55.6	78.4	.946	.984	.931	0.0
249649	-92882	360.9	56.2	77.8	.941	.981	.923	0.0
249581	-92985	340.5	56.8	77.0	.936	.976	.913	0.0
249515	-93087	310.9	57.6	75.7	.928	.969	.899	0.0
249453	-93187	276.1	58.5	73.7	.921	.961	.885	0.0
249393	-93286	253.9	59.2	72.2	.917	.955	.876	0.0
249336	-93383	234.0	60.0	70.6	.914	.950	.868	0.0
249280	-93480	226.8	60.3	70.0	.914	.946	.865	0.0
249225	-93577	221.8	60.6	69.5	.913	.941	.860	0.0
249172	-93673	210.3	61.1	68.5	.913	.934	.853	0.0
249120	-93768	201.2	61.8	67.5	.913	.925	.844	0.0
249071	-93861	185.9	63.0	65.8	.914	.914	.836	0.0
249071	-93861	185.9	63.0	65.8	.914	.914	.836	0.0

DEEPWATER THETA(DEGREES TRUE) = 329.20

CALCULATIONS FOR RAY NO. 10

Xi=249154 Yi=-93924 Depth=170.5 Kr= .792 Ks= .917 Bo= 65.3 Bs= 104.1

ORIGINAL RAY

X(ft)	Y(ft)	Depth	Theta(Deg)	Cel	Ks	Kr	Ks*Kr*H	Hb
250902	-92159	636.8	36.2	81.6	.989	1.000	.989	0.0
250797	-92236	602.9	36.3	81.4	.986	.999	.985	0.0
250692	-92313	565.3	36.5	81.2	.982	.999	.980	0.0
250588	-92390	511.8	36.7	80.8	.974	.998	.972	0.0
250485	-92467	468.2	37.1	80.3	.966	.997	.963	0.0
250385	-92544	424.3	37.8	79.5	.956	.996	.952	0.0
250286	-92622	385.7	38.5	78.5	.947	.994	.941	0.0
250189	-92700	364.9	39.1	77.9	.942	.989	.932	0.0
250093	-92779	361.7	40.0	77.8	.941	.982	.924	0.0
249999	-92860	347.9	41.2	77.3	.937	.974	.913	0.0
249907	-92941	330.8	42.3	76.6	.933	.960	.896	0.0
249818	-93024	314.0	43.4	75.8	.929	.944	.877	0.0
249732	-93107	294.5	44.6	74.8	.924	.924	.855	0.0
249649	-93191	273.7	45.9	73.6	.920	.906	.833	0.0
249570	-93275	255.9	47.0	72.3	.917	.889	.816	0.0
249493	-93358	238.1	48.1	71.0	.915	.873	.798	0.0
249419	-93442	227.6	48.7	70.1	.914	.860	.786	0.0
249346	-93526	223.3	49.1	69.7	.913	.848	.774	0.0
249273	-93610	218.5	49.6	69.2	.913	.834	.762	0.0
249203	-93694	208.1	50.5	68.2	.913	.820	.749	0.0
249136	-93778	199.2	51.6	67.3	.913	.806	.736	0.0
249071	-93861	185.9	53.0	65.8	.914	.792	.724	0.0
249071	-93861	185.9	53.0	65.8	.914	.792	.724	0.0

DEEPWATER THETA(DEGREES TRUE) = 346.84

CALCULATIONS FOR RAY NO. 11

CALCULATIONS FOR RAY NO. 12

CALCULATIONS FOR RAY NO. 13

Depth<Depth MinDEEPWATER THETA(DEGREES TRUE) = 119.78

CALCULATIONS FOR RAY NO. 14

Depth<Depth MinDEEPWATER THETA(DEGREES TRUE) = 26.53

CALCULATIONS FOR RAY NO. 15

FACILITY NAME: AGANA Sewage Treatment Plant	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

INTERIM SEWAGE SLUDGE PERMIT APPLICATION FORM

Paperwork Reduction Act Notice
Public reporting burden for this application is estimated to average 8.4 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden, to: Chief, Information Policy Branch, PM-223Y, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC, 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC, 20503.

PRELIMINARY INFORMATION

This page is designed to indicate whether the applicant is to complete Part 1 or Part 2. Answer each question. Then complete Part 1 or Part 2, as indicated.
For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

1. Is this facility required to have, or is it requesting, site-specific pollutant limits?

   ✓ Yes ___ No

2. Does this facility have a currently effective NPDES permit?

   ✓ Yes ___ No

3. Is this facility required by the permitting authority to submit a full permit application at this time?

   ✓ Yes ___ No

If the answers to the above questions are all no, complete Part 1 only (see instructions). If the answer to any of the above questions is yes, complete Part 2 rather than Part 1.

Send the completed application form to:

AGA 1660

FACILITY NAME: AGANA STP

PERMIT NUMBER: GU0020087

EPA ID NUMBER: (for official use only)

Form Approved
OMB Number
Approval Expires xx-xx-xx

PART 1: LIMITED BACKGROUND INFORMATION OMITTED

This part should be completed only by "sludge-only" facilities—that is, facilities that do not currently have, and are not now applying for, an NPDES permit for a direct discharge to a surface body of water. This part also does not pertain to facilities that are requesting, or that are required to have, site-specific pollutant limits in their permits.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

1. **Facility identification.**

   a. Name of facility: _____

   b. Facility contact. Name: _____
   Title: _____
   Phone: ( ) _____

   c. Facility mailing address.
   Street or P.O. Box: _____
   City or Town: _____ State: ____ Zip: _____

   d. Facility location.
   Street or Route #: _____
   County: _____
   City or Town: _____ State: ____ Zip: _____

2. **Owner/Operator information.** OMITTED

   a. Are you the owner of this facility? ____ Yes ____ No

   If no, provide the owner's:
   Name: _____
   Phone: ( ) _____
   Street or P.O. Box: _____
   City or Town: _____ State: ____ Zip: _____

   b. Are you the operator of this facility? ____ Yes ____ No

   If no, provide the operator's:
   Name: _____
   Phone: ( ) _____
   Street or P.O. Box: _____
   City or Town: _____ State: ____ Zip: _____

c. Indicate the type of facility:
   ____ Publicly owned treatment works (POTW)
   ____ Privately owned treatment works
   ____ Federally owned treatment works
   ____ Blending or treatment operation
   ____ Surface disposal site
   ____ Sewage sludge incinerator
   ____ Other. If other, explain: _____

3. **Sewage Sludge Amount.** Provide the total dry metric tons per 365-day period of sewage sludge handled under the following practices:

   a. Amount generated at the facility: _____
   b. Amount received from off site: _____
   c. Amount treated on site (including blending): _____
   d. Amount sold or given away in a bag or other container for application to the land: _____
   e. Amount of bulk sewage sludge shipped off site for treatment or for sale/give-away in a bag or other container for application to the land: _____
   f. Amount applied to the land in bulk form: _____
   g. Amount placed on a surface disposal site: _____
   h. Amount fired in a sewage sludge incinerator: _____
   i. Amount sent to a municipal solid waste landfill: _____
   j. Amount used or disposed by another practice: _____
   Describe: _____

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FACILITY NAME:	PERMIT NUMBER:	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

4. Pollutant Concentrations. Using the table below or a separate attachment, provide existing data on the pollutant concentrations in sewage sludge from this facility. Provide all data for the last two years. If data from the last two years are unavailable, provide the most recent data.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE TYPE	SAMPLE DATE	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

5. Treatment Provided at Your Facility.

a. Which class of pathogen reduction does the sewage sludge meet at your facility?

____ Class A ____ Class B ____ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
____ Option 8 (90 percent solids with unstabilized solids)
____ Option 9 (Injection below land surface)
____ Option 10 (Incorporation into soil within 6 hours)
____ Option 11 (Covering active sewage sludge unit daily)
____ None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:

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FACILITY NAME	PERMIT NUMBER:	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

6. **Treatment Provided at Other Facilities.** Is sewage sludge from your facility provided to another facility for treatment, distribution, use, or disposal?

____ Yes ____ No

If yes, provide the following information for the facility receiving the sewage sludge:

a. Name of facility: _____

b. Facility contact. Name: _____
Title: _____
Phone: ( ) _____

c. Facility mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

d. Facility location.
Street or Route #: _____
County: _____
City or Town: _____ State: ____ Zip: _____

e. Which activities does the receiving facility provide? (Check all that apply):
____ Treatment (e.g., blending, dewatering, composting, heat drying)
____ Sale or give-away in bag or other container
____ Land application ____ Surface disposal
____ Other (describe): ____ Incineration
_____
_____
_____

7. **Use and Disposal Sites.** Provide the following information for each site on which sewage sludge from this facility is used or disposed:

a. Site name or number: _____

b. Site contact. Name: _____
Title: _____
Phone: ( ) _____

c. Site location.
Street or Route #: _____
County: _____
City or Town: _____ State: ____ Zip: _____

d. Site type:
____ Agricultural ____ Lawn or home garden
____ Forest ____ Surface disposal
____ Public contact ____ Incineration
____ Reclamation ____ Other (describe):
_____
_____
_____

8. **Certification.** Sign the certification statement below. (Refer to instructions to determine who is an officer for purposes of this certification.)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Officer: _____
Name of Officer: _____
(typed or printed)
Official Title of Officer: _____
Telephone Number: _____
Date Signed: _____

AGA 1663

FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

PART 2: PERMIT APPLICATION INFORMATION

Complete this part if you answered "yes" to any of the questions in the PRELIMINARY INFORMATION section (page 1). In other words, complete this part if your facility has, or is applying for, an NPDES permit or if your facility (including a "sludge-only" facility) is requesting, or is required to have, site-specific pollutant limits in its permit.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

SCREENING INFORMATION — SEWAGE SLUDGE USE OR DISPOSAL INFORMATION

Part 2 is divided into six sections (A-F). Sections A and F pertain to all applicants. The applicability of Sections B, C, D, and E depends on your facility's sewage sludge use or disposal practices. The information provided on this page will indicate which sections of Part 2 to fill out.

1. All applicants must complete **Section A (General Information).**

2. Does this facility generate sewage sludge?

   ✓ Yes ____ No

   Does this facility derive a material from sewage sludge?

   ____ Yes ✓ No

   If you answered **Yes** to either, complete **Section B (Generation of a Sewage Sludge or Preparation of a Sewage Sludge or Preparation of a Sewage Sludge Product).**

3. Does this facility apply sewage sludge to the land?

   ____ Yes ✓ No

   Is sewage sludge from this facility applied to the land?

   ____ Yes ✓ No

   If you answered **Yes** to either, answer the following three questions:

   a. Does sewage sludge from this facility meet the pollutant concentrations, Class A pathogen reduction requirements, and one of vector attraction reduction options 1-8, as identified in the instructions? ____ Yes ____ No

   b. Is sewage sludge from this facility placed in a bag or other container for sale or give-away? ____ Yes ____ No

   c. Is sewage sludge from this facility sent to another facility for treatment (including blending) or placement in a bag or other container for sale or give-away? ____ Yes ____ No

   If you answered **No** to all three, complete **Section C (Land Application of Bulk Sewage Sludge).**

   If you answered **Yes** to a., b., or c., **skip Section C.**

4. Do you own or operate a surface disposal site?

   ____ Yes ✓ No

   If **Yes**, complete **Section D (Surface Disposal).**

5. Do you own or operate a sewage sludge incinerator?

   ____ Yes ✓ No

   If **Yes**, complete **Section E (Incineration).**

6. All applicants must complete **Section F (Other Information).**

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

A. GENERAL INFORMATION

All applicants must complete this section.

A.1. Facility Identification.

a. Name of facility: AGANA SEWAGE TREATMENT PLANT

b. Facility contact. Name: Michael A. Aguon
Title: Sewer Plant Superintendent
Phone: (671) 477-8472

c. Facility mailing address.
Street or P.O. Box: P.O. Box 3010
City or Town: Hagatna State: GU Zip: 96932

d. Facility location.
Street or Route #: Route 1 Marine Drive
County: Hagatna
City or Town: Hagatna State: GU Zip: 96932

e. Facility latitude: 13°29'3.3" Facility longitude: 144°44'37.1"

Method of latitude/longitude determination:
____ USGS map ____ Other (describe:)
____ Field survey

If map used, provide datum and scale:

f. Is this facility a Class I sludge management facility?
✓ Yes ____ No

g. Indicate whether this facility is currently: ✓ Active ____ Inactive
Date on which facility became active/inactive: AUG 1979

h. SIC Codes (4-digit, in descending order of priority):
Code: 4952 Specify:
Code: ____ Specify:
Code: ____ Specify:
Code: ____ Specify:

A.2. Permit Information.

a. Facility's NPDES permit number (if applicable): GU0020087

b. List, on this form or an attachment, all other Federal, State, and local permits or construction approvals received or applied for that regulate this facility's sewage sludge management practices:

Permit Number:	Type of Permit:
GEPA MOT	STATE Environmental Protection Agency

A.3. Owner/Operator Information.

a. Are you the owner of this facility? ✓ Yes ____ No
If no, provide the owner's:
Name:
Phone: ( )
Street or P.O. Box:
City or Town: State: Zip:

b. Are you the operator of this facility? ✓ Yes ____ No
If no, provide the operator's:
Name:
Phone: ( )
Street or P.O. Box:
City or Town: State: Zip:

c. Indicate the type of facility:
✓ Publicly owned treatment works (POTW)
____ Privately owned treatment works
____ Federally owned treatment works
____ Blending or treatment operation
____ Surface disposal site
____ Sewage sludge incinerator
____ Other. If other, explain:

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

A.4. Indian Lands. Does any generation, treatment, storage, application to land, or disposal of sewage sludge from this facility occur on Indian lands?

____ Yes ✓ No

If yes, describe:

A.5. Topographic Map. Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that shows the following items of information. Map(s) should include the area one mile beyond all property boundaries of the facility:

a. Location of all sewage sludge management facilities, including locations where sewage sludge is generated, treated, or disposed.

b. Location of all water bodies within one mile beyond the facility's property boundaries.

c. Location of all wells used for drinking water listed in public records or otherwise known to the applicant within 1/4 mile of the property boundaries.

N/A

A.6. Hazardous Waste Characteristics. Attach the results of any testing that has been conducted in the last five years to determine whether the sewage sludge is a hazardous waste.

(See Attachments)

A.7. Pollutant Concentrations. Using the table below or a separate attachment, provide existing data on the pollutant concentrations in sewage sludge from this facility. Provide all data for the last two years. If data from the last two years are unavailable, provide the most recent data.

(See Attachments)

POLLUTANT	CONCENTRATION (mg/kg dry weight)	SAMPLE TYPE	SAMPLE DATE	DETECTION LEVEL FOR ANALYSIS
Arsenic				
Cadmium				
Chromium				
Copper				
Lead				
Mercury				
Molybdenum				
Nickel				
Selenium				
Zinc				

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FACILITY NAME: AGANA STP

PERMIT NUMBER: GU0020087

EPA ID NUMBER: (for official use only)

Form Approved
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B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge.

B.1. Amount Generated On Site.

Total dry metric tons per 365-day period generated at your facility: _____

B.2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use, or disposal, provide the following information for each facility from which sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.

N/A

a. Name of facility: _____

b. Facility contact. Name: _____
Title: _____
Phone: ( ) _____

c. Facility mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

d. Facility location.
Street or Route #: _____
County: _____
City or Town: _____ State: ____ Zip: _____

e. Total dry metric tons per 365-day period received from this facility: _____

f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

B.3. Treatment Provided at Your Facility.

a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?

✓ Class A ____ Class B ____ Neither or unknown

b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge:
Aerobically Digested

c. Which vector attraction reduction option is met for the sewage sludge at your facility?

____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
✓ Option 8 (90 percent solids with unstabilized solids)
____ None or unknown

d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge:
Aerobically digested then centrifuged to driest extent possible; Then transported to municipal solid waste landfill.

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

e. Describe, on this form or another sheet of paper, any other sewage sludge treatment (including blending) activities not identified in (a) - (d) above:

Centrifuged sludge cake deposited at local municipal solid waste landfill which is covered with dirt at the end of everyday.

Complete Section B.4 if sewage sludge from your facility meets the pollutant concentrations in Table 3 of 40 CFR 503.13, the Class A pathogen reduction requirements in §503.32(a), and one of the vector attraction reduction requirements in §503.33(b)(1)-(8). Skip this section if sewage sludge from your facility does not meet all of these criteria.

B.4. Preparation of Sewage Sludge Meeting Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.

a. Total dry metric tons per 365-day period of sewage sludge subject to this section that is applied to the land: (See B.10, p. 13)

b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away?

____ Yes ✓ No

c. Is sewage sludge subject to this section provided to another facility for distribution (including placement in a bag or other container for sale or give-away)?

____ Yes ✓ No

If yes, provide the following information if available for each facility distributing this sewage sludge:

Name of facility: _____

Facility contact Name: _____

Title: _____

Phone: ( ) _____

Street or P.O. Box: _____

City or Town: _____ State: ____ Zip: _____

List, on this form or an attachment, the receiving facility's NPDES permit number, as well as the numbers of all other Federal, State, and local permits that regulate the receiving facility's sewage sludge management practices:

Permit Number:	Type of Permit:

Complete Section B.5 if you place sewage sludge in a bag or other container for sale or give-away prior to land application. Skip this section if the sewage sludge is covered in Section B.4.

B.5. Sale or Give-Away in a Bag or Other Container.

a. Total dry metric tons per 365-day period of sewage sludge placed in a bag or other container at your facility for sale or give-away: _____

b. Attach, with this application, a copy of all labels or notices that accompany the sewage sludge being sold or given away in a bag or other container.

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

Complete Section B.6 if sewage sludge from your facility is provided to another facility that provides treatment or that places the sewage sludge in a bag or other container for sale or give-away. This section does not apply to sewage sludge sent directly to a land application or surface disposal site. Skip this section if the sewage sludge is covered in Sections B.4 or B.5. If you provide sewage sludge to more than one facility, attach additional pages as necessary.

B.6. Shipment Off Site for Treatment or for Sale or Give-Away.

a. Name of receiving facility: _____

b. Facility contact. Name: _____
Title: _____
Phone: ( ) _____

c. Facility mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

d. Total dry metric tons per 365-day period of sewage sludge provided to receiving facility: _____

e. List, on this form or an attachment, the receiving facility's NPDES permit number, as well as the numbers of all other Federal, State, and local permits that regulate the receiving facility's sewage sludge management practices:

Permit Number:	Type of Permit:

f. Does the receiving facility provide additional treatment to reduce pathogens in sewage sludge from your facility? ____ Yes ____ No

Which class of pathogen reduction is achieved for the sewage sludge at the receiving facility?

____ Class A ____ Class B ____ Neither or unknown

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce pathogens in sewage sludge:

g. Does the receiving facility provide additional treatment to reduce vector attraction characteristics of the sewage sludge? ____ Yes ____ No

Which vector attraction reduction option is met for the sewage sludge at the receiving facility?

____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
____ Option 8 (90 percent solids with unstabilized solids)
____ None

Describe, on this form or another sheet of paper, any treatment processes used at the receiving facility to reduce vector attraction properties of sewage sludge:

h. Does the receiving facility provide any additional treatment (including blending) activities) not identified in (f) or (g) above? ____ Yes ____ No

If yes, describe—on this form or another sheet of paper—the treatment (including blending) activities not identified in (f) or (g) above:

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU002007	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

i. If you answered yes to (f), (g), or (h), attach a copy of any information you provide the receiving facility to comply with the "notice and necessary information" requirement of 40 CFR 503.12(g).

j. Does the receiving facility place sewage sludge from your facility in a bag or other container for sale or give-away? ____ Yes ____ No

If yes, provide a copy of all labels or notices that accompany the product being sold or given away.

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

Complete Section B.7 if sewage sludge from your facility is applied to the land, unless the sewage sludge is covered in:

- **Section B.4 (it meets Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8); or**
- **Section B.5 (you place it in a bag or other container for sale or give-away); or**
- **Section B.6 (you send it to another facility for treatment or for sale or give-away).**

B.7. Land Application of Bulk Sewage Sludge.

a. Total dry metric tons per 365-day period of sewage sludge applied to all land application sites: _____

b. Nitrogen content in the sewage sludge that is applied to the land in bulk form, expressed as percent dry weight or mg/kg dry weight:

	Content	Units
Ammonium nitrogen:	_____	_____
Nitrate nitrogen:	_____	_____
Total Kjeldahl nitrogen (TKN):	_____	_____

c. Do you identify all land application sites in Section C of this application?

_____ Yes _____ No

If no, submit a copy of the land application plan with this application (see instructions).

d. Are any land application sites located in States other than the State where you generate sewage sludge or derive a material from sewage sludge?

_____ Yes _____ No

If yes, describe—on this form or another sheet of paper—how you notify the permitting authority for the States where the land application sites are located. Provide a copy of the notification.

_____

_____

_____

_____

Complete Section B.8 if sewage sludge from your facility is placed on a surface disposal site.

B.8. Surface Disposal.

a. Total dry metric tons of sewage sludge from your facility placed on all surface disposal sites per 365-day period: _____

b. Do you own or operate all surface disposal sites to which you send sewage sludge for disposal?

_____ Yes _____ No

If no, answer B.8.c - B.8.h for each surface disposal site that you do not own or operate. If you send sewage sludge to more than one such surface disposal site, attach additional pages as necessary.

c. Site name or number: _____

d. Site contact. Name: _____
Title: _____
Phone: ( ) _____
Contact is: _____ Site owner _____ Site operator

e. Site mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____

f. Site location.
Street or Route #: _____
County: _____
City or Town: _____ State: _____ Zip: _____

g. Total dry metric tons of sewage sludge from your facility placed on this surface disposal site per 365-day period: _____

h. List, on this form or an attachment, the site's NPDES permit number, as well as the numbers of all other Federal, State, and local permits that regulate sewage sludge disposal at the site:

Permit Number:	Type of Permit:
_____	_____
_____	_____
_____	_____

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FACILITY NAME:	PERMIT NUMBER:	EPA ID NUMBER:	Form Approved OMB Number Approval Expires xx-xx-xx
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Complete Section B.9 if sewage sludge from your facility is fired in a sewage sludge incinerator.

B.9. Incineration.

a. Total dry metric tons of sewage sludge from your facility fired in all sewage sludge incinerators per 365-day period: _____

b. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired?

_____ Yes _____ No

If no, complete B.9.c - B.9.h for each sewage sludge incinerator that you do not own or operate. If you send sewage sludge to more than one such sewage sludge incinerator, attach additional pages as necessary.

c. Incinerator name or number: _____ OMITTED

d. Incinerator contact. Name: _____
Title: _____
Phone: ( ) _____
Contact is incinerator: _____ Owner _____ Operator

e. Incinerator mailing address.
Street or P.O. Box: _____
City or Town: _____ State: _____ Zip: _____

f. Incinerator location.
Street or Route #: _____
County: _____
City or Town: _____ State: _____ Zip: _____

g. Total dry metric tons of sewage sludge from your facility fired in this sewage sludge incinerator per 365-day period: _____

h. List, on this form or an attachment, the numbers of all other Federal, State, and local permits that regulate the firing of sewage sludge in this incinerator:

Permit Number:	Type of Permit:

Complete Section B.10 if sewage sludge from this facility is placed on a municipal solid waste landfill.

B.10. Disposal in a Municipal Solid Waste Landfill. Provide the following information for each municipal solid waste landfill on which sewage sludge from your facility is placed. If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

a. Name of landfill: Ordot Solid Waste Landfill

b. Landfill contact. Name: Gov. Guam Dept of Public Works
Title: Director
Phone: (671) 646-3131
Contact is: ✓ Landfill owner ✓ Landfill operator

c. Mailing address for municipal solid waste landfill.
Street or P.O. Box: 542 N. Marine Drive
City or Town: Tamuning State: GU Zip: 96911

d. Location of municipal solid waste landfill.
Street or Route #: Dero Drive
County: Ordot
City or Town: Chalan Pago State: GU Zip: 969

e. Total dry metric tons of sewage sludge from your facility placed in this municipal solid waste landfill per 365-day period: _____

f. List, on this form or an attachment, the numbers of all other Federal, State, and local permits that regulate the operation of this municipal solid waste landfill:

Permit Number:	Type of Permit:

g. Submit, with this application, information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test).

h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?

_____ Yes _____ No

FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

C. LAND APPLICATION OF BULK SEWAGE SLUDGE

Complete Section C for sewage sludge that is applied to the land, unless any of the following conditions apply:

- **The sewage sludge meets the Table 3 pollutant concentrations, Class A pathogen requirements, and one of vector attraction reduction options 1-8 *(fill out B.4 instead)*; or**
- **The sewage sludge is sold or given away in a bag or other container *(fill out B.5 instead)*; or**
- **You provide the sewage sludge to another facility for treatment or placement in a bag or other container *(fill out B.6 instead)*.**

In other words, complete Section C only for the sewage sludge that you reported in Section B.7.

C.1. Identification of Land Application Site.

a. Site name or number: _____

b. Site location.

Street or Route #: _____

County: _____

City or Town: _____ State: ____ Zip: _____

Latitude: _____ Longitude: _____

C.2. Owner Information.

a. Are you the owner of this land application site? ____ Yes ____ No

b. If no, provide the following information for the owner:

Name: _____

Phone: ( ) _____

Street or P.O. Box: _____

City or Town: _____ State: ____ Zip: _____

C.3. Applier Information.

a. Are you the person who applies, or who is responsible for application of, sewage sludge to this land application site? ____ Yes ____ No

b. If no, provide the following information for the person who applies:

Name: _____

Phone: ( ) _____

Street or P.O. Box: _____

City or Town: _____ State: ____ Zip: _____

C.4. Site Type. Identify the type of land application site from among the following:

____ Agricultural land
____ Forest
____ Public contact site
____ Reclamation site
____ Lawn or home garden
____ Other. If other, specify: _____

C.5. Crop or Other Vegetation.

a. What type of crop or other vegetation is grown on this site? OMITTED

b. What is the nitrogen requirement for this crop or vegetation? _____

C.6. Vector Attraction Reduction.

Are any vector attraction reduction requirements met when sewage sludge is applied to the land application site?

_____ Yes _____ No

If yes, answer C.6.a and C.6.b:

a. Indicate which vector attraction reduction option is met:

_____ Option 9 (Injection below land surface)
_____ Option 10 (Incorporation into soil within 6 hours)

b. Describe, on this form or another sheet of paper, any treatment processes used at the land application site to reduce vector attraction properties of sewage sludge:

OMITTED

C.7. Ground-Water Monitoring.

Are any ground-water monitoring data available for this land application site?

_____ Yes _____ No

If yes, submit the ground-water monitoring data with this permit application. Also submit a written description of the well locations, approximate depth to ground water, and the ground-water monitoring procedures used to obtain these data.

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires XX-XX-XX

Complete Question C.10 only if the sewage sludge applied to this site since July 20, 1993, is subject to the cumulative pollutant loading rates (CPLRs) in 40 CFR 503.13(b)(2) (see instructions).

C.8. Cumulative Loadings and Remaining Allotments.

a. Have you contacted the permitting authority in the State where the bulk sewage sludge subject to CPLRs will be applied, to ascertain whether bulk sewage sludge subject to CPLRs has been applied to this site on or since July 20, 1993?

____ Yes ____ No

If no, sewage sludge subject to CPLRs may not be applied to this site.
If yes, continue on to the next question.

b. Based upon this inquiry, has bulk sewage sludge subject to CPLRs been applied to this site since July 20, 1993?

____ Yes ____ No

If no, skip the rest of this section.
If yes, answer questions C.8.c - C.8.g.

c. Site size, in hectares: _____

d. Dry metric tons of sewage sludge per hectare from your facility applied to this site, per 365-day period: _____

e. Total dry metric tons of sewage sludge per hectare from your facility applied to this site, over the life of the site: _____

f. Provide the following information for every facility other than yours that is sending, or has sent, bulk sewage sludge subject to CPLRs to this site since July 20, 1993. If more than one such facility sends sewage sludge to this site, attach additional pages as necessary.

Name of facility: _____
Facility contact. Name: _____
Title: _____
Phone: ( ) _____
Facility mailing address:
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

g. Provide the total loading and allotment remaining, in kg/hectare, for each of the following pollutants:

	Cumulative loading	Allotment remaining
Arsenic		
Cadmium		
Chromium		
Copper		
Lead		
Mercury		
Molybdenum		
Nickel		
Selenium		
Zinc		

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FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

D. SURFACE DISPOSAL

Complete this section if you own or operate a surface disposal site.

Complete Section D.1 once for each surface disposal site that you own or operate.

D.1. Site Information. Provide the following information for the surface disposal site:

a. Site name or number: _____

b. Are you the owner of this surface disposal site? ____ Yes ____ No

If no, provide the following information:
Name of owner: _____
Facility contact. Name: _____
Title: _____
Phone: ( ) _____

Owner mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

c. Are you the operator of this surface disposal site? ____ Yes ____ No

If no, provide the following information:
Name of operator: _____
Facility contact. Name: _____
Title: _____
Phone: ( ) _____

Operator mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

Facility location.
Street or Route #: _____
County: _____
City or Town: _____ State: ____ Zip: _____

AGA 1676

FACILITY NAME: AGANA STP

PERMIT NUMBER: GU0020087

EPA ID NUMBER: (for official use only)

Form Approved
OMB Number
Approval Expires xx-xx-xx

Complete Sections D.2 - D.6 for each active sewage sludge unit.

D.2. Information on Active Sewage Sludge Units.

a. Unit name or number: _____

b. Total dry metric tons of sewage sludge placed on the active sewage sludge unit per 365-day period: _____

c. Does the active sewage sludge unit have a liner with a minimum hydraulic conductivity of 1 x 10^{-7} cm/sec? ____ Yes ____ No

If yes, describe the liner (or attach a description):

_____

_____

_____

d. Does the active sewage sludge unit have a leachate collection system? ____ Yes ____ No

If yes, describe the leachate collection system (or attach a description). Also describe the method used for leachate disposal and provide the numbers of any Federal, State, or local permit(s) for leachate disposal:

_____

_____

_____

e. If you answered no to either D.2.c or D.2.d, answer the following question:

Is the boundary of the active sewage sludge unit less than 150 meters from the property line of the surface disposal site? ____ Yes ____ No

If yes, provide the actual distance in meters: _____

D.3. Sewage Sludge from Other Facilities. Is sewage sludge sent to this active sewage sludge unit from any facilities other than your facility?

____ Yes ____ No

If yes, provide the following information for each such facility. If sewage sludge is sent to this active sewage sludge unit from more than one such facility, attach additional pages as necessary.

a. Name of facility: _____

b. Facility contact. Name: _____
Title: _____
Phone: ( ) _____

c. Facility mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

d. List, on this form or an attachment, the facility's NPDES permit number, as well as the numbers of all other Federal, State, and local permits that regulate the facility's sewage sludge management practices:

Permit Number:	Type of Permit:

e. Which class of pathogen reduction is achieved before sewage sludge leaves the other facility?

____ Class A ____ Class B ____ None or unknown

f. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce pathogens in sewage sludge:

_____

_____

_____

g. Which vector attraction reduction option is achieved before sewage sludge leaves the other facility?

____ Option 1 (Minimum 38 percent reduction in volatile solids)
____ Option 2 (Anaerobic process, with bench-scale demonstration)
____ Option 3 (Aerobic process, with bench-scale demonstration)
____ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
____ Option 5 (Aerobic processes plus raised temperature)
____ Option 6 (Raise pH to 12 and retain at 11.5)
____ Option 7 (75 percent solids with no unstabilized solids)
____ Option 8 (90 percent solids with unstabilized solids)
____ None or unknown

h. Describe, on this form or another sheet of paper, any treatment processes used at the other facility to reduce vector attraction properties of sewage sludge:

i. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities performed by the other facility that are not identified in (e) - (h) above:

D.4. Vector Attraction Reduction.

a. Which vector attraction reduction option, if any, is met when sewage sludge is placed on this active sewage sludge unit?

____ Option 9 (Injection below land surface)
____ Option 10 (Incorporation into soil within 6 hours)
____ Option 11 (Covering active sewage sludge unit daily)

b. Describe, on this form or another sheet of paper, any treatment processes used at the active sewage sludge unit to reduce vector attraction properties of sewage sludge:

D.5. Ground-Water Monitoring.

a. Is ground-water monitoring currently conducted at this active sewage sludge unit, or are ground-water monitoring data otherwise available for this active sewage sludge unit ?

____ Yes ____ No

If yes, provide a copy of available ground-water monitoring data. Also provide a written description of the well locations, the approximate depth to ground water, and the ground-water monitoring procedures used to obtain these data.

b. Has a ground-water monitoring program been prepared for this active sewage sludge unit?

____ Yes ____ No

If yes, submit a copy of the ground-water monitoring program with this permit application.

c. Have you obtained a certification from a qualified ground-water scientist that the aquifer below the active sewage sludge unit has not been contaminated?

____ Yes ____ No

If yes, submit a copy of the certification with this permit application.

D.6. Site-Specific Limits. Are you seeking site-specific permit limits for the sewage sludge placed on the active sewage sludge unit?

____ Yes ____ No

If yes, submit information to support the request for site-specific pollutant limits with this application.

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FACILITY NA AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

E. INCINERATION

Complete this section if you fire sewage sludge in a sewage sludge incinerator.

Complete this section once for each incinerator in which you fire sewage sludge. If you fire sewage sludge in more than one sewage sludge incinerator, attach additional copies of this section as necessary.

E.1. Incinerator Identification. Provide the following information for the sewage sludge incinerator:

a. Incinerator name or number: _____

b. Are you the owner of this sewage sludge incinerator? ____ Yes ____ No

If no, provide the following information:
Name of owner: _____
Facility contact. Name: _____
Title: _____
Phone: ( ) _____

Owner mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

c. Are you the operator of this sewage sludge incinerator? ____ Yes ____ No

If no, provide the following information:
Name of operator: _____
Facility contact. Name: _____
Title: _____
Phone: ( ) _____

Operator mailing address.
Street or P.O. Box: _____
City or Town: _____ State: ____ Zip: _____

Facility location.
Street or Route #: _____
County: _____
City or Town: _____ State: ____ Zip: _____

E.2. Amount Fired. Dry metric tons per 365-day period of sewage sludge fired in the sewage sludge incinerator: _____

E.3. Beryllium NESHAP.

a. Is the sewage sludge fired in this incinerator "beryllium-containing waste," as defined in the instructions? ____ Yes ____ No

Submit, with this application, information, test data, and description of measures taken that demonstrate whether the sewage sludge incinerated is beryllium-containing waste, and will continue to remain as such.

b. If the answer to (a) is yes, submit—with this application—a complete report of the latest beryllium emission rate testing and documentation of ongoing incinerator operating parameters indicating that the NESHAP emission rate limit for beryllium has been and will continue to be met.

E.4. Mercury NESHAP.

a. How is compliance with the mercury NESHAP being demonstrated?
____ Stack testing (if checked, complete E.4.b) ____ Sewage sludge sampling (if checked, complete E.4.c)

b. If stack testing is conducted, submit the following information with this application:

- A complete report of stack testing and documentation of ongoing incinerator operating parameters indicating that the incinerator has met, and will continue to meet, the mercury NESHAP emission rate limit.
- Copies of mercury emission rate tests for the two most recent years in which testing was conducted.

FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

c. If sewage sludge sampling is used to demonstrate compliance, submit a complete report of sewage sludge sampling and documentation of ongoing incinerator operating parameters indicating that the incinerator has met, and will continue to meet, the mercury NESHAP emission rate limit.

E.5. Dispersion Factor.

a. Dispersion factor, in micrograms/cubic meter per gram/second: _____

b. Name and type of dispersion model: _____

c. Submit a copy of the modeling results and supporting documentation with this application.

E.6. Control Efficiency.

a. Control efficiency, in hundredths, for the following pollutants:

Arsenic: _____ Lead: _____
Cadmium: _____ Nickel: _____
Chromium: _____

b. Submit a copy of the results of performance testing and supporting documentation (including testing dates) with this application.

E.7. Risk Specific Concentration for Chromium.

a. Risk specific concentration (RSC) used for chromium, in micrograms per cubic meter: _____

b. Which basis was used to determine the RSC?
____ Table 2 in 40 CFR 503.43
____ Equation 6 in 40 CFR 503.43 (site-specific determination)

c. If Table 2 was used, identify the type of incinerator used as the basis:
____ Fluidized bed with wet scrubber
____ Fluidized bed with wet scrubber and wet electrostatic precipitator
____ Other types with wet scrubber
____ Other types with wet scrubber and wet electrostatic precipitator

d. If Equation 6 was used, provide the following:

Decimal fraction of hexavalent chromium concentration to total chromium concentration in stack exit gas: _____

Submit results of incinerator stack tests for hexavalent and total chromium concentrations, including date(s) of test, with this application.

E.8. Operational Standard for Total Hydrocarbons (THC).

a. Raw value for THC concentration in stack emissions, in ppm: _____
b. Moisture content in stack gas, in percent: _____
c. Oxygen concentration in stack gas, in percent: _____
d. Corrected value for THC concentration in stack emissions, in ppm: _____

e. Submit, with this application, documentation used to derive raw THC concentration, moisture content, oxygen concentration, and corrected THC concentration.

E.9. Operating Parameters.

a. Incinerator type: _____

b. Combustion temperature: _____

Submit, with this application, supporting documentation such as testing date(s), a description of temperature measurement and data recording and handling systems, and a description of how such combustion temperature data have been averaged.

c. Sewage sludge feed rate, in dry metric tons/day: _____

Indicate whether value submitted is:
____ Average use ____ Maximum design

Submit, with this application, supporting documentation describing how the feed rate was calculated.

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d. Incinerator stack height, in meters: _____

Indicate whether value submitted is:

_____ Actual stack height _____ Creditable stack height

e. Submit, with this application, information documenting the operating parameters for the air pollution control device(s) used for this sewage sludge incinerator.

E.10. Monitoring Equipment. List the equipment in place to monitor the following parameters:

a. Total hydrocarbons: _____
b. Percent oxygen: _____
c. Moisture content: _____
d. Combustion temperature: _____
e. Other: _____

E.11. Air Pollution Control Equipment. Submit, with this application, a list of all air pollution control equipment used with this sewage sludge incinerator.

OMITTED

AGA 1681

FACILITY NAME: AGANA STP	PERMIT NUMBER: GU0020087	EPA ID NUMBER: (for official use only)	Form Approved OMB Number Approval Expires xx-xx-xx

F. CERTIFICATION

All applicants must sign the certification in this section.

Read and submit the following certification statement with this application.

Refer to the instructions to determine who is an officer for purposes of this certification.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Officer: _____

Name of Officer: (typed or printed) _____

Official Title of Officer: _____

Telephone Number: _____

Date Signed: _____

AGA 1682

H 1170-

Quanterra Incorporated
1721 South Grand Avenue
Santa Ana, California 92705

714 258-8610 Telephone
714 258-0921 Fax

CARMEN

Quanterra Environmental Services

PUAG
50801

February 21, 1998

QUANTERRA INCORPORATED PROJECT NUMBER: E9B120150
PO/CONTRACT: 51801, P.O. # 99-0169

Montgomery Watson Laboratories
555 E. Walnut Street
Pasadena, CA 91101

Dear Ms. Martha Frost:

This report contains the analytical results for one sample received under chain of custody by Quanterra Incorporated on February 11, 1999.

The case narrative is an integral part of this report.

Preliminary results were sent via facsimile on February 21, 1999.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Keith Aleckson
Project Manager

TABLE OF CONTENTS

QUANTERRA INCORPORATED PROJECT NUMBER E9B120150

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER E9B120150

All applicable internal quality control analyses including calibrations and calibration verifications, calibration (instrument) and method blanks, laboratory control samples (LCS), matrix spikes (MS) and matrix spike duplicates (MSD), and other QC met method-specified acceptance criteria. There were no anomalies associated with this sample lot.

Quanterra Environmental Services - Western Region
Quality Control Definitions

QC Parameter	Definition
QC Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Duplicate Control Sample (DCS)	Consist of a pair of LCSs analyzed within the same QC batch to monitor precision and accuracy independent of sample matrix effects. This QC is performed only if required by client or when insufficient sample is available to perform MS/MSD.
Duplicate Sample (DU)	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Laboratory Control Sample (LCS)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. An LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried through the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank (MB)	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate Spike	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.

Source: Quanterra® Quality Control Program, Policy QA-003, Rev. 0, 8/19/96.

QUANTERRA INCORPORATED - SANTA ANA
PROJECT RECEIPT CHECKLIST

Project #: E9B120150 Date: 2/12/99
Client Name: Montgomery Labs Project Name: Misc. Proj.
Received by: RMANTIS Date/Time Received: 2/11/99 1050
Delivered by : ☑Client ☐Airborne ☐Fed Ex ☐DHL ☐Ultra-Ex ☐Rey B.
☐Edmund ☐UPS ☐ATD ☐Other

Initial / Date

Custody Seal Status: ☑Intact ☐Broken ☐None ..... RM 2/12
Custody Seal #(s): ☐No Seal # .
Sample Container(s): ☑Quanterra ☐Client ☐N/A .....
Temperature(s) (COOLER/BLANK) in °C: 4.0 (CORRECTED TEMP)..
Thermometer Used : ☑IR (Infra-red) ☐Digital (Probe) .....
Samples: ☑Intact ☐Broken ☐Other .....
Anomalies: ☑No ☐Yes (See Anoms) ....
Labeled by .....
Labeling checked by .....

Short-Hold Notification: ☐pH ☐Wet Chem ☐Metals (Filter/Pres) ☐N/A .....
Rush Notification : ☐N/A ☐Extractions ☐LUFT ☐Wet Chem ☐Metals
☐MS/Voa ☐MS/SVoa ☐GC/Voa ☐GC/SVoa .
Outside Analysis(es) (Test/Lab/Date Sent Out) :
TCLP Pest. & Herb To WSTE .....
2/12/99 .....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	-1										pH
VOAh *											N/A
125CGS	8										N/A

h:HCl s:H2SO4 na:Sodium Hydroxide znna: Sodium Hydroxide + Zinc Acetate n:HNO3 n/f:HNO3 field filtered
* Number VOA's w/ air bubbles present n/f/l:HNO3 Lab filtered

LOGGED BY/DATE: RM 2/12/99 REVIEWED BY/DATE: [signature] 2/12/99

C008388 PRC Ver 3 110698

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Laboratory/Client Sample Cross-Reference

Lab Sample ID	Client Sample ID	Date	Matrix
E9B120150-001	990211001 AGANA SEWAGE CAKE	02/09/99	Solid

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Analytical Data Report

Client: MONTGOMERY LABORATORIES

GC/MS Volatiles

Précis
a Quanterra Product

Analytical Data Report

Client: MONTGOMERY LABORATORIES

Client Sample ID: 990211001 AGANA SEWAGE CAKE
Lab Sample ID: E9B120150-001

Volatile Organics, GC/MS (8260B)
TCLP Leachate / Purge-and-Trap

Batch: 9046296
Matrix: Solid
Units: mg/L
Dil. Factor: 25
Method: 8260B
Preparation: 1311/5030B

Date Sampled: 02/09/99
Date Prepared: 02/18/99
Date Analyzed: 02/18/99

Analyte	Result	RL	Qualifier
Benzene	ND	16	
2-Butanone	ND	78	
Carbon tetrachloride	ND	16	
Chlorobenzene	ND	16	
Chloroform	ND	16	
1,2-Dichloroethane	ND	16	
1,1-Dichloroethene	ND	16	
Tetrachloroethene	ND	16	
Trichloroethene	ND	16	
Vinyl chloride	ND	16	

Surrogate	% Rec.	Acceptance Limit	Qualifier
4-Bromofluorobenzene	111	60-140	
,2-Dichloroethane-d4	118	60-140	
Toluene-d8	109	60-140	

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Analytical Data Report

Client: MONTGOMERY LABORATORIES

GC/MS Semivolatiles

Précis
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Analytical Data Report

Client: MONTGOMERY LABORATORIES

Client Sample ID: 990211001 AGANA SEWAGE CAKE
Lab Sample ID: E9B120150-001

Base/Neutrals and Acids (8270C)
TCLP Leachate / Sep Funnel Extraction

Batch: 9046301
Matrix: Solid
Units: mg/L
Dil. Factor: 1

Method: 8270C
Preparation: 1311/3510C

Date Sampled: 02/09/99
Date Prepared: 02/16/99
Date Analyzed: 02/17/99

Analyte	Result	RL	Qualifier
m-Cresol & p-Cresol	**0.69**	**0.10**	
1,4-Dichlorobenzene	ND	0.050	
2,4-Dinitrotoluene	ND	0.050	
Hexachlorobenzene	ND	0.050	
Hexachlorobutadiene	ND	0.050	
Hexachloroethane	ND	0.050	
o-Cresol	ND	0.050	
Nitrobenzene	ND	0.050	
Pentachlorophenol	ND	0.25	
Pyridine	ND	0.25	
2,4,5-Trichlorophenol	ND	0.050	
2,4,6-Trichlorophenol	ND	0.050	

Surrogate	% Rec.	Acceptance Limit	Qualifier
2-Fluorobiphenyl	82	20-125	
2-Fluorophenol	79	20-125	
Nitrobenzene-d5	90	20-125	
Phenol-d5	75	10-125	
Terphenyl-d14	85	10-125	
2,4,6-Tribromophenol	96	10-125	

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Analytical Data Report

Client: MONTGOMERY LABORATORIES

Metals

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Analytical Data Report

Client: MONTGOMERY LABORATORIES

Client Sample ID: 990211001 AGANA SEWAGE CAKE
Lab Sample ID: E9B120150-001

Inductively Coupled Plasma (6010B)
TCLP Leachate / Acid Digestion

Batch: 9047310
Matrix: Solid
Units: mg/L

Method: 6010B
Preparation: 1311/3010A

Date Sampled: 02/09/99
Date Prepared: 02/16/99
Date Analyzed: 02/17/99

Analyte	Result	RL	Dil. Factor	Qualifier
Arsenic	ND	0.50	1	
Barium	ND	10.0	1	
Cadmium	ND	0.10	1	
Chromium	ND	0.50	1	
Lead	ND	0.50	1	
Selenium	ND	0.25	1	
Silver	ND	0.50	1	

Client Sample ID: 990211001 AGANA SEWAGE CAKE
Lab Sample ID: E9B120150-001

Mercury (7470A, Cold Vapor) - Liquid
TCLP Leachate / Mercury Preparation

Batch: 9047242
Matrix: Solid
Units: mg/L

Method: 7470A
Preparation: 1311/7470A

Date Sampled: 02/09/99
Date Prepared: 02/16/99
Date Analyzed: 02/17/99

Analyte	Result	RL	Dil. Factor	Qualifier
Mercury	ND	0.0020	1	

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Quality Control Batch Assignment Report

Lab Sample ID	Matrix	Method	Batch ID	MS Run Number
Metals				
E9B120150-001	SOLID	6010B	9047310	9047141
E9B120150-001		7470A	9047242	9047091
GC/MS Semivolatiles				
E9B120150-001	SOLID	8270C	9046301	9047130
GC/MS Volatiles				
E9B120150-001	SOLID	8260B	9046296	9047102

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Quality Control Reports

GC/MS Volatiles

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Quality Control Reports

Batch ID: 9046296

Volatile Organics, GC/MS (8260B)

Method Blank

Lab Sample ID: E9B150000-295B
Matrix: Solid
Units: mg/L

Analyte	Result	RL	Qual.	Date Analyzed
Benzene	ND	16		02/17/99
2-Butanone	ND	78		02/17/99
Carbon tetrachloride	ND	16		02/17/99
Chlorobenzene	ND	16		02/17/99
Chloroform	ND	16		02/17/99
1,2-Dichloroethane	ND	16		02/17/99
1,1-Dichloroethene	ND	16		02/17/99
Tetrachloroethene	ND	16		02/17/99
Trichloroethene	ND	16		02/17/99
Vinyl chloride	ND	16		02/17/99

Surrogate	% Rec.	Acceptance Limit	Qualifier
4-Bromofluorobenzene	113	60-140	
1,2-Dichloroethane-d4	120	60-140	
Toluene-d8	111	60-140	

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Quality Control Reports

Batch ID: 9046296

Volatile Organics, GC/MS (8260B)

Laboratory Control Sample

Lab Sample ID: E9B150000-296C
Matrix: Solid
Units: mg/L

Analyte	Spike Amount	Result	% Rec.	QC Limits	Qual.
Benzene	0.250	ND	93	60-140	
2-Butanone	0.250	ND	117	50-150	
Carbon tetrachloride	0.250	ND	90	60-140	
Chlorobenzene	0.250	ND	91	60-140	
Chloroform	0.250	ND	92	60-140	
1,2-Dichloroethane	0.250	ND	95	60-140	
1,1-Dichloroethene	0.250	ND	83	60-140	
Tetrachloroethene	0.250	ND	82	60-140	
Trichloroethene	0.250	ND	90	60-140	
Vinyl chloride	0.250	ND	68	50-150	
Surrogate					
4-Bromofluorobenzene	0.250	0.268	107	60-140	
1,2-Dichloroethane-d4	0.250	0.282	113	60-140	
Toluene-d8	0.250	0.272	109	60-140	

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Quality Control Reports

Batch ID: 9046296

Volatile Organics, GC/MS (8260B)

Matrix Spike / Matrix Spike Duplicate

Lab Sample ID E9B120150-001S
Matrix: Solid
Units: mg/L

Analyte	Sample Result	Spike Amount	Result MS	Result MSD	% Rec. MS	% Rec. MSD	Control Limits	RPD	Qualifier MS	Qualifier MSD
Benzene	ND	0.250	0.222	0.226	89	90	60-140	1.7		
2-Butanone	ND	0.250	0.594	0.608	79	85	50-150	2.2		
Carbon tetrachloride	ND	0.250	0.210	0.226	84	91	60-140	7.4		
Chlorobenzene	ND	0.250	0.223	0.223	89	89	60-140	0.13		
Chloroform	ND	0.250	0.227	0.230	91	92	60-140	1.3		
1,2-Dichloroethane	ND	0.250	0.237	0.236	95	94	60-140	0.67		
1,1-Dichloroethene	ND	0.250	0.187	0.199	75	80	60-140	6.0		
Tetrachloroethene	ND	0.250	0.193	0.201	77	80	60-140	4.0		
Trichloroethene	ND	0.250	0.216	0.226	86	90	60-140	4.5		
Vinyl chloride	ND	0.250	0.148	0.147	59	59	50-150	0.61		
Surrogate										
4-Bromofluorobenzene	0.28	0.250	0.284	0.284	113	113	60-140			
1,2-Dichloroethane-d4	0.29	0.250	0.318	0.330	127	132	60-140			
Toluene-d8	0.27	0.250	0.274	0.265	109	106	60-140			

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Quality Control Reports

GC/MS Semivolatiles

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Quality Control Reports

Batch ID: 9046301

Base/Neutrals and Acids (8270C)

Method Blank

Lab Sample ID: E9B150000-303B
Matrix: Solid
Units: mg/L

Analyte	Result	RL	Qual.	Date Analyzed
m-Cresol & p-Cresol	ND	0.10		02/17/99
1,4-Dichlorobenzene	ND	0.050		02/17/99
2,4-Dinitrotoluene	ND	0.050		02/17/99
Hexachlorobenzene	ND	0.050		02/17/99
Hexachlorobutadiene	ND	0.050		02/17/99
Hexachloroethane	ND	0.050		02/17/99
o-Cresol	ND	0.050		02/17/99
Nitrobenzene	ND	0.050		02/17/99
Pentachlorophenol	ND	0.25		02/17/99
Pyridine	ND	0.25		02/17/99
2,4,5-Trichlorophenol	ND	0.050		02/17/99
2,4,6-Trichlorophenol	ND	0.050		02/17/99

Surrogate	% Rec.	Acceptance Limit	Qualifier
2-Fluorobiphenyl	78	20-125	
2-Fluorophenol	71	20-125	
Nitrobenzene-d5	78	20-125	
Phenol-d5	67	10-125	
Terphenyl-d14	86	10-125	
2,4,6-Tribromophenol	96	10-125	

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Quality Control Reports

Batch ID: 9046301

Base/Neutrals and Acids (8270C)

Laboratory Control Sample

Lab Sample ID: E9B150000-301C
Matrix: Solid
Units: mg/L

Analyte	Spike Amount	Result	% Rec.	QC Limits	Qual.
m-Cresol & p-Cresol	0.750	0.612	82	10-150	
1,4-Dichlorobenzene	0.500	0.364	73	50-120	
2,4-Dinitrotoluene	0.500	0.484	97	20-140	
Hexachlorobenzene	0.500	0.487	97	50-125	
Hexachlorobutadiene	0.500	0.382	76	20-150	
Hexachloroethane	0.500	0.329	66	40-120	
o-Cresol	0.750	0.627	84	10-150	
Nitrobenzene	0.500	0.432	86	10-150	
Pentachlorophenol	0.750	0.797	106	30-150	
Pyridine	0.500	0.288	58	1.0-150	
2,4,5-Trichlorophenol	0.750	0.680	91	30-130	
2,4,6-Trichlorophenol	0.750	0.670	89	40-130	
Surrogate					
2-Fluorobiphenyl	0.500	0.425	85	20-125	
2-Fluorophenol	0.750	0.617	82	20-125	
Nitrobenzene-d5	0.500	0.441	88	20-125	
Phenol-d5	0.750	0.566	75	10-125	
Terphenyl-d14	0.500	0.482	96	10-125	
2,4,6-Tribromophenol	0.750	0.751	100	10-125	

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Quality Control Reports

Batch ID: 9046301

Base/Neutrals and Acids (8270C)

Matrix Spike / Matrix Spike Duplicate

Lab Sample ID E9B120150-001S
Matrix: Solid
Units: mg/L

Analyte	Sample Result	Spike Amount	Result MS	Result MSD	% Rec. MS	% Rec. MSD	Control Limits	RPD	Qualifier MS	Qualifier MSD
m-Cresol & p-Cresol	0.69	0.750	1.24	1.09	72	53	10-150	12		
1,4-Dichlorobenzene	ND	0.500	0.363	0.328	73	66	50-120	10		
2,4-Dinitrotoluene	ND	0.500	0.511	0.507	102	101	20-140	0.68		
Hexachlorobenzene	ND	0.500	0.473	0.457	95	91	50-125	3.5		
Hexachlorobutadiene	ND	0.500	0.384	0.347	77	69	20-150	10		
Hexachloroethane	ND	0.500	0.332	0.299	66	60	40-120	11		
o-Cresol	ND	0.750	0.644	0.568	86	76	10-150	12		
Nitrobenzene	ND	0.500	0.436	0.393	87	79	10-150	10		
Pentachlorophenol	ND	0.750	0.776	0.774	104	103	30-150	0.25		
Pyridine	ND	0.500	0.193	0.143	39	29	1.0-150	30		
2,4,5-Trichlorophenol	ND	0.750	0.695	0.666	93	89	30-130	4.2		
2,4,6-Trichlorophenol	ND	0.750	0.723	0.676	96	90	40-130	6.6		
Surrogate										
2-Fluorobiphenyl	0.41	0.500	0.431	0.384	86	77	20-125			
2-Fluorophenol	0.59	0.750	0.581	0.535	78	71	20-125			
Nitrobenzene-d5	0.45	0.500	0.447	0.407	89	81	20-125			
Phenol-d5	0.56	0.750	0.555	0.499	74	67	10-125			
Terphenyl-d14	0.43	0.500	0.504	0.504	101	101	10-125			
2,4,6-Tribromophenol	0.72	0.750	0.748	0.738	100	98	10-125			

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Quality Control Reports

Metals

Précis
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Quality Control Reports

Batch ID: 9047310

Inductively Coupled Plasma (6010B)

Method Blank

Lab Sample ID: E9B160000-263B
Matrix: Solid
Units: mg/L

Analyte	Result	RL	Qual.	Date Analyzed
Arsenic	ND	0.50		02/17/99
Barium	ND	10.0		02/17/99
Cadmium	ND	0.10		02/17/99
Chromium	ND	0.50		02/17/99
Lead	ND	0.50		02/17/99
Selenium	ND	0.25		02/17/99
Silver	ND	0.50		02/17/99

Laboratory Control Sample

Lab Sample ID: E9B160000-310C
Matrix: Solid
Units: mg/L

Analyte	Spike Amount	Result	% Rec.	QC Limits	Qual.
Arsenic	1.00	0.958	96	80-120	
Barium	1.00	ND	90	80-120	
Cadmium	1.00	0.905	91	80-120	
Chromium	1.00	0.943	94	80-120	
Lead	1.00	0.869	87	80-120	
Selenium	1.00	0.979	98	80-120	
Silver	1.00	0.795	80	80-120	

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Quality Control Reports

Batch ID: 9047310

Inductively Coupled Plasma (6010B)

Matrix Spike / Matrix Spike Duplicate

Lab Sample ID E9B120150-001S
Matrix: Solid
Units: mg/L

Analyte	Sample Result	Spike Amount	Result MS	Result MSD	% Rec. MS	% Rec. MSD	Control Limits	RPD	Qualifier MS	Qualifier MSD
Arsenic	ND	1.00	0.939	0.969	91	94	50-150	3.1		
Barium	ND	1.00	1.74	1.76	101	103	50-150	1.1		
Cadmium	ND	1.00	0.878	0.904	88	90	50-150	3.0		
Chromium	ND	1.00	0.892	0.910	89	91	50-150	2.0		
Lead	ND	1.00	0.847	0.874	85	87	50-150	3.1		
Selenium	ND	1.00	0.980	0.977	98	98	50-150	0.30		
Silver	ND	1.00	0.862	0.872	86	87	50-150	1.1		

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Quality Control Reports

Batch ID: 9047242

Mercury (7470A, Cold Vapor) - Liquid

Method Blank

Lab Sample ID: E9B160000-263B
Matrix: Solid
Units: mg/L

Analyte	Result	RL	Qual.	Date Analyzed
Mercury	ND	0.0020		02/17/99

Laboratory Control Sample

Lab Sample ID: E9B160000-242C
Matrix: Solid
Units: mg/L

Analyte	Spike Amount	Result	% Rec.	QC Limits	Qual.
Mercury	0.00500	0.00554	111	80-120	

Matrix Spike / Matrix Spike Duplicate

Lab Sample ID E9B120150-001S
Matrix: Solid
Units: mg/L

Analyte	Sample Result	Spike Amount	Result		% Rec.		Control Limits	RPD	Qualifier	
			MS	MSD	MS	MSD			MS	MSD
Mercury	ND	0.00500	0.00555	0.00558	111	112	80-120	0.53		

MONTGOMERY WATSON LABORATORIES
a Division of Montgomery Watson Americas, Inc.
555 East Walnut Street
Pasadena, California 91101
Tel: 626 568 6400 Fax: 626 568 6324
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Guam Water Authority
Government of Guam

P.O.Box 3010

Agana, GUAM , USA 96910

Attention: Carmen Sian-Denton
Fax: (671) 637-2592

HDS Hillary Strayer

Report#: 51801
DRINKING

MONTGOMERY WATSON LABORATORIES
a Division of Montgomery Watson Americas, Inc.
555 East Walnut Street
Pasadena, California 91101
Tel: 626 568 6400 Fax: 626 568 6324
1 800 566 LABS (1 800 566 5227)

Report
Comments
#51801

Group Comments

TCLP analysis are submitted by Quanterra. GG 2/22/99.

MONTGOMERY WATSON LABORATORIES
a Division of Montgomery Watson Americas, Inc.
555 East Walnut Street
Pasadena, California 91101
Tel: 626 568 6400 Fax: 626 568 6324
1 800 566 LABS (1 800 566 5227)

Laboratory
Report
#51801

Guam Water Authority
Carmen Sian-Denton
Government of Guam
P.O.Box 3010
Agana, GUAM , USA 96910

Samples Received
11-feb-1999 13:05:59

Prepared	Analyzed	QC Batch#	Method	Analyte	Result	Units	MDL	Dilution
AGANA SEWAGE CAKE (990211001)			**Sampled on 02/09/99**					
	02/17/99		(ML)	Custom Inorganic Analysis	SubQuant	None	0.0000	1
	02/17/99		( )	GC/MS custom analysis	SubQuant	None	0.0000	1

MAR 2 3 RECD

99-0169
PUAG
51801

Quanterra Incorporated
880 Riverside Parkway
West Sacramento, California 95605

916 373-5600 Telephone
916 372-1059 Fax

March 18, 1999

QUANTERRA INCORPORATED PROJECT NUMBER: 304187
PO/CONTRACT: MWL Project# 51801/Sub PO# 99-0169

Martha Frost
Montgomery Laboratories
555 East Walnut
Pasadena, CA 91101

Dear Ms. Frost,

This report contains the analytical results for the one sample received under chain of custody by Quanterra Incorporated on February 15, 1999. This sample is associated with your 51801 project.

The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916)374-4381.

Sincerely,

Jon Gildersleeve
Project Manager

Quanterra

TABLE OF CONTENTS

QUANTERRA INCORPORATED PROJECT NUMBER 304187

Quanterra

CASE NARRATIVE

QUANTERRA INCORPORATED PROJECT NUMBER 304187

There were no anomalies associated with this project.

Quanterra

Quanterra - Western Region

Quality Control Definitions

QC Parameter	Definition
QC Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Duplicate Control Sample (DCS)	Consist of a pair of LCSs analyzed within the same QC batch to monitor precision and accuracy independent of sample matrix effects. This QC is performed only if required by client or when insufficient sample is available to perform MS/MSD.
Duplicate Sample (DU)	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Laboratory Control Sample (LCS)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. An LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MSs/MSDs are carried through the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank (MB)	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate Spike	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.

Source: Quanterra® Quality Control Program, Policy QA-003, Rev. 0, 8/19/96.

Quanterra

SAMPLE DESCRIPTION INFORMATION
for
Montgomery Watson Laboratories

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
304187-0001-MB	Method Blank	AQUEOUS			18 FEB 99
304187-0001-SA	990211001 AGANA SEWAGE CAKE	AQUEOUS	09 FEB 99		18 FEB 99

Quanterra

TCLP Chlorinated Pesticides - Method 8080

Quanterra

Chlorinated Pesticides - Toxicity Characteristic List (TCLP)
TCLP Leachate
Method 8080

Client Name: Montgomery Watson Laboratories
Client ID: Method Blank
Lab ID: 304187-0001-MB
Matrix: AQUEOUS

Sampled: NA
Received: NA
Authorized: 13 FEB 99

Leached: 15 FEB 99
Prepared: 22 FEB 99
Analyzed: 03 MAR 99

Parameter	Result	Units	Reporting Limit
gamma-BHC (Lindane)	ND	mg/L	0.00050
Chlordane	ND	mg/L	0.0050
Endrin	ND	mg/L	0.0010
Heptachlor (and its epoxide)	ND	mg/L	0.00050
Methoxychlor	ND	mg/L	0.0050
Toxaphene	ND	mg/L	0.050

Surrogate	Recovery	
Tetrachloro-m-xylene	87	%
Decachlorobiphenyl	82	%

ND = Not detected
NA = Not applicable

Reported By: Marcia Reed

Approved By: Kris Rogers

The cover letter is an integral part of this report.
Rev 230787

Quanterra

Chlorinated Pesticides - Toxicity Characteristic List (TCLP)
TCLP Leachate
Method 8080

Client Name: Montgomery Watson Laboratories
Client ID: 990211001 AGANA SEWAGE CAKE
Lab ID: 304187-0001-SA
Matrix: AQUEOUS

Sampled: 09 FEB 99
Received: 18 FEB 99
Authorized: 13 FEB 99

Leached: 15 FEB 99
Prepared: 22 FEB 99
Analyzed: 03 MAR 99

Parameter	Result	Units	Reporting Limit
gamma-BHC (Lindane)	ND	mg/L	0.00050
Chlordane	ND	mg/L	0.0050
Endrin	ND	mg/L	0.0010
Heptachlor (and its epoxide)	ND	mg/L	0.00050
Methoxychlor	ND	mg/L	0.0050
Toxaphene	ND	mg/L	0.050

Surrogate	Recovery	
Tetrachloro-m-xylene	71	%
Decachlorobiphenyl	32	%

ND = Not detected
NA = Not applicable

Reported By: Marcia Reed

Approved By: Kris Rogers

The cover letter is an integral part of this report.
Rev 230787

Quanterra

QC LOT ASSIGNMENT REPORT
Semivolatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (LCS/BLANK)
304187-0001-MB	LEACHATE	OCP-TL	22 FEB 99-11R	22 FEB 99-11R
304187-0001-SA	LEACHATE	OCP-TL	22 FEB 99-11R	22 FEB 99-11R

Quanterra

METHOD BLANK REPORT
Semivolatile Organics by GC
Project: 304187

Test: 8080CP-OTC-TL
Method: 8080
Matrix: LEACHATE
QC Lot: 22 FEB 99-11R
Analyzed: 03 MAR 99

Chlorinated Pesticides - Toxicity Characteristic List (TCLP)

QC Run: 22 FEB 99-11R
Time: 04:21

Analyte	Result	Units	Reporting Limit	Qualifier
gamma-BHC (Lindane)	ND	mg/L	0.00050	
Chlordane	ND	mg/L	0.0050	
Endrin	ND	mg/L	0.0010	
Heptachlor (and its epoxide)	ND	mg/L	0.00050	
Methoxychlor	ND	mg/L	0.0050	
Toxaphene	ND	mg/L	0.050	

Surrogate	% Recovery	Acceptable Range
Tetrachloro-m-xylene	84	30 -150
Decachlorobiphenyl	60	30 -150

ND = Not Detected

Quanterra

DUPLICATE CONTROL SAMPLE REPORT
emivolatile Organics by GC
Project: 304187

Category: OCP-TL Organochlorine Pesticides - TLCP Leachate
Testcode: 8080CP-OTC-TL Method: 8080
Matrix: LEACHATE Concentration Units: mg/L
QC Lot: 22 FEB 99-11R Analyzed Date: 03 MAR 99 Time: 06:13

Analyte	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Precision (RPD) Limit
gamma-BHC (Lindane)	0.00250	0.00166	0.00165	66	66	56-103	0.57	23
Heptachlor	0.00250	0.00208	0.00212	83	85	49-101	2.2	24
Aldrin	0.00250	0.00218	0.00222	87	89	48-99	2.1	31
Dieldrin	0.00500	0.00502	0.00494	100	99	60-106	1.6	25
Endrin	0.00500	0.00518	0.00504	104	101	63-118	2.7	24
4,4'-DDT	0.00500	0.00371	0.00360	74	72	55-112	3.0	27

Surrogate	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
Tetrachloro-m-xylene	0.00020	0.00016	0.00017	82	85	30-150
Decachlorobiphenyl	0.00020	0.00016	0.00016	80	79	30-150

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quanterra

TCLP Herbicides - Method 8150

AGA 1722

Quanterra

TCLP Herbicides
TCLP Leachate
Method 8150

Client Name: Montgomery Watson Laboratories
Client ID: Method Blank
LAB ID: 304187-0001-MB
Matrix: AQUEOUS
Authorized: 13 FEB 99

Sampled: NA
Prepared: 22 FEB 99

Received: NA
Analyzed: 27 FEB 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
2,4-D	ND	mg/L	0.010	
2,4,5-TP (Silvex)	ND	mg/L	0.0020	

Surrogate	Recovery	Acceptable Range
2,4-DCAA	65 %	50 - 150

NA = Not Applicable
ND = Not Detected

Reported By: Jon Edmondson

Approved By: Rose Harrelson

The cover letter is an integral part of this report.
Rev 230787

Quanterra

TCLP Herbicides
TCLP Leachate
Method 8150

Client Name: Montgomery Watson Laboratories
Client ID: 990211001 AGANA SEWAGE CAKE
LAB ID: 304187-0001-SA
Matrix: AQUEOUS Sampled: 09 FEB 99 Received: 18 FEB 99
Authorized: 13 FEB 99 Prepared: 22 FEB 99 Analyzed: 27 FEB 99

Dilution Factor: 1.0

Parameter	Result	Units	Reporting Limit	Qualifier
2,4-D	ND	mg/L	0.010	
2,4,5-TP (Silvex)	ND	mg/L	0.0020	

Surrogate	Recovery	Acceptable Range
2,4-DCAA	84 %	50 - 150

ND = Not Detected

Reported By: Jon Edmondson Approved By: Rose Harrelson

The cover letter is an integral part of this report.
Rev 230787

Quanterra

QC LOT ASSIGNMENT REPORT
Semivolatile Organics by GC

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (LCS/BLANK)
304187-0001-MB	LEACHATE	8150-TL	22 FEB 99-11A	22 FEB 99-11A
304187-0001-SA	LEACHATE	8150-TL	22 FEB 99-11A	22 FEB 99-11A

Quanterra

METHOD BLANK REPORT
Semivolatile Organics by GC
Project: 304187

Test: 8150-TCLP-TL TCLP Herbicides
Method: 8150
Matrix: LEACHATE
QC Lot: 22 FEB 99-11A QC Run: 22 FEB 99-11A
Analyzed: 27 FEB 99 Time: 20:23

Analyte	Result	Units	Reporting Limit	Qualifier
2,4-D	ND	mg/L	0.010	
2,4,5-TP (Silvex)	ND	mg/L	0.0020	

Surrogate	% Recovery	Acceptable Range
2,4-DCAA	62	50 -150

ND = Not Detected

Quanterra

DUPLICATE CONTROL SAMPLE REPORT
Semivolatile Organics by GC
Project: 304187

Category: 8150-TL Herbicides, Leachate
Testcode: 8150-TCLP-TL Method: 8150
Matrix: LEACHATE Concentration Units: mg/L
QC Lot: 22 FEB 99-11A Analyzed Date: 27 FEB 99 Time: 21:53

Analyte	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy (%) DCS1	Accuracy (%) DCS2	Limits	Precision (RPD) DCS	Precision (RPD) Limit
2,4-D	0.00500	0.00373	0.00375	75	75	50-150	0.62	40
2,4,5-TP (Silvex)	0.00100	0.000851	0.000852	85	85	50-150	0.14	40

Surrogate	Concentration Spiked	Concentration Measured DCS1	Concentration Measured DCS2	Accuracy(%) DCS1	Accuracy(%) DCS2	Limits
2,4-DCAA	0.0040	0.0036	0.0036	90	89	50-150

Calculations are performed before rounding to avoid round-off errors in calculated results.

MAP

1999 DISCHARGE MONITORING REPORTS

7

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16)	(17-19)
GU0020087	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR (20-21)	MO (22-23)	DAY (24-25)		YEAR (26-27)	MO (28-29)	DAY (30-31)
FROM	99	4	1	TO	99	4	30

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53)	QUANTITY OR LOADING (54-61)		(4 Card Only) (38-45)	QUANTITY OR CONCENTRATION (46-53)	(54-61)		NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW	SAMPLE MEASUREMENT	8.0	9.8	MGD				mgd	0	30/30	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	8754	10629	lbs/day	110	132	178	mg/l		4/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	4974	5912	lbs/day	59	75	99	mg/l	0	4/30	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	6824	11232	lbs/day	62	103	178	mg/l		19/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	2915	4193	lbs/day	22	44	60	mg/l	0	19/30	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.3	0.5	ml/l	0	19/30	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	240	240	lbs/day	3.6	3.6	3.6	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				6.9	7.0	7.3		12	19/30	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRICIPLE EXECUTIVE OFFICER

RICHARD A. QUINTANILLA

GENERAL MANAGER, GWA

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 671 — NUMBER 479-7844

DATE: YEAR — MO — DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH below 7.0 on 12 of 19 dates sample

Explaination of violations attached at end of DMR's

AGA 1732

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF APRIL 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1							7.60
2							7.58
3							8.07
4	7.51	78		3.0	4996		7.68
5	7.28	174		8.0	11232		7.74
6	7.43	178	178	8.0	10629	10629	7.16
7	7.27	144		10.0	9620		8.01
8	7.22	120		13.0	8387		8.38
9							7.94
10							8.27
11	7.01	104		7.0	6748		7.78
12							9.80
13	7.01	98	110	5.0	6702	7523	8.20
14	7.20	74		3.0	5061		8.20
15	7.11	84		3.0	5752		8.21
16							8.23
17							7.74
18	7.25	82		4.0	5286		7.73
19	7.21	98		3.0	6539		8.00
20	7.10	96	120	7.5	6813	8517	8.51
21	7.25	90		1.5	5900		7.86
22	7.22	90		12.0	5554		7.40
23							7.94
24							7.59
25	7.10	62		5.0	4204		8.13
26	7.07	82		6.0	5704		8.34
27	7.31	100	119	2.5	7014	8347	8.41
28	7.16	112		4.0	7435		7.96
29	7.13	84		3.5	6074		8.67
30							8.20
AVG	7.20	103	132	5.7	6824	8754	8.04
MIN	7.01	62	110	1.5	4204	7523	7.16
MAX	7.51	178	178	13.0	11232	10629	9.80
COUNT	19	19	4	19	19	4	30

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1										
2										
3										
4	7.16	28		0.3	1793		64%			
5	7.23	60		0.2	3873		66%			
6	7.29	50	99	0.1	2986	5912	72%	44%		
7	7.16	42		0.2	2806		71%			
8	6.91	60		0.3	4193		50%			
9										
10										
11	6.95	46		0.4	2985		56%			
12										
13	6.99	42	62	0.3	2872	4240	57%	44%		
14	6.99	32		0.3	2188		57%			
15	6.99	40		0.2	2739		52%			
16										
17										
18	7.21	38		0.2	2450		54%			
19	6.97	46		0.2	3069		53%		3.6	240.192
20	6.89	42	79	0.3	2981	5607	56%	34%		
21	6.89	48		0.1	3147		47%			
22	6.89	46		0.5	2839		49%			
23										
24										
25	6.95	22		0.5	1492		65%			
26	7.02	56		0.4	3895		32%			
27	6.99	52	59	0.4	3647	4138	48%	50%		
28	7.00	34		0.2	2257		70%			
29	6.99	44		0.2	3182		48%			
30										
AVG	7.02	44	75	0.3	2915	4974	56%	43%	3.6	240.192
MIN	6.89	22	59	0.1	1492	4138	32%	34%	3.6	240.192
MAX	7.29	60	99	0.5	4193	5912	72%	50%	3.6	240.192
COUNT	19	19	4	19	19	4	19	4	1	1

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

12th NO SAMPLES AS PLANT ON BYPASS.

AGA 1733

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER: GU0020087

(17-19) DISCHARGE NUMBER: 001

MONITORING PERIOD

	YEAR (20-21)	MO (22-23)	DAY (24-25)		YEAR (26-27)	MO (28-29)	DAY (30-31)
FROM	99	5	1	TO	99	5	31

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) AVERAGE	QUANTITY OR LOADING (54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) MINIMUM	QUANTITY OR CONCENTRATION (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.1	9.0	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	8561	10909	lbs/day	94	122	150	mg/l	0	4/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	5139	6709	lbs/day	58	73	93	mg/l	0	4/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	7219	12750	lbs/day	64	106	194	mg/l	0	21/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3317	5561	lbs/day	28	49	80	mg/l	0	21/31	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.3	0.8	ml/l	0	21/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	374	374	lbs/day	5.4	5.4	5.4	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				6.9	7.2	7.8		7	21/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRICIPLE EXECUTIVE OFFICER

RICHARD A. QUINTANILLA

GENERAL MANAGER, GWA

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 671 | NUMBER 479-7844

DATE: YEAR | MO | DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

pH was below 7.0 on 7 sample dates earlier this month. This was corrected and pH has remained above 7.0 since the 16th.

Explaination of violations attached at end of DMR's

AGA 1734

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF MAY 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1							8.35
2	7.19	76		3.0	4779		7.54
3	7.09	68		3.0	4350		7.67
4	7.16	100	133	4.0	6956	9251	8.34
5	7.20	66		4.0	4569		8.30
6	7.38	100		3.5	7072		8.48
7							8.44
8							8.36
9	7.03	80		5.0	5264		7.89
10	7.30	96		5.0	6333		7.91
11	7.24	72	94	10.0	4600	6005	7.66
12	7.18	96		10.0	5797		7.24
13	7.21	104		10.0	6800		7.84
14							7.69
15							6.99
16	7.35	64		7.0	4126		7.73
17	7.54	82		3.0	5663		8.28
18	7.14	156	150	8.0	11345	10909	8.72
19	7.31	122		8.5	9167		9.01
20	7.33	194		8.5	12750		7.88
21							7.69
22							8.62
23	7.27	170		7.0	12051		8.50
24	7.79	150		9.0	10821		8.65
25	7.27	108	112	7.5	7791	8080	8.65
26	7.26	112		8.0	7772		8.32
27	7.36	102		7.5	6712		7.89
28							8.38
29							8.17
30							8.02
31	7.52	102		2.5	6882		8.09
AVG	7.29	106	122	6.4	7219	8561	8.11
MIN	7.03	64	94	2.5	4126	6005	6.99
MAX	7.79	194	150	10.0	12750	10909	9.01
COUNT	21	21	4	21	21	4	31

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1										
2	7.14	38		0.5	2390		50%			
3	6.99	50		0.4	3198		26%			
4	7.00	40	59	0.3	2782	4104	60%	56%		
5	6.90	40		0.3	2769		39%		5.4	373.799
6	7.04	42		0.4	2970		58%			
7										
8										
9	6.94	44		0.4	2895		45%			
10	6.98	56		0.4	3694		42%			
11	6.98	28	58	0.2	1789	3705	61%	38%		
12	6.98	62		0.2	3744		35%			
13	6.99	46		0.3	3008		56%			
14										
15										
16	7.11	40		0.5	2579		38%			
17	7.84	28		0.1	1934		66%			
18	7.20	62	83	0.1	4509	6036	60%	45%		
19	7.39	74		0.2	5561		39%			
20	7.30	80		0.1	5258		59%			
21										
22										
23	7.29	52		0.7	3686		69%			
24	7.42	46		0.3	3318		69%			
25	7.23	66	93	0.3	4761	6709	39%	17%		
26	7.26	52		0.8	3608		54%			
27	7.33	40		0.2	2632		61%			
28										
29										
30										
31	7.26	38		0.2	2564		63%			
AVG	7.17	49	73	0.3	3317	5139	52%	39%	5.4	373.799
MIN	6.90	28	58	0.1	1789	3705	26%	17%	5.4	373.799
MAX	7.84	80	93	0.8	5561	6709	69%	56%	5.4	373.799
COUNT	21	21	4	21	21	4	21	4	1	1

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

AGA 1735

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER	(17-19) DISCHARGE NUMBER
GU0020087	001

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	99	6	1	TO	99	6	30
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) QUANTITY OR CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	7.9	8.6	MGD				mgd	0	30/30	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	10243	13505	lbs/day	133	153	193	mg/l		4/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	6478	7767	lbs/day	91	97	111	mg/l	1	4/30	COMPOSITE
	PERMIT REQUIRSMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8416	10374	lbs/day	82	128	152	mg/l		22/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3681	6298	lbs/day	32	56	90	mg/l	0	22/30	COMPOSITE
	PERMIT REQUIREMENT	6009	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.2	0.4	1.1	ml/l	0	22/30	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	#DIV/0!	0	lbs/day	0	#DIV/0!	0	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.2	7.3	7.4		0	22/30	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRICIPLE EXECUTIVE OFFICER		TELEPHONE		DATE		
RICHARD A. QUINTANILLA GENERAL MANAGER, GWA	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)		671	479-7844			
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

BOD monthly average concentration was exceeded by 17 mg/l. No results were obtainable on the 15th due to technican error in reading samples. Samples were discarded before error was discovered

Explaination of violations attached at end of DMR's

AGA 1736

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF JUNE 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.45	124	133	3.0	8108	8696	7.84
2	7.49	98		3.0	6465		7.91
3	7.49	136		3.5	8280		7.30
4							7.79
5							7.48
6	7.53	132		3.0	8488		7.71
7	7.39	130		4.5	8186		7.55
8	7.32	114	136	7.0	7673	9153	8.07
9	7.40	142		6.5	8835		7.46
10	7.47	152		7.5	9736		7.68
11							8.11
12							8.22
13	7.51	138		3.5	8620		7.49
14	7.57	120		4.0	8066		8.06
15	7.51	146		3.0	10374		8.52
16	7.58	130		2.5	9031		8.33
17	7.60	118		2.0	7991		8.12
18							8.39
19							7.98
20	7.36	82		6.0	5232		7.65
21	7.52	126		4.0	8333		7.93
22	7.41	144	193	9.0	10076	13505	8.39
23	7.57	122		3.0	7448		7.32
24	7.42	150		11.0	10071		8.05
25							8.26
26							7.57
27	7.60	100		2.5	7097		8.51
28	7.43	146		8.5	9218		7.57
29	7.41	140	149	3.9	9037	9618	7.74
30	7.43	122		7.5	8791		8.64
AVG	7.48	128	153	4.9	8416	10243	7.92
MIN	7.32	82	133	2.0	5232	8696	7.30
MAX	7.60	152	193	11.0	10374	13505	8.64
COUNT	22	22	4	22	22	4	30

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.20	48	92	0.4	3139	6015	61%	31%		
2	7.23	48		0.3	3167		51%			
3	7.26	56		0.2	3409		59%			
4										
5										
6	7.26	52		0.3	3344		61%			
7	7.20	58		0.4	3652		55%			
8	7.35	88	91	0.2	5923	6125	23%	33%		
9	7.31	46		0.3	2862		68%			
10	7.29	32		0.2	2050		79%			
11										
12										
13	7.30	54		0.3	3373		61%			
14	7.32	54		0.3	3630		55%			
15	7.22	56		0.4	3979		62%			
16	7.24	50		0.3	3474		62%			
17	7.26	38		0.4	2573		68%			
18										
19										
20	7.28	62		0.5	3956		24%			
21	7.19	52		0.5	3439		59%			
22	7.21	90	111	1.1	6298	7767	38%	42%		
23	7.19	66		0.4	4029		46%			
24	7.24	56		0.4	3760		63%			
25										
26										
27	7.33	44		0.3	3123		56%			
28	7.30	68		0.5	4293		53%			
29	7.32	56	93	0.3	3615	6003	60%	38%		
30	7.34	54		0.3	3891		56%			
0										
AVG	7.27	56	97	0.4	3681	6478	55%	36%	#DIV/0!	#DIV/0!
MIN	7.19	32	91	0.2	2050	6003	23%	31%	0	0
MAX	7.35	90	111	1.1	6298	7767	79%	42%	0	0
COUNT	22	22	4	22	22	4	22	4	0	0

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

No results for BOD of samples taken on the 15th due to technician error in analysis.

AGA 1737

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) GU0020087 — PERMIT NUMBER

(17-19) 001 — DISCHARGE NUMBER

MONITORING PERIOD

	YEAR (20-21)	MO (22-23)	DAY (24-25)		YEAR (26-27)	MO (28-29)	DAY (30-31)
FROM	99	7	1	TO	99	7	31

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) QUALITY OR CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.2	9.5	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	7494	8237	lbs/day	95	109	125	mg/l	0	4/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	5189	5491	lbs/day	66	75	84	mg/l	0	4/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8149	12098	lbs/day	70	120	182	mg/l	0	19/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3529	4363	lbs/day	40	52	64	mg/l	0	19/31	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.3	0.5	ml/l	0	19/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	668	668	lbs/day	10.7	10.7	10.7	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.0	7.3	7.5		2	19/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRICIPLE EXECUTIVE OFFICER

RICHARD A. QUINTANILLA

GENERAL MANAGER, GWA

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC §1001 AND 33 USC §1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: AREA CODE 671 — NUMBER 479-7844

DATE: YEAR — MO — DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
pH was below 7.0 on 2 sample dates earlier this month. This was corrected and pH has remained above 7.0 since the 8th.

Explaination of violations attached at end of DMR's

AGA 1738

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF JULY 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.35	182		10.0	12098		7.97
2							8.75
3							8.34
4							7.68
5	7.14	130		7.5	8717		8.04
6	7.49	132	125	7.5	8433	7986	7.66
7	7.04	124		7.5	7746		7.49
8	7.60	108		9.0	7854		8.72
9							7.75
10							9.04
11	7.43	70		6.0	5108		8.75
12	7.52	138		3.0	9046		7.86
13	7.51	90	95	2.5	6177	6521	8.23
14	7.59	118		3.0	7775		7.90
15	7.53	120		4.0	7466		7.46
16							7.59
17							7.60
18	7.54	104		4.0	6878		7.93
19	7.56	126	120	2.5	8648	8237	8.23
20							8.64
21	7.53	140		3.5	9096		7.79
22	7.48	122		6.0	8058		7.92
23							8.24
24							8.64
25	7.48	122		3.5	9005		8.85
26	7.47	100		3.5	6464		7.75
27	7.46	90	95	7.0	6853	7234	9.13
28	7.41	142		4.0	9676		8.17
29	7.46	130		2.5	9736		8.98
30							9.49
31							8.36
AVG	7.45	120	109	5.1	8149	7494	8.22
MIN	7.04	70	95	2.5	5108	6521	7.46
MAX	7.60	182	125	10.0	12098	8237	9.49
COUNT	19	19	4	19	19	4	31

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.29	56		0.4	3722		69%			
2										
3										
4										
5	6.96	54		0.2	3621		58%			
6	7.31	64	84	0.4	4089	5366	52%	33%		
7	6.97	50		0.2	3123		60%		10.7	668.39
8	7.41	60		0.1	4363		44%			
9										
10										
11	7.36	40		0.3	2919		43%			
12	7.31	64		0.5	4195		54%			
13	7.29	44	71	0.2	3020	4873	51%	25%		
14	7.24	52		0.2	3426		56%			
15	7.27	52		0.2	3235		57%			
16										
17										
18	7.29	54		0.2	3571		48%			
19	7.45	54	80	0.2	3706	5491	57%	33%		
20										
21	7.25	60		0.2	3898		57%			
22	7.24	54		0.4	3567		56%			
23										
24										
25	7.27	42		0.4	3100		66%			
26	7.30	46		0.3	2973		54%			
27	7.27	44	66	0.3	3350	5026	51%	31%		
28	7.22	48		0.4	3271		66%			
29	7.24	52		0.4	3894		60%			
30										
31										
AVG	7.26	52	75	0.3	3529	5189	56%	30%	10.7	668.39
MIN	6.96	40	66	0.1	2919	4873	43%	25%	10.7	668.39
MAX	7.45	64	84	0.5	4363	5491	69%	33%	10.7	668.39
COUNT	19	19	4	19	19	4	19	4	1	1

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

AGA 1739

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER: GU0020087

(17-19) DISCHARGE NUMBER: 001

MONITORING PERIOD

	YEAR (20-21)	MO (22-23)	DAY (24-25)		YEAR (26-27)	MO (28-29)	DAY (30-31)
FROM	99	8	1	TO	99	8	31

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card only) AVERAGE (46-53)	QUANTITY OR LOADING MAXIMUM (54-61)	UNITS	QUANTITY OR CONCENTRATION (4 Card Only) MINIMUM (38-45)	QUANTITY OR CONCENTRATION AVERAGE (46-53)	QUANTITY OR CONCENTRATION MAXIMUM (54-61)	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.3	9.9	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	6134	7455	lbs/day	62	93	117	mg/l		4/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	5185	6703	lbs/day	68	78	94	mg/l	0	4/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8637	13656	lbs/day	72	125	198	mg/l		18/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	4030	6275	lbs/day	36	58	88	mg/l	0	18/31	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			80	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.3	0.5	ml/l	0	18/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	961	961	lbs/day	14	14	14	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.0	7.2	7.5		0	18/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER

RICHARD A. QUINTANILLA

GENERAL MANAGER, GWA

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
671	479-7844			

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

No violations this month.

Explaination of violations attached at end of DMR's

AGA 1740

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF AUGUST 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.57	110		3.0	7725		8.42
2	7.34	124		8.5	10186		9.85
3	7.26	128	103	9.0	9127	7345	8.55
4	7.26	90		7.0	6365		8.48
5	7.37	118		3.0	8887		9.03
6							8.78
7							7.90
8	7.49	160		3.5	10782		8.08
9	7.49	102		1.8	6899		8.11
10	7.56	86	62	5.0	5308	3826	7.40
11	7.52	112		3.0	7445		7.97
12	7.44	142		3.5	9344		7.89
13							8.66
14							7.32
15							7.97
16							8.66
17							8.20
18							8.04
19							8.78
20							8.11
21							8.51
22	7.52	198		2.5	13656		8.27
23	7.37	134		8.5	8806		7.88
24	7.56	138	89	2.5	9161	5908	7.96
25	7.26	134		8.0	9667		8.65
26	7.34	132		9.0	9567		8.69
27							8.40
28							8.48
29	7.73	72		2.5	4846		8.07
30	7.42	150		3.0	10296		8.23
31	7.28	116	117	3.0	7391	7455	7.64
AVG	7.43	125	93	4.8	8637	6134	8.29
MIN	7.26	72	62	1.8	4846	3826	7.32
MAX	7.73	198	117	9.0	13656	7455	9.85
COUNT	18	18	4	18	18	4	31

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.32	54		0.2	3792		51%			
2	7.20	60		0.4	4929		52%			
3	7.08	88	94	0.3	6275	6703	31%	9%		
4	7.16	54		0.3	3819		40%			
5	7.18	48		0.2	3615		59%			
6										
7										
8	7.27	64		0.4	4313		60%			
9	7.29	62		0.2	4194		39%			
10	7.03	48	68	0.3	2962	4197	44%	-10%		
11	7.06	54		0.5	3589		52%			
12	7.15	62		0.5	4080		56%			
13										
14										
15										
16										
17										
18										
19										
20										
21										
22	7.30	88		0.2	6070		56%			
23	7.31	66		0.3	4337		51%			
24	7.45	60	82	0.3	3983	5444	57%	8%		
25	7.15	52		0.2	3751		61%			
26	7.33	58		0.1	4204		56%			
27										
28										
29	7.38	36		0.3	2423		50%			
30	7.19	42		0.3	2883		72%		14	960.93
31	7.14	52	69	0.3	3313	4397	55%	41%		
AVG	7.22	58	78	0.3	4030	5185	52%	12%	14	960.93
MIN	7.03	36	68	0.1	2423	4197	31%	-10%	14	960.93
MAX	7.45	88	94	0.5	6275	6703	72%	41%	14	960.93
COUNT	18	18	4	18	18	4	18	4	1	1

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

AGA 1741

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) GU0020087 — PERMIT NUMBER

(17-19) 001 — DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	99	9	1	TO	99	9	30
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) AVERAGE	QUANTITY OR LOADING (54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) MINIMUM	QUANTITY OR CONCENTRATION (46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.2	9.5	MGD				mgd	0	30/30	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	10114	11098	lbs/day	110	144	157	mg/l		4/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	6343	6972	lbs/day	71	90	101	mg/l	1	4/30	COMPOSITE
	PERMIT REQUIREMENT	8011	18022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8785	19015	lbs/day	66	128	240	mg/l		21/30	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3884	5546	lbs/day	36	57	80	mg/l	0	21/30	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.3	1.0	ml/l	0	21/30	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	1009	1009	lbs/day	14	14	14	mg/l		1/30	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				6.9	7.3	7.5		1	21/30	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER			TELEPHONE		DATE		
RICHARD A. QUINTANILLA GENERAL MANAGER, GWA	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)		671	479-7844			
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
BOD monthly average concentration was exceeded by 10 mg/L
pH of effluent was below 7.0 on the 27th.

Explaination of violations attached at end of DMR's.

AGA 1742

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF SEPTEMBER 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.67	114		2.5	7587		7.98
2	7.40	78		2.0	5165		7.94
3							7.80
4							8.02
5							8.17
6	7.50	78		2.5	5575		8.57
7	7.52	150	151	2.5	10634	10704	8.50
8	7.52	134		2.5	8851		7.92
9	7.69	108		2.5	6800		7.55
10							8.42
11							7.64
12	7.58	184		3.0	12445		8.11
13	7.64	134		2.5	9354		8.37
14	7.75	240	110	1.4	19015	8715	9.50
15	7.56	104		4.0	7494		8.64
16	7.51	132		4.0	8818		8.01
17							7.93
18							8.39
19	7.51	66		4.5	4717		8.57
20	7.48	112		7.0	7762		8.31
21	7.75	146	156	3.0	10386	11098	8.53
22	7.54	130		3.5	8663		7.99
23	7.63	116		3.0	7769		8.03
24							8.14
25							7.78
26	7.68	120		3.5	7706		7.70
27	7.16	130		3.5	8966		8.27
28	7.63	138	157	5.0	8735	9938	7.59
29	7.58	160		3.0	10755		8.06
30	7.50	104		3.0	7286		8.40
AVG	7.56	128	144	3.3	8785	10114	8.16
MIN	7.16	66	110	1.4	4717	8715	7.55
MAX	7.75	240	157	7.0	19015	11098	9.50
COUNT	21	21	4	21	21	4	30

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.31	56		0.2	3727		51%			
2	7.21	36		0.2	2384		54%			
3										
4										
5										
6	7.45	56		0.1	4003		28%			
7	7.13	60	90	0.5	4253	6380	60%	40%		
8	7.20	46		0.3	3038		66%			
9	7.16	54		0.2	3400		50%			
10										
11										
12	7.26	80		0.2	5411		57%			
13	7.35	48		0.5	3351		64%			
14	7.45	70	71	0.5	5546	5625	71%	35%		
15	7.38	50		0.4	3603		52%		14	1008.8
16	7.35	48		0.3	3207		64%			
17										
18										
19	7.31	38		0.4	2716		42%			
20	7.30	60		0.2	4158		46%			
21	7.49	70	98	0.2	4980	6972	52%	37%		
22	7.36	64		1.0	4265		51%			
23	7.26	58		0.2	3884		50%			
24										
25										
26	7.24	72		0.4	4624		40%			
27	6.88	54		0.4	3724		58%			
28	7.49	72	101	0.4	4558	6393	48%	36%		
29	7.38	48		0.3	3227		70%			
30	7.25	50		0.3	3503		52%			
AVG	7.30	57	90	0.3	3884	6343	54%	37%	14	1008.8
MIN	6.88	36	71	0.1	2384	5625	28%	35%	14	1008.8
MAX	7.49	80	101	1.0	5546	6972	71%	40%	14	1008.8
COUNT	21	21	4	21	21	4	21	4	1	1

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

VIOLATIONS
BOD monthly average
pH

AGA 1743

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER	(17-19) DISCHARGE NUMBER
GU0020087	001

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	99	12	1	TO	99	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) QUANTITY OR CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.3	9.5	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	9724	10376	lbs/day	118	144	174	mg/l		4/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	6066	7101	lbs/day	57	90	106	mg/l	1	4/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8717	12055	lbs/day	60	129	180	mg/l		18/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3836	5629	lbs/day	34	58	82	mg/l	0	18/31	COMPOSITE
	PERMIT REQUIREMENT	6009	12018			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.2	0.4	1.0	ml/l	0	19/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	1056	1056	lbs/day	14	14	14	mg/l		1/31	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.1	7.3	7.5		0	19/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER		TELEPHONE		DATE		
HERBERT J. JOHNSTON Jr. GENERAL MANAGER, GWA ACTING	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC $1001 AND 33 USC $1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)		671	479-7844			
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
Suspended solids monthly average concentration exceeded by 10 mg/L

1/21/00

Explaination of violations attached at end of DMR's

AGA 1744

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF DECEMBER 1999

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.40	166		5.0	11408		8.24
2	7.50	118		4.0	7676		7.80
3							8.19
4							9.37
5	7.48	108		4.5	7287		8.09
6	7.41	138	143	3.0	9507	9851	8.26
7							8.70
8	7.60	60		4.0	4303		8.60
9	7.55	120		4.5	9478		9.47
10							8.71
11							8.50
12	7.42	76		4.5	5369		8.47
13	7.57	120		4.5	8006		8.00
14	7.55	108	118	2.5	8143	8896	9.04
15	7.63	ns		5.0	ns		8.33
16	7.47	150		4.0	10508		8.40
17							8.43
18							8.11
19	7.51	90		3.5	6087		8.11
20	7.54	148		3.0	8517		6.90
21	7.54	146	174	4.0	8706	10376	7.15
22	7.64	168		5.0	10677		7.62
23							8.47
24							8.18
25							7.92
26	7.53	136		7.0	9754		8.60
27	7.63	180		6.5	12055		8.03
28	7.69	132	139	5.0	9280	9773	8.43
29	7.07	152		5.0	10154		8.01
30							8.31
31							7.79
AVG	7.51	129	144	4.4	8717	9724	8.27
MIN	7.07	60	118	2.5	4303	8896	6.90
MAX	7.69	180	174	7.0	12055	10376	9.47

EFFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.23	46		0.3	3161		72%			
2	7.31	34		0.3	2212		71%			
3										
4										
5	7.37	40		0.3	2699		63%			
6	7.12	60	95	0.3	4133	6544	57%	34%		
7										
8	7.20	34		0.2	2439		43%			
9	7.09	70		0.4	5529		42%			
10										
11										
12	7.31	42		0.7	2967		45%			
13	7.21	56		0.3	3736		53%			
14	7.53	50	57	0.5	3770	4297	54%	52%	14	1055.51
15	7.50			1.0						
16	7.22	74		0.2	5184		51%			
17										
18										
19	7.36	52		0.3	3517		42%			
20	7.39	60		0.2	3453		59%			
21	7.33	72	106	0.3	4293	6321	51%	39%		
22	7.45	82		0.5	5211		51%			
23										
24										
25										
26	7.34	56		0.5	4017		59%			
27	7.35	70		0.5	4688		61%			
28	7.10	46	101	0.5	3234	7101	65%	27%		
29	7.07	72		0.5	4810		53%			
30										
31										
AVG	7.29	56	90	0.4	3836	6066	55%	38%	14	1055.51
MIN	7.07	34	57	0.2	2212	4297	42%	27%	14	1055.51
MAX	7.53	82	106	1.0	5529	7101	72%	52%	14	1055.51

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

/IOLATIONS
)OD
5th composite samples incomplete.

AGA 1745

/14/00

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER	(17-19) DISCHARGE NUMBER
GU0020087	001

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2000	1	1	TO	2000	1	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) QUANTITY OR CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	8.4	10.8	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	9355	11218	lbs/day	121	138	159	mg/l		4/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	8485	9172	lbs/day	118	125	131	mg/l	2	4/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8806	12743	lbs/day	64	125	148	mg/l		21/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	4719	9692	lbs/day	38	66	108	mg/l	1	21/31	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.4	1.1	ml/l	0	21/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	1239	1239	lbs/day	17	17	17	mg/l		1/31	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.1	7.3	7.6		0	21/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER		TELEPHONE		DATE		
HERBERT J. JOHNSTON Jr. GENERAL MANAGER, GWA ACTING	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC §1001 AND 33 USC §1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)		671	479-7676	MAY	05	2000
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

BOD monthly average concentration was exceeded by 45 mg/l, and monthly average loading by 474 lbs/day
Suspended solids monthly average concentration was exceeded by 6 mg/l, and monthly average loading by 474 lbs/day

5/5/00

AGA 1746

4/12/00

Explaination of violations attached at end of DMR's

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF JANUARY 2000

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1							8.18
2	7.32	128		5.0	10163		9.52
3	7.63	138		5.0	9967		8.66
4	7.53	138		4.0	9438		8.20
5	7.50	104	130	6.0	7095	8869	8.18
6	7.71	140		5.0	9212		7.89
7							8.74
8							8.35
9	7.55	118		8.0	7912		8.04
10	7.46	116		7.0	8088		8.36
11	7.54	116		3.0	8533		8.82
12	7.66	140	159	5.5	9878	11218	8.46
13	7.61	138		3.0	9898		8.60
14							8.69
15							8.14
16							8.12
17	7.51	134		3.0	8773		7.85
18	7.31	148		2.5	9381		7.60
19	7.39	144	141	2.5	9416	9219	7.84
20	7.70	100		3.0	7114		8.53
21							8.36
22							7.94
23	7.58	64		3.0	4868		9.12
24	7.57	120		3.0	8607		8.60
25	7.59	104		3.0	7442		8.58
26	7.66	136	121	3.0	9119	8113	8.04
27	7.55	122		3.0	7865		7.73
28							7.60
29							8.39
30	7.56	142		3.5	12743		10.76
31	7.53	138		4.5	9415		8.18
AVG	7.55	125	138	4.1	8806	9355	8.39
MIN	7.31	64	121	2.5	4868	8113	7.60
MAX	7.71	148	159	8.0	12743	11218	10.76

EFFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1										
2	7.21	80		0.3	6352		38%			
3	7.14	82		0.3	5922		41%			
4	7.27	90		0.3	6155		35%			
5	7.26	102	131	0.1	6959	8937	2%	-1%		
6	7.37	68		0.2	4475		51%			
7									17	1239.16
8										
9	7.23	38		0.3	2548		68%			
10	7.22	58		0.4	4044		50%			
11	7.23	54		0.2	3972		53%			
12	7.22	56	130	0.8	3951	9172	60%	18%		
13	7.25	64		0.2	4590		54%			
14										
15										
16										
17	7.25	70		0.5	4583		48%			
18	7.21	66		0.5	4183		55%			
19	7.08	58	118	0.5	3792	7716	60%	16%		
20	7.39	56		0.6	3984		44%			
21										
22										
23	7.17	40		0.4	3042		38%			
24	7.59	48		0.2	3443		60%			
25	7.20	40		0.2	2862		62%			
26	7.23	58	121	0.2	3889	8113	57%	0%		
27	7.17	66		0.3	4255		46%			
28										
29										
30	7.32	108		0.6	9692		24%			
31	7.30	94		1.1	6413		32%			
AVG	7.25	66	125	0.4	4719	8485	46%	8%	17	1239.16
MIN	7.08	38	118	0.1	2548	7716	2%	-1%	17	1239.16
MAX	7.59	108	131	1.1	9692	9172	68%	18%	17	1239.16

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

VIOLATIONS
BOD
SUSPENDED SOLIDS

AGA 1747

4/12/00

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER	(17-19) DISCHARGE NUMBER
GU0020087	001

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	2000	2	1	TO	2000	2	29
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	MAXIMUM	UNITS	(4 Card Only) (38-45) QUANTITY OR CONCENTRATION MINIMUM	AVERAGE	MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	10.0	11.4	MGD				mgd	0	29/29	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	9378	10325	lbs/day	101	113	131	mg/l		4/29	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	8133	10018	lbs/day	48	98	122	mg/l	2	4/29	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	9446	21369	lbs/day	72	116	272	mg/l		20/29	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	4881	8956	lbs/day	32	60	114	mg/l	0	20/29	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.2	0.6	1.2	ml/l	0	20/29	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	1261	1261	lbs/day	16	16	16	mg/l		1/29	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.1	7.3	7.4		0	20/29	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER			TELEPHONE		DATE		
HERBERT J. JOHNSTON Jr. GENERAL MANAGER, GWA ACTING	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC §1001 AND 33 USC §1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)		671	479-7844	MAY	05	2000
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
BOD monthly average concentration was exceeded by 18 mg/l, and monthly average loading by 122 lbs/day

5/5/2

AGA 1748

4/12/00

Explanation of violations attached at end of DMR's

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF FEBRUARY 2000

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.69	272		3.5	21369		9.42
2	7.57	112	131	4.0	8827	10325	9.45
3	7.58	140		5.0	9866		8.45
4							10.33
5							10.03
6	7.48	94		4.0	8130		10.37
7	7.45	108		4.0	8296		9.21
8	7.48	102		2.5	8396		9.87
9	7.42	98	116	7.5	8230	9742	10.07
10	7.57	86		3.5	7194		10.03
11							9.44
12							9.97
13	7.47	72		4.0	5651		9.41
14	7.59	94		4.0	7330		9.35
15	7.63	110		5.5	8358		9.11
16	7.51	80	101	7.0	7633	9636	11.44
17	7.55	72		6.5	6653		11.08
18							10.79
19							10.20
20							10.57
21	7.74	138		4.5	12188		10.59
22	7.62	118		2.0	9398		9.55
23	7.53	128	102	3.5	9800	7809	9.18
24	7.40	208		4.0	16515		9.52
25							10.39
26							10.13
27	7.42	88		3.0	6789		9.25
28	7.46	90		4.0	8467		11.28
29	7.57	110		7.0	9825		10.71

AVG	7.54	116	113	4.5	9446	9378	9.97
MIN	7.40	72	101	2.0	5651	7809	8.45
MAX	7.74	272	131	7.5	21369	10325	11.44

EFFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %removal	BOD %removal	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.33	114		1.2	8956		58%			
2	7.27	62	116	0.7	4886	9142	45%	11%	16	1261.01
3	7.32	88		1.1	6202		37%			
4										
5										
6	7.14	50		0.5	4324		47%			
7	7.19	88		0.5	6759		19%			
8	7.12	58		0.3	4774		43%			
9	7.11	48	48	0.3	4031	4031	51%	59%		
10	7.38	50		0.5	4183		42%			
11										
12										
13	7.36	44		0.5	3453		39%			
14	7.40	56		0.7	4367		40%			
15	7.41	96		1.2	7294		13%			
16	7.29	44	105	0.7	4198	10018	45%	-4%		
17	7.36	32		0.2	2957		56%			
18										
19										
20										
21	7.30	52		0.2	4593		62%			
22	7.36	50		0.2	3982		58%			
23	7.34	60	122	0.3	4594	9340	53%	-20%		
24	7.25	56		0.2	4446		73%			
25										
26										
27	7.21	46		0.3	3549		48%			
28	7.32	50		0.5	4704		44%			
29	7.16	60		1.0	5359		45%			

AVG	7.28	60	98	0.6	4881	8133	46%	12%	16	1261.01
MIN	7.11	32	48	0.2	2957	4031	13%	-20%	16	1261.01
MAX	7.41	114	122	1.2	8956	10018	73%	59%	16	1261.01

PERMIT REQUIRMENTS	MAX	monthly avg	7	60	80	1	6008	8011
	12	daily max	9	120	160	2	12016	16022

VIOLATIONS
BOD

AGA 1749

4/12/00

PERMITTEE NAME/ADDRESS (Include facility Name/Location if Different)

NAME: Guam Waterworks Authority
ADDRESS: P.O. Box 3010
AGANA, GUAM 96932

FACILITY: Agana Sewage Treatment Plant
LOCATION: Agana, Guam

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004
Approval expires 9-30-85

(2-16) PERMIT NUMBER: GU0020087

(17-19) DISCHARGE NUMBER: 001

MONITORING PERIOD

	YEAR (20-21)	MO (22-23)	DAY (24-25)		YEAR (26-27)	MO (28-29)	DAY (30-31)
FROM	2000	3	1	TO	2000	3	31

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card only) (46-53) QUANTITY OR LOADING AVERAGE	(54-61) MAXIMUM	UNITS	(4 Card Only) (38-45) QUANTITY OR CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	NO. EX. (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
FLOW	SAMPLE MEASUREMENT	9.7	10.9	MGD				mgd	0	31/31	HOURLY
	PERMIT REQUIREMENT		12.0								CONTINUOUS
INFLUENT BOD	SAMPLE MEASUREMENT	10598	14836	lbs/day	88	133	201	mg/l		5/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT BOD	SAMPLE MEASUREMENT	8430	10301	lbs/day	98	104	113	mg/l	2	5/31	COMPOSITE
	PERMIT REQUIREMENT	8011	16022			80	160			1/7	COMPOSITE
INFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	8268	10756	lbs/day	86	102	118	mg/l		21/31	COMPOSITE
	PERMIT REQUIREMENT										COMPOSITE
EFFLUENT SUSPENDED SOLIDS	SAMPLE MEASUREMENT	3969	5469	lbs/day	32	49	62	mg/l	0	21/31	COMPOSITE
	PERMIT REQUIREMENT	6008	12016			60	120			1/7	COMPOSITE
EFFLUENT SETTLEABLE SOLIDS	SAMPLE MEASUREMENT				0.1	0.6	3.0	ml/l	1	21/31	DISCRETE
	PERMIT REQUIREMENT					1.0	2.0			1/7	DISCRETE
EFFLUENT OIL & GREASE	SAMPLE MEASUREMENT	1367	1367	lbs/day	15	15	15	mg/l		1/31	DISCRETE
	PERMIT REQUIREMENT									1/30	DISCRETE
EFFLUENT pH	SAMPLE MEASUREMENT				7.0	7.2	7.3		0	21/31	DISCRETE
	PERMIT REQUIREMENT				7.0		9.0			1/7	DISCRETE

NAME/TITLE PRINCIPLE EXECUTIVE OFFICER

HERBERT J. JOHNSTON Jr.

GENERAL MANAGER, GWA
ACTING

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE. 18 USC §1001 AND 33 USC §1319 (Penalties under these statutes may include fines up to $10,000 and or a maximum imprisonment of between 6 months and 5 years)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
671	479-7844	MAY	0 5	2000

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

BOD monthly average concentration was exceeded by 24 mg/l, and monthly average loading by 419 lbs/day
Settleable solids daily maximum was exceeded on the 30th by 1.0 ml/L.

5/5/00

Explaination of violations attached at end of DMR's

4/12/00

AGA 1750

AGANA TREATMENT PLANT WASTEWATER RESULTS
FOR THE MONTH OF MARCH 2000

INFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	FLOW mgd
1	7.59	118	110	6.0	10756	10027	10.93
2	7.61	92		5.0	7987		10.41
3							8.99
4							9.84
5							9.40
6	7.46	86		4.0	6921		9.65
7	7.49	100		4.0	7706		9.24
8	7.53	104	158	5.0	8517	12940	9.82
9	7.54	94		4.0	7761		9.90
10							9.77
11							10.44
12	7.52	90		4.0	7641		10.18
13	7.45	108		3.0	9665		10.73
14	7.50	102		3.0	8532		10.03
15	7.49	94	88	4.0	7989	7479	10.19
16	7.56	110		4.0	9385		10.23
17							9.82
18							9.90
19	7.44	108		3.0	8467		9.40
20	7.44	114		4.0	9070		9.54
21	7.43	92		3.0	7113		9.27
22	7.49	90	107	9.0	6485	7710	8.64
23	7.50	104		0.3	8162		9.41
24							9.89
25							8.73
26	7.47	116		3.5	8717		9.01
27	7.50	102		3.0	8243		9.69
28	7.46	114		3.0	9498		9.99
29	7.44	100	201	4.0	7381	14836	8.85
30	7.39	106		4.0	7629		8.63
31							9.07
AVG	7.49	102	133	3.9	8268	10598	9.66
MIN	7.39	86	88	0.3	6485	7479	8.63
MAX	7.61	118	201	9.0	10756	14836	10.93

EFFLUENT

DATE	pH	SUSP. SOLIDS mg/l	BOD mg/l	SETTL. SOLID ml/l	SUSP. SOLIDS lbs/day	BOD lbs/day	SUSP. SOLIDS %remova	BOD %remova	OIL & GREASE mg/l	OIL & GREASE lbs/day
1	7.20	60	113	0.6	5469	10301	49%	-3%	15	1367.3
2	7.27	50		0.3	4341		46%			
3										
4										
5										
6	7.16	50		0.5	4024		42%			
7	7.20	46		0.4	3545		54%			
8	7.31	50	110	0.4	4095	9009	52%	30%		
9	7.25	46		0.3	3798		51%			
10										
11										
12	7.14	46		0.2	3905		49%			
13	7.14	50		0.3	4474		54%			
14	7.19	46		0.2	3848		55%			
15	7.10	32	98	0.2	2720	8328	66%	-11%		
16	7.16	48		1.0	4095		56%			
17										
18										
19	7.26	48		0.5	3763		56%			
20	7.10	52		0.4	4137		54%			
21	7.18	62		0.1	4793		33%			
22	7.09	54	101	0.3	3891	7278	40%	6%		
23	7.16	50		0.3	3924		52%			
24										
25										
26	7.12	36		0.3	2705		69%			
27	7.16	46		2.0	3717		55%			
28	7.09	56		0.5	4666		51%			
29	7.03	52	98	0.5	3838	7233	48%	51%		
30	7.01	50		3.0	3599		53%			
31										
AVG	7.16	49	104	0.6	3969	8430	52%	15%	15	1367.3
MIN	7.01	32	98	0.1	2705	7233	33%	-11%	15	1367.3
MAX	7.31	62	113	3.0	5469	10301	69%	51%	15	1367.3

PERMIT REQUIRMENTS								
MAX	monthly avg	7	60	80	1	6008	8011
12	daily max	9	120	160	2	12016	16022

VIOLATIONS
BOD
SETTLEABLE SOLIDS

AGA 1751

4/12/00

INDUSTRIAL USER SURVEY FORM

(Includes 1999 results)

8

COMMERCIAL WASTEWATER DISCHARGE SURVEY

Completion of this questionnaire is required for all GWA commercial account wastewater dischargers. Please mail in the completed form no later than May 15, 1999. A self-addressed, stamped envelope is included.

PLEASE TYPE OR PRINT LEGIBLY. (NOTE: GWA will follow-up incomplete and illegible questionnaires by phone or official letter). Should you have any questions or need assistance in completing this questionnaire, please call GWA's Planning Division at 479-7833 or 479-7605 between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. Thank you for your cooperation and timely response.

1. NAME OF BUSINESS (as it appears on GWA account): _____

MAILING ADDRESS: _____

2. BUSINESS LOCATION (if different from mailing address):

_____

3. YOUR PRINCIPAL SERVICE OR PRODUCT OF BUSINESS: _____

4. NAME OF INDIVIDUAL (WITHIN YOUR BUSINESS) WHO WE SHOULD CONTACT CONCERNING YOUR WASTEWATER DISCHARGE INTO THE PUBLIC SEWER:

NAME: _____
TITLE: _____
TELEPHONE NUMBER: _____

5. DO YOU DISCHARGE ANY NON-DOMESTIC WASTEWATER (FROM OTHER THAN WASHROOM, TOILET, OR SHOWER) INTO THE SEWER SYSTEM?

[ ] YES [ ] NO (GO TO QUESTION #16)

6. DESCRIBE THE OPERATION(S) AT YOUR BUSINESS THAT RESULT(S) IN THE DISCHARGE TO THE SEWER OF NON-DOMESTIC WASTES. INCLUDE A DESCRIPTION OF RAW MATERIALS, CATALYSTS, OR INTERMEDIARIES, IF APPLICA BLE. DESCRIBE ANY MANUFACTURING OPERATION AT THIS LOCATION. (ATTACH ADDITIONAL SHEETS AS NECESSARY):

_____
_____
_____
_____

7. DESCRIBE ANY WATER CONDITIONING PROCESSES USED AT THIS FACILITY (SUCH AS WATER SOFTENING, REVERSE OSMOSIS, FILTRATION):

_____
_____
_____
_____

8. INDICATE (BY CHECKMARK) OPERATION SHIFTS NORMALLY WORKED EACH DAY:

SHIFT	START TIME	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1ST								
2ND								
3RD								

9. IS YOUR PRODUCTION SEASONAL? [ ] YES [ ] NO

AGA 1753

10. CHECK THE TYPE WHICH BEST DESCRIBES YOUR WASTEWATER DISCHARGE FLOW:

[ ] CONTINUOUS

AVERAGE DAILY FLOW: _____ GALLONS PER DAY

[ ] INTERMITTENT

AVERAGE QUANTITY PER DISCHARGE: _____ GALLONS

AVERAGE NUMBER OF DISCHARGES PER DAY: _____

[ ] BATCH

AVERAGE QUANTITY PER DISCHARGE: _____ GALLONS

AVERAGE NUMBER OF DISCHARGES PER DAY: _____

11. INDICATE THE APPROXIMATE TIMES THAT DISCHARGES OCCUR:

Sun	Mon	Tue	Wed	Thu	Fri	Sat

12. DESCRIBE THE CHARACTERISTICS AND CONSTITUENTS OF YOUR WASTEWATER DISCHARGE(S). LIST THE CONCENTRATION (IN PERCENT OR MG/L) IF KNOWN:

13. DESCRIBE ANY TREATMENT FACILITIES AT YOUR BUSINESS THAT TREATS WASTEWATER PRIOR TO DISCHARGE TO THE SEWER:

14. ADDITIONAL INFORMATION ON YOUR OPERATION:

15. INDICATE IF ANY OF THE FOLLOWING CONSTITUENTS OR SUBSTANCES IS (OR CAN BE) PRESENT IN YOUR WATEWATER DISCHARGE AS A RESULT OF YOUR OPERATIONS BY PLACING IN FRONT OF EACH LISTED CHEMICAL COMPOUND:

1 = YOU SUSPECT THE COMPOUND IS ABSENT
2 = YOU KNOW THE COMPOUND IS ABSENT
3 = YOU SUSPECT THE COMPOUND IS PRESENT
4 = YOU KNOW THE COMPOUND IS PRESENT

[ ] Acenapthene
[ ] Acenapthylene (PAH)
[ ] Acrolein
[ ] Acrylonitrile
[ ] Aldrin
[ ] Antimony
[ ] Anthracene
[ ] Arsenic
[ ] Asbestos (Halomethanes)
[ ] 1,2 Benzanthracene (PAH)
[ ] Benzene
[ ] Benzidine
[ ] Benzo (A) Pyrene (3,4-Benzo-Pyrene) (PAH)
[ ]. 3,4 Benzofluoranthene (PAH)
[ ] Benzo (K) Fluoranthene (PAH)
[ ] 1,12 Benzoperylene (PAH)
[ ] Beryllium
[ ] Bromoform (Tribromomethane)
[ ] Bromomethane (Methyl Bromide)
[ ] 4-Bromophenyl Phenyl Ether
[ ] Cadmium
[ ] Carbon Tetrachloride (Tetrachloromethane)
[ ] Chlordane
[ ] Chlorobenzene (Monochloro-Benzene)
[ ] Chlorodibromomethane (Halomethane)
[ ] 1,2 Dichlorobenzene
[ ] 1,3 Dichlorobenzene
[ ] 1,4 Dichlorobenzene
[ ] 3,3 Dichlorobenzidine
[ ] Dichloroethane 1,1
[ ] Dichloroethane 1,2
[ ] 1,1 Dichloroethylene
[ ] 1,2-Trans-Dichloroethylene
[ ] Dichlorobromomethane
[ ] Dichloromethane (Halomethanes)
[ ] 2,4-Dichlorophenol
[ ] Dichloropropane 1,2
[ ] Dichloropropene 1,3
[ ] Dieldrin
[ ] Dimethylphenol 2,4
Diethylphthalate
Dimethylphthalate
[ ] Dinitrotoluene 2,4
[ ] Dinitrotoluene 2,6
[ ] 2,4 Dinitrophenol
[ ] Dioxine (2,3,7,8-TCDD)
[ ] Diphenylhydrazine 1,2
[ ] Alpha Endosulfan
[ ] Beta Endosulfan
[ ] Endosulfan Sulfate
[ ] Endrin
[ ] Endrin Aldehyde
[ ] Ethylbenzene
[ ] Chlorethane (Monochloroethane)
[ ] Chlorothyl Ether (Bis-2)
[ ] 1 Chloroethoxy Methane (Bis-2)
[ ] 2 Chloroethyl Vinyl Ether
[ ] 4-Chloro-3-Methylphenol
[ ] Chloromethane (Methyl Chloride)
[ ] Chloroform Trichloromethane
[ ] 2 Chlorophenol
[ ] Chloroisopropyl Ether (Bis-2)
[ ] 2 Chloronaphthalene
[ ] 4-Chlorophenyl Ether
[ ] Chromium (HEX)
[ ] Chromium (TRI)
[ ] Oil / Grease (animal or vegetable origin)
[ ] Oil / Grease (mineral origin)
[ ] Petroleum or petroleum products
[ ] Chrysene (PAH)
[ ] Copper
[ ] pH decrease
[ ] pH increase
[ ] 4,4 DDT
[ ] 4,4 DDE
[ ] 4,4 DDD
[ ] Dibenzo (a,h) Anthracene (PAH)
[ ] 2 Nitrophenol
[ ] 4 Nitrophenol
[ ] 4, 6-Dinitro-2-Methylphenol
[ ] Nitrosodimenthylamine N
[ ] Nitrosodimenthylamine-N
[ ] Nitrosodi-N-Propylamine-N
[ ] PCB 1242
[ ] PCB 1254
[ ] PCB 1221
[ ] PCB 1232
Temperature decrease
- _____ F
Temperature increase
+ _____ F
[ ] PCB 1248
[ ] PCB 1260
[ ] PCB 1016
[ ] Fluorene (PAH)
[ ] Fluoranthene
[ ] Heptachlor
[ ] Heptachlor Epoxide
[ ] Hexachloroethane
[ ] Hexachlorobenzene
[ ] Hexachlorobutadiene
[ ] Hexachlorocyclohexane (lindane)
[ ] Hexachlorocyclohexane (Alpha)
[ ] Hexachlorocyclohexane (Beta)
[ ] Hexachlorocyclohexane (Delta)
[ ] Hexachlorocyclopentadiene
[ ] Indeno (1,2,3-cd) Pyrene (PAH)
[ ] Isophorone
[ ] Lead
[ ] Mercury
[ ] Naphthalene
[ ] Nickel
[ ] Nitrobenzene
[ ] Di-N-Butyl Phthalate
[ ] Di-N-Octyl-Phthalate
[ ] Pyrene (PAH)
[ ] Selenium
[ ] Silver
[ ] Tetracholoethane 1,1,2,2
[ ] Tetrachloroethylene
[ ] Thallium
[ ] Toluene
[ ] Toxaphene
[ ] 1,2,4 Trichlorobenzene
[ ] Trichloroethane 1,1,1
[ ] Trichloroethane 1,1,2
[ ] Trichloroethylene
[ ] Phenol
[ ] Pentachlorophenol
[ ] Phenanthrene (PAH)
[ ] Bis (2 Ethyl Hexyl)
[ ] Phthalate
[ ] Butyl Benzyl Phthalate
[ ] Trichlorophenol 2,4,6
[ ] Vinyl Chloride (Chloroethylene)
[ ] Zinc

OTHER COMPOUNDS NOT LISTED:
[ ] _____
[ ] _____
[ ] _____
[ ] _____
[ ] _____

16. STATEMENT OF RESPONSIBILITY:

THIS IS TO CERTIFY THAT THE UNDERSIGNED RESPONSIBLE OFFICIAL REPRESENTING

_____, IS FAMILIAR AND KNOWLEDGEABLE WITH QUESTIONS CONTAINED
(Company)

HEREIN, AND THAT THIS QUESTIONNAIRE HAS BEEN COMPLETED IN ITS ENTIRETY AND IS CERTIFIED TO BE

TRUE AND CORRECT TO THE BEST OF KNOWLEDGE AND ABILITY

NAME: _____
(Please print)

SIGNATURE: _____

DATE: _____

TITLE: _____

GWA COMMERCIAL WASTEWATER DISCHARGE SURVEY RESULTS

(October 15, 1999)

I. Points of Interest Regarding the Survey

- The survey questionnaires were mailed out to all GWA commercial wastewater account holders during the first week of April 1999.
- The survey questionnaires were to be completed and mailed back to GWA NLT May 15, 1999; self-addressed, stamped envelopes were provided.
- During the interim, several calls regarding the survey were made to GWA.

II. Statistical numbers

- Out of the approximately fifteen hundred (1500) surveys mailed out, three hundred sixty-six (366) were returned to GWA.
- When responding to the question "Do you discharge any non-domestic wastewater into the sewer system?" (survey question #5) – question that allowed respondents to forego the remaining survey questions and simply sign the acknowledgement on the last page – three hundred forty-six (346) replied "No" and twenty (20) replied "Yes."

III. Breakdown of the Principal Service or Product of Business that responded to the survey

Hotel water park
Hemodialysis center
Laundromat
Manufacturer of soft drinks, ice, bottle water
Dental clinic
Wholesale/Retail of Fresh Seafood
Restaurant/Food court (water softener)
Daycare center (water softener)
Newspaper publisher
Commercial building (water softener)
Diagnostic Laboratory
Optical Laboratory
Medical Clinic
Pharmacy

END OF REVISED SECTION