

**ANNUAL 2012  
REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**Notes:**

1. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's toxicity equivalency factor (TEF) and bioaccumulation equivalency factor (BEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 37 of the NPDES permit.
2. pH was determined with a field instrument and was noted as such. These results were not validated.
3. The NPDES monthly average permit limit for mercury of 0.05 µg/L (Outfall 019) is not achievable by the laboratory; therefore, the laboratory MDL of 0.10 µg/L was used to determine compliance.
4. All of the following abbreviations and/or notes may not occur on every table.

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-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
\$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit
*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values

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*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
* II *III	Unusual problems found with the data that have been described in Section II, "sample management", or Section III, "method analysis". The number following the asterisk (*) will indicated the validation report section where a description of the problem can be found.
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed over the reporting period (annual, semi-annual, etc.)
B	laboratory method blank contamination
BA	relative percent difference out of control
BEF	bioaccumulation equivalency factor
BU	analyzed out of holding time
BV	sample received after holding time expired
C	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
CEs/100 ml	cell equivalents per 100 milliliters
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
ft/sec	feet per second
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value, result lower than the detection limit
J, DX	estimated value, value < lowest standard (MQL), but > than MDL
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
LOD	limit of detection
LQ	LCS/LCSD recovery above method control limits
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDA	minimum detectable activity
MDL	method detection limit
MGD	million gallons per day

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MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
mg/kg	milligrams per kilogram
ml/L/hr	milliliters per liter per hour
MPN/100 ml	most probable number per 100 milliliters
NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU <sub>c</sub>	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume
#	Per ORDER NO. R4-2010-0090 page 23 Footnote 1. The effluent limitations for total suspended solids and settleable solids are not applicable for discharges during wet weather. During wet weather flow, a discharge event is greater than 0.1 inches of rainfall in a 24-hour period. No more than one sample per week need be obtained during extended periods of rainfall or the discharge of collected stormwater. A storm event must be preceded by at least 72 hours of dry weather.
(4.0)3.1/-	Represents (Dry Weather Limit) Wet Weather Limit / Monthly Average Limit.

SECTION 1

OUTFALL 001 (SOUTH SLOPE BELOW PERIMETER POND)  
ANNUAL 2012 REPORTING SUMMARY

**OUTFALL 001 (South Slope below Perimeter Pond)**

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**January 1 through December 31, 2012**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/13/2012		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/-	Comp	0.840	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/-	Comp	3.6	*
Chloride	mg/L	150/-	Comp	2.9	*
Dissolved Oxygen	mg/L	-/-	Grab	10.65	*
E. Coli	MPN/100mL	-/-	Grab	900	*
Fecal Coliform	MPN/100mL	-/-	Grab	900	*
Human Bacteroides	Ces/100 mL	-/-	Grab	ND	*
Specific Conductivity (Lab)	umhos/cm	-/-	Grab	79	--
Surfactants (MBAS)	mg/L	0.5/-	Comp	ND < 0.050	*
Fluoride	mg/L	1.6/-	Comp	0.061	J,DX* (DNQ)
Nitrate + Nitrite as Nitrogen (N)	mg/L	8/-	Comp	0.64	*
Nitrate as Nitrogen (N)	mg/L	8/-	Comp	0.64	*
Nitrite as Nitrogen (N)	mg/L	1/-	Comp	ND < 0.11	*
Oil & Grease	mg/L	15/-	Grab	ND < 1.4	*
Perchlorate	ug/L	6.0/-	Comp	1.4	J (Q, DNQ)
pH (Field)	pH units	6.5-8.5/-	Grab	7.2	*
Total Settleable Solids	ml/L	0.3/-	Grab	ND < 0.10	*
Sulfate	mg/L	300/-	Comp	5.0	*
Temperature	deg. F	86/-	Grab	52	*
Total Cyanide	ug/L	8.5/-	Comp	ND < 3.0	*
Total Dissolved Solids	mg/L	950/-	Comp	76	*
Hardness	mg/L	-/-	Comp	42	--
Hardness, dissolved	mg/L	-/-	Comp	20	--
Total Organic Carbon	mg/L	-/-	Comp	13	--
Total Residual Chlorine (Field)	mg/L	0.1/-	Grab	0.0	*
Total Suspended Solids	mg/L	45/-	Comp	63	--
Turbidity	NTU	-/-	Comp	390	J (R)
Volume Discharged	MGD	160/-	MEAS	0.089125	*
<b>METALS</b>					
Aluminum	ug/L	-/-	Comp	11000	--
Aluminum, dissolved	ug/L	-/-	Comp	660	--
Antimony	ug/L	6.0/-	Comp	ND < 0.60	U
Antimony, dissolved	ug/L	-/-	Comp	ND < 1.5	U
Arsenic	ug/L	10/-	Comp	7.9	J (DNQ)
Arsenic, dissolved	ug/L	-/-	Comp	ND < 7.0	U
Barium	mg/L	1.0/-	Comp	0.11	--
Barium, dissolved	mg/L	-/-	Comp	0.11	--
Beryllium	ug/L	4.0/-	Comp	ND < 0.90	U
Beryllium, dissolved	ug/L	-/-	Comp	ND < 0.90	U
Boron	mg/L	-/-	Comp	0.046	J (DNQ)
Boron, dissolved	mg/L	-/-	Comp	ND < 0.050	U (B)
Cadmium	ug/L	3.1/-	Comp	0.27	J (DNQ)

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			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Cadmium, dissolved	ug/L	-/-	Comp	ND < 0.50	U
Chromium	ug/L	16/-	Comp	15	--
Chromium, dissolved	ug/L	-/-	Comp	ND < 2.0	U
Chromium VI	ug/L	16/-	Comp	ND < 0.25	BU BV*
Cobalt	ug/L	-/-	Comp	5.0	J (DNQ)
Cobalt, dissolved	ug/L	-/-	Comp	ND < 2.0	U
Copper	ug/L	14/-	Comp	10	--
Copper, dissolved	ug/L	-/-	Comp	3.0	J (DNQ)
Iron	mg/L	0.3/-	Comp	14	--
Iron, dissolved	mg/L	-/-	Comp	0.56	--
Lead	ug/L	5.2/-	Comp	10	--
Lead, dissolved	ug/L	-/-	Comp	ND < 1.0	U
Manganese	ug/L	50/-	Comp	260	--
Manganese, dissolved	ug/L	-/-	Comp	7.7	J (DNQ)
Mercury	ug/L	0.10/-	Comp	ND < 0.10	U
Mercury, dissolved	ug/L	-/-	Comp	ND < 0.10	U
Nickel	ug/L	96/-	Comp	12	--
Nickel, dissolved	ug/L	-/-	Comp	3.4	J (DNQ)
Selenium	ug/L	8.2/-	Comp	ND < 1.0	UJ (C)
Selenium, dissolved	ug/L	-/-	Comp	ND < 2.5	U
Silver	ug/L	4.1/-	Comp	ND < 6.0	U
Silver, dissolved	ug/L	-/-	Comp	ND < 6.0	U
Thallium	ug/L	2.0/-	Comp	ND < 0.40	U
Thallium, dissolved	ug/L	-/-	Comp	ND < 1.0	U
Vanadium	ug/L	-/-	Comp	27	--
Vanadium, dissolved	ug/L	-/-	Comp	ND < 3.0	U
Zinc	ug/L	119/-	Comp	55	--
Zinc, Dissolved	ug/L	-/-	Comp	12	J (DNQ)
<b>ORGANICS</b>					
Benzene	ug/L	-/-	Grab	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	Grab	ND < 0.28	*
Chloroform	ug/L	-/-	Grab	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	Grab	ND < 0.40	*
1,2-Dichloroethane	ug/L	0.5/-	Grab	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/-	Grab	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	Comp	ND < 1.0	*
Ethylbenzene	ug/L	-/-	Grab	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	Grab	ND < 0.32	*
Toluene	ug/L	-/-	Grab	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	Grab	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*

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			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Trichloroethene	ug/L	5.0/-	Grab	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	Grab	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	Grab	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	Grab	ND < 0.40	*
<b>TPH</b>					
DRO (C13 - C28)	mg/L	-/-	Grab	0.14	J (DNQ)
GRO (C4 - C12)	mg/L	-/-	Grab	ND < 0.025	U
<b>ADDITIONAL ANALYTES</b>					
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	Grab	ND < 1.1	*
1,1,2,2-Tetrachloroethane	ug/L	-/-	Grab	ND < 0.30	*
1,2,4-Trichlorobenzene	ug/L	-/-	Comp	ND < 0.0948	*
1,2-Dichlorobenzene	ug/L	-/-	Comp	ND < 0.0948	*
1,2-Dichlorobenzene	ug/L	-/-	Grab	ND < 0.32	*
1,2-Dichloropropane	ug/L	-/-	Grab	ND < 0.35	*
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	Comp	ND < 0.190	*
1,3-Dichlorobenzene	ug/L	-/-	Comp	ND < 0.0948	*
1,3-Dichlorobenzene	ug/L	-/-	Grab	ND < 0.35	*
1,4-Dichlorobenzene	ug/L	-/-	Comp	ND < 0.190	*
1,4-Dichlorobenzene	ug/L	-/-	Grab	ND < 0.37	*
2,4,6-Trichlorophenol	ug/L	13/-	Comp	ND < 0.0948	*
2,4-Dichlorophenol	ug/L	-/-	Comp	ND < 0.190	*
2,4-Dimethylphenol	ug/L	-/-	Comp	ND < 0.284	*
2,4-Dinitrophenol	ug/L	-/-	Comp	ND < 0.853	*
2,4-Dinitrotoluene	ug/L	18/-	Comp	ND < 0.190	*
2,6-Dinitrotoluene	ug/L	-/-	Comp	ND < 0.0948	*
2-Chloroethylvinylether	ug/L	-/-	Grab	ND < 1.8	*
2-Chloronaphthalene	ug/L	-/-	Comp	ND < 0.0948	*
2-Chlorophenol	ug/L	-/-	Comp	ND < 0.190	*
2-Methyl-4,6-dinitrophenol	ug/L	-/-	Comp	ND < 0.284	*
2-Methylnaphthalene	ug/L	-/-	Comp	ND < 0.190	*
2-Methylphenol	ug/L	-/-	Comp	ND < 0.0948	*
2-Nitrophenol	ug/L	-/-	Comp	ND < 0.0948	*
3,3'-Dichlorobenzidine	ug/L	-/-	Comp	ND < 0.474	*
4,4'-DDD	ug/L	-/-	Comp	ND < 0.0039	*
4,4'-DDE	ug/L	-/-	Comp	ND < 0.0029	*
4,4'-DDT	ug/L	-/-	Comp	ND < 0.0039	*
4-Bromophenylphenylether	ug/L	-/-	Comp	ND < 0.190	*
4-Chloro-3-methylphenol	ug/L	-/-	Comp	ND < 0.190	*
4-Chloroaniline	ug/L	-/-	Comp	ND < 0.284	*
4-Chlorophenylphenylether	ug/L	-/-	Comp	ND < 0.190	*
4-Nitrophenol	ug/L	-/-	Comp	ND < 2.37	LQ*
Acenaphthene	ug/L	-/-	Comp	ND < 0.190	*

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Acenaphthylene	ug/L	-/-	Comp	ND < 0.190	*
Acrolein	ug/L	-/-	Grab	ND < 4.0	*
Acrylonitrile	ug/L	-/-	Grab	ND < 1.2	*
Acute Toxicity	% SURVIVAL	70-100/-	Comp	100	*
Aldrin	ug/L	-/-	Comp	ND < 0.0015	*
alpha-BHC	ug/L	0.03/-	Comp	ND < 0.0024	*
Aniline	ug/L	-/-	Comp	ND < 0.284	*
Anthracene	ug/L	-/-	Comp	ND < 0.0948	*
Aroclor-1016	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1221	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1232	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1242	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1248	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1254	ug/L	-/-	Comp	ND < 0.24	*
Aroclor-1260	ug/L	-/-	Comp	ND < 0.24	*
Benzidine	ug/L	-/-	Comp	ND < 0.948	*
Benzo(a)anthracene	ug/L	-/-	Comp	ND < 0.0948	*
Benzo(a)pyrene	ug/L	-/-	Comp	ND < 0.0948	*
Benzo(b)fluoranthene	ug/L	-/-	Comp	ND < 0.0948	*
Benzo(g,h,l)perylene	ug/L	-/-	Comp	ND < 0.0948	*
Benzo(k)fluoranthene	ug/L	-/-	Comp	ND < 0.190	*
Benzoic acid	ug/L	-/-	Comp	ND < 2.84	*
Benzyl alcohol	ug/L	-/-	Comp	ND < 0.0948	*
beta-BHC	ug/L	-/-	Comp	ND < 0.0039	*
bis (2-Chloroethyl) ether	ug/L	-/-	Comp	ND < 0.0948	*
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	Comp	ND < 1.61	*
bis(2-Chloroethoxy) methane	ug/L	-/-	Comp	ND < 0.0948	*
bis(2-Chloroisopropyl) ether	ug/L	-/-	Comp	ND < 0.0948	*
Bromodichloromethane	ug/L	-/-	Grab	ND < 0.30	*
Bromoform	ug/L	-/-	Grab	ND < 0.40	*
Bromomethane	ug/L	-/-	Grab	ND < 0.42	*
Butylbenzylphthalate	ug/L	-/-	Comp	ND < 0.664	*
Chlordane	ug/L	-/-	Comp	ND < 0.0078	*
Chlorobenzene	ug/L	-/-	Grab	ND < 0.36	*
Chloroethane	ug/L	-/-	Grab	ND < 0.40	*
Chloromethane	ug/L	-/-	Grab	ND < 0.40	*
Chronic Toxicity	TUC	1.0/-	Comp	1.0	*
Chrysene	ug/L	-/-	Comp	ND < 0.0948	*
cis-1,2-Dichloroethene	ug/L	-/-	Grab	ND < 0.32	*
cis-1,3-Dichloropropene	ug/L	-/-	Grab	ND < 0.22	*
Cyclohexane	ug/L	-/-	Grab	ND < 0.40	*
delta-BHC	ug/L	-/-	Comp	ND < 0.0034	*



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Dibenzo(a,h)anthracene	ug/L	-/-	Comp	ND < 0.0948	*
Dibenzofuran	ug/L	-/-	Comp	ND < 0.0948	*
Dibromochloromethane	ug/L	-/-	Grab	ND < 0.40	*
Dieldrin	ug/L	-/-	Comp	ND < 0.0019	*
Diethylphthalate	ug/L	-/-	Comp	ND < 0.0948	*
Dimethylphthalate	ug/L	-/-	Comp	ND < 0.190	*
Di-n-butylphthalate	ug/L	-/-	Comp	ND < 0.284	*
Di-n-octylphthalate	ug/L	-/-	Comp	ND < 0.190	*
Endosulfan I	ug/L	-/-	Comp	ND < 0.0029	*
Endosulfan II	ug/L	-/-	Comp	ND < 0.0019	*
Endosulfan sulfate	ug/L	-/-	Comp	ND < 0.0029	*
Endrin	ug/L	-/-	Comp	ND < 0.0019	*
Endrin aldehyde	ug/L	-/-	Comp	ND < 0.0019	*
Fluoranthene	ug/L	-/-	Comp	ND < 0.0948	*
Fluorene	ug/L	-/-	Comp	ND < 0.0948	*
Heptachlor	ug/L	-/-	Comp	ND < 0.0029	*
Heptachlor epoxide	ug/L	-/-	Comp	ND < 0.0024	*
Hexachlorobenzene	ug/L	-/-	Comp	ND < 0.0948	*
Hexachlorobutadiene	ug/L	-/-	Comp	ND < 0.190	*
Hexachlorocyclopentadiene	ug/L	-/-	Comp	ND < 0.0948	*
Hexachloroethane	ug/L	-/-	Comp	ND < 0.190	*
Hydrazine	ug/L	-/-	Comp	ND < 0.439	*
Unsymmetrical Dimethyl Hydrazine	ug/L	-/-	Comp	ND < 1.13	*
Indeno(1,2,3-cd)pyrene	ug/L	-/-	Comp	ND < 0.0948	*
Isophorone	ug/L	-/-	Comp	ND < 0.0948	*
Lindane (gamma-BHC)	ug/L	-/-	Comp	ND < 0.0029	*
Methylene Chloride	ug/L	-/-	Grab	ND < 0.95	*
m-Nitroaniline	ug/L	-/-	Comp	ND < 0.948	*
Monomethyl Hydrazine	ug/L	-/-	Comp	ND < 1.77	*
Naphthalene	ug/L	-/-	Comp	ND < 0.0948	*
Nitrobenzene	ug/L	-/-	Comp	ND < 0.0948	*
n-Nitrosodimethylamine	ug/L	16/-	Comp	ND < 0.0948	*
n-Nitroso-di-n-propylamine	ug/L	-/-	Comp	ND < 0.0948	*
n-Nitrosodiphenylamine	ug/L	-/-	Comp	ND < 0.0948	*
o-Nitroaniline	ug/L	-/-	Comp	ND < 0.0948	*
p-Cresol	ug/L	-/-	Comp	ND < 0.190	*
Pentachlorophenol	ug/L	16.5/-	Comp	ND < 0.379	*
Phenanthrene	ug/L	-/-	Comp	ND < 0.0948	*
Phenol	ug/L	-/-	Comp	ND < 0.284	*
p-Nitroaniline	ug/L	-/-	Comp	ND < 0.474	*
Pyrene	ug/L	-/-	Comp	ND < 0.0948	*
Toxaphene	ug/L	-/-	Comp	ND < 0.24	*

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			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
trans-1,2-Dichloroethene	ug/L	-/-	Grab	ND < 0.30	*
trans-1,3-Dichloropropene	ug/L	-/-	Grab	ND < 0.32	*

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**Sample Type Composite  
Sample Date April 13, 2012**

<b>ANALYTE</b>	<b>LAB LOD (ug/L)</b>	<b>LAB RL (ug/L)</b>	<b>LAB RESULT (ug/L)</b>	<b>VALIDATION QUALIFIER</b>	<b>1998 WHO TEF</b>	<b>BEF Great Lakes Water Quality Initiative</b>	<b>TCDD Equivalent (w/out DNQ Values) (ug/L)</b>
1,2,3,4,6,7,8-HpCDD	1.90E-07	4.80E-05	5.00E-05	--	0.01	0.05	<b>2.50E-08</b>
1,2,3,4,6,7,8-HpCDF	2.10E-07	4.80E-05	ND	U (B)	0.01	0.01	<b>ND</b>
1,2,3,4,7,8,9-HpCDF	2.60E-07	4.80E-05	ND	U (B)	0.01	0.4	<b>ND</b>
1,2,3,4,7,8-HxCDD	4.00E-08	4.80E-05	ND	U (B)	0.1	0.3	<b>ND</b>
1,2,3,4,7,8-HxCDF	3.00E-08	4.80E-05	ND	U (B)	0.1	0.08	<b>ND</b>
1,2,3,6,7,8-HxCDD	4.00E-08	4.80E-05	ND	U (B)	0.1	0.1	<b>ND</b>
1,2,3,6,7,8-HxCDF	3.00E-08	4.80E-05	ND	U (B)	0.1	0.2	<b>ND</b>
1,2,3,7,8,9-HxCDD	3.00E-08	4.80E-05	ND	U (B)	0.1	0.1	<b>ND</b>
1,2,3,7,8,9-HxCDF	7.30E-07	4.80E-05	ND	U	0.1	0.6	<b>ND</b>
1,2,3,7,8-PeCDD	9.40E-07	4.80E-05	ND	U	1	0.9	<b>ND</b>
1,2,3,7,8-PeCDF	3.40E-07	4.80E-05	ND	U (B)	0.05	0.2	<b>ND</b>
2,3,4,6,7,8-HxCDF	3.00E-08	4.80E-05	ND	U (B)	0.1	0.7	<b>ND</b>
2,3,4,7,8-PeCDF	3.50E-07	4.80E-05	ND	U (B)	0.5	1.6	<b>ND</b>
2,3,7,8-TCDD	6.00E-08	9.60E-06	ND	UJ (*III)	1	1	<b>ND</b>
2,3,7,8-TCDF	2.00E-06	9.60E-06	ND	U	0.1	0.8	<b>ND</b>
OCDD	3.70E-07	9.60E-05	4.70E-04	--	0.0001	0.01	<b>4.70E-10</b>
OCDF	2.90E-07	9.60E-05	ND	U (B)	0.0001	0.02	<b>ND</b>
<b>TCDD TEQ w/out DNQ Values</b>							<b>2.55E-08</b>

**TCDD TEQ BENCHMARK LIMIT = 2.80E-08**

See attached notes for abbreviations, definitions, and other explanations for the data presented in this table.

**OUTFALL 001 (South Slope below Perimeter Pond)**

**ANNUAL 2012 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**January 1 through December 31, 2012**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	04/13/2012 (Comp)		
			RESULT	MDA	VALIDATION QUALIFIER
<b>RADIOACTIVITY</b>					
Gross Alpha	pCi/L	15/-	17.1 ± 2.0	1.02	J (C)
Gross Beta	pCi/L	50/-	16.2 ± 1.2	1.37	--
Strontium-90	pCi/L	8.0/-	-0.104 ± 0.39	0.935	UJ (L)
Total Combined Radium-226 & Radium 228	pCi/L	5.0/-	1.33 ± 0.47	1.05	--
Tritium	pCi/L	20000/-	-36.3 ± 87	150	U
Uranium, Total	pCi/L	20/-	0.687 ± 0.074	0.018	J (L, DNQ)
Potassium-40	pCi/L	-/-	-1.04 ± 21	35.8	U
Cesium 137	pCi/L	200/-	-1.43 ± 2.3	3.99	U

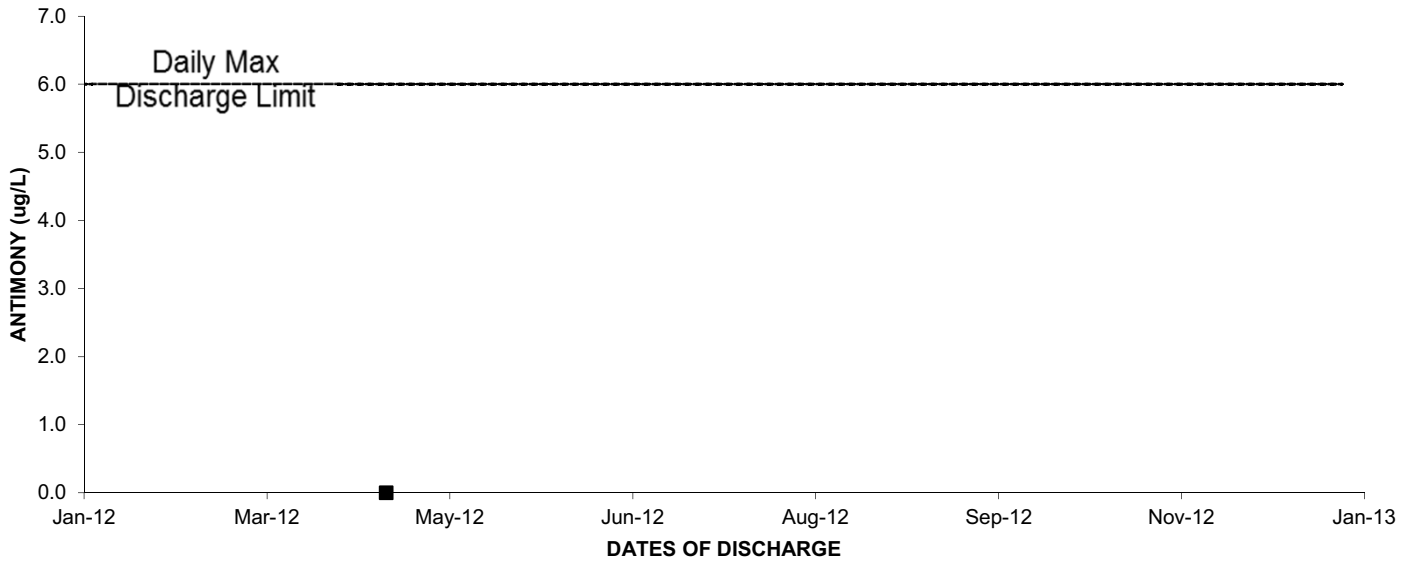
**OUTFALL 001 (South Slope below Perimeter Pond)**

**ANNUAL 2012 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

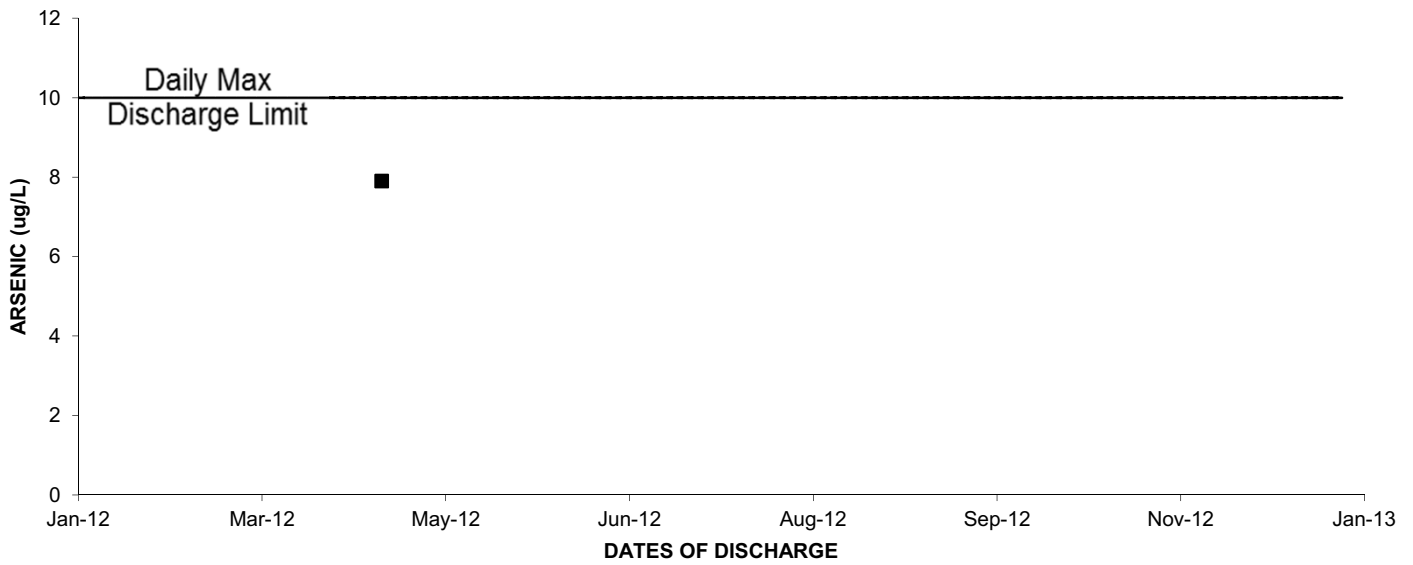
**January 1 through December 31, 2012**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/13/2012		
			Sample Type	Result	Concentration Result Validation Qualifier
Max Discharge for event	MGD	160	Meas	0.089125	
Ammonia as Nitrogen (N)	LBS/DAY	13,500/-	Comp	0.62	*
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/-	Comp	2.68	*
Chloride	LBS/DAY	200,160/-	Comp	2.16	*
Surfactants (MBAS)	LBS/DAY	667/-	Comp	ND	*
Fluoride	LBS/DAY	2,135/-	Comp	0.05	J,DX* (DNQ)
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	Comp	0.48	*
Nitrate as Nitrogen (N)	LBS/DAY	10,700/-	Comp	0.48	*
Nitrite as Nitrogen (N)	LBS/DAY	1,334/-	Comp	ND	*
Oil & Grease	LBS/DAY	20,016/-	Grab	ND	*
Perchlorate	LBS/DAY	8.0/-	Comp	0.001	J (Q, DNQ)
Sulfate	LBS/DAY	400,320/-	Comp	3.72	*
Total Cyanide	LBS/DAY	11/-	Comp	ND	*
Total Dissolved Solids	LBS/DAY	1,270,000/-	Comp	56.49	*
Total Residual Chlorine (Field)	LBS/DAY	133/-	Grab	0.0	*
Total Suspended Solids	LBS/DAY	60,048/-	Comp	46.83	--
Antimony	LBS/DAY	8.0/-	Comp	ND	U
Arsenic	LBS/DAY	67/-	Comp	0.01	J (DNQ)
Barium	LBS/DAY	1,330/-	Comp	0.08	--
Beryllium	LBS/DAY	5.3/-	Comp	ND	U
Cadmium	LBS/DAY	4.1/-	Comp	0.0002	J (DNQ)
Chromium VI	LBS/DAY	22/-	Comp	ND	BU BV*
Copper	LBS/DAY	19/-	Comp	0.01	--
Iron	LBS/DAY	400/-	Comp	10.41	--
Lead	LBS/DAY	6.9/-	Comp	0.01	--
Manganese	LBS/DAY	66.7/-	Comp	0.19	--
Mercury	LBS/DAY	0.13/-	Comp	ND	U
Nickel	LBS/DAY	128/-	Comp	0.01	--
Selenium	LBS/DAY	11/-	Comp	ND	UJ (C)
Silver	LBS/DAY	5.5/-	Comp	ND	U
Thallium	LBS/DAY	2.7/-	Comp	ND	U
Zinc	LBS/DAY	159/-	Comp	0.04	--
1,2-Dichloroethane	LBS/DAY	0.67/-	Grab	ND	*
1,1-Dichloroethene	LBS/DAY	8.0/-	Grab	ND	*
Trichloroethene	LBS/DAY	6.7/-	Grab	ND	*
2,4,6-Trichlorophenol	LBS/DAY	17/-	Comp	ND	*
2,4-Dinitrotoluene	LBS/DAY	24/-	Comp	ND	*
alpha-BHC	LBS/DAY	0.04/-	Comp	ND	*
bis (2-ethylhexyl) Phthalate	LBS/DAY	5.3/-	Comp	ND	*
n-Nitrosodimethylamine	LBS/DAY	22/-	Comp	ND	*
Pentachlorophenol	LBS/DAY	22/-	Comp	ND	*
TCDD TEQ_NoDNQ	LBS/DAY	3.70E-08/-	Comp	1.90E-11	--

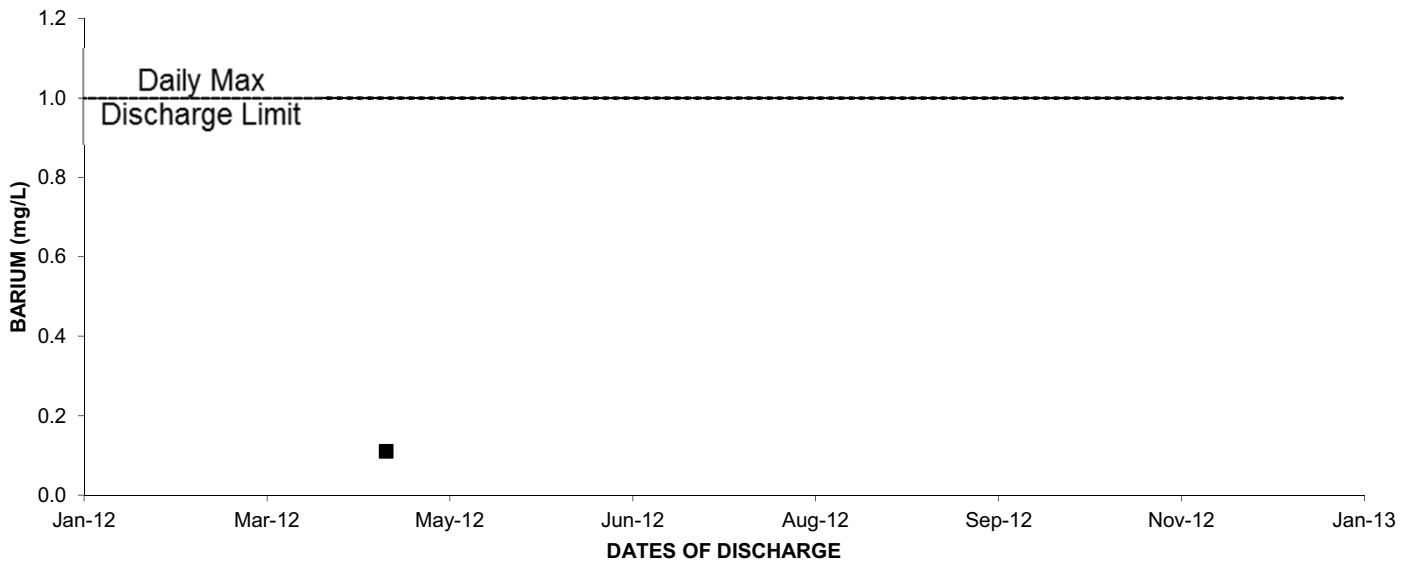
2012: OUTFALL 001 ANTIMONY



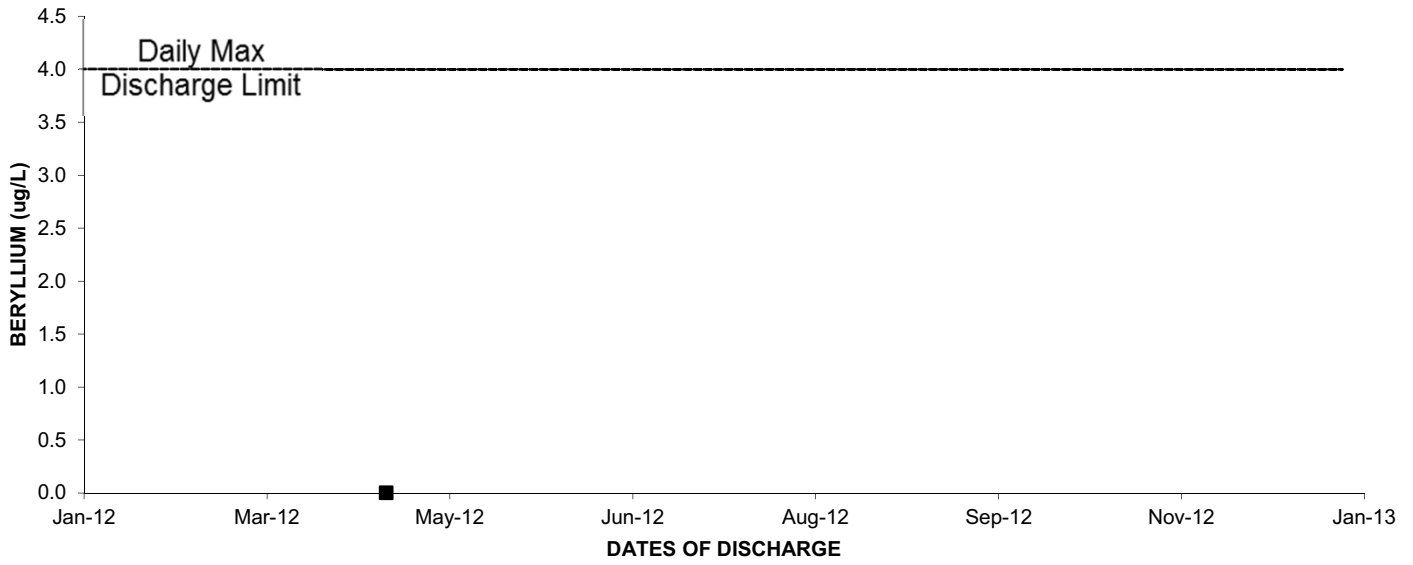
2012: OUTFALL 001 ARSENIC



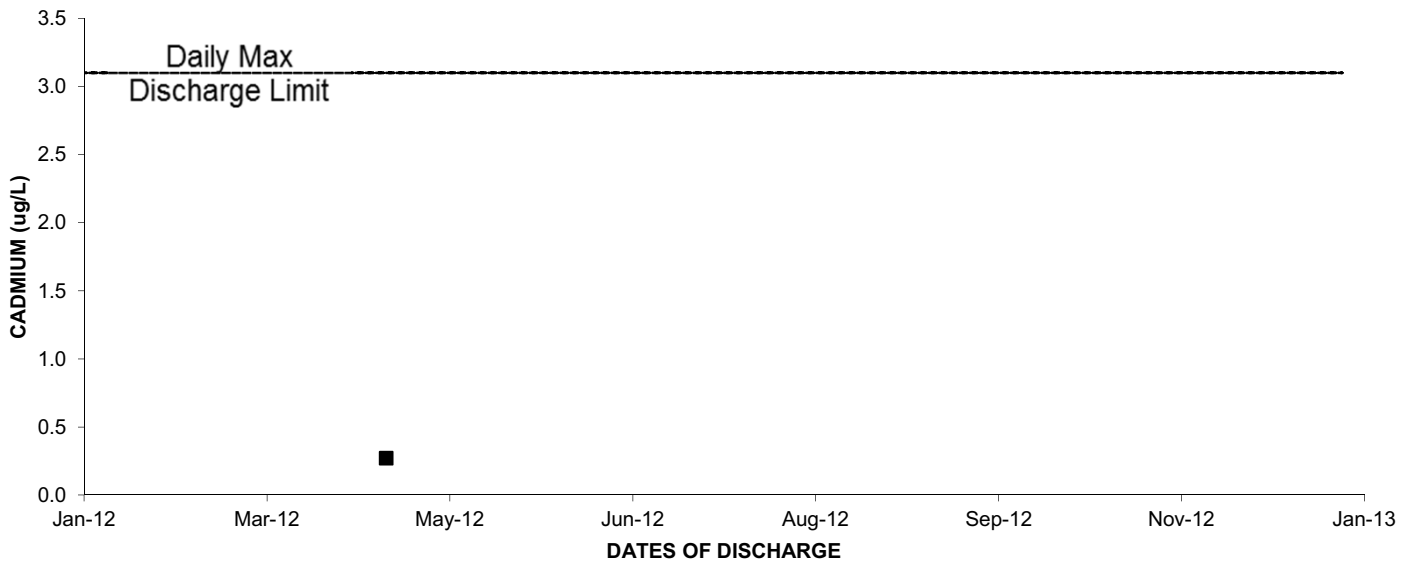
2012: OUTFALL 001 BARIUM



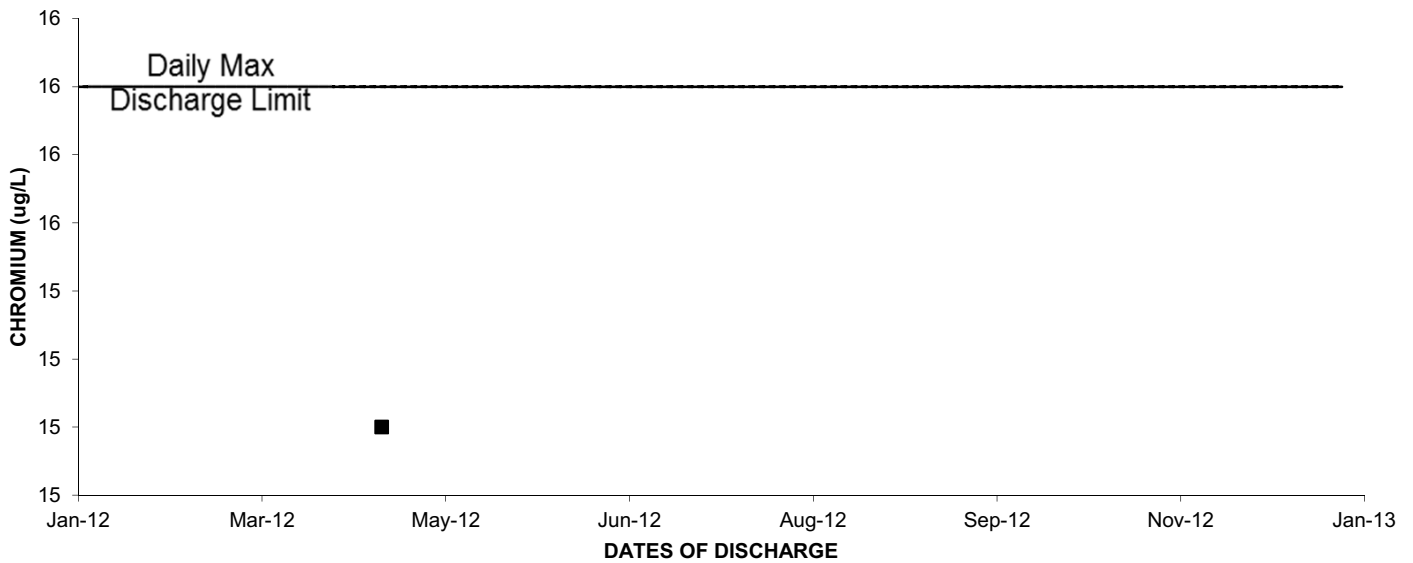
### 2012: OUTFALL 001 BERYLLIUM



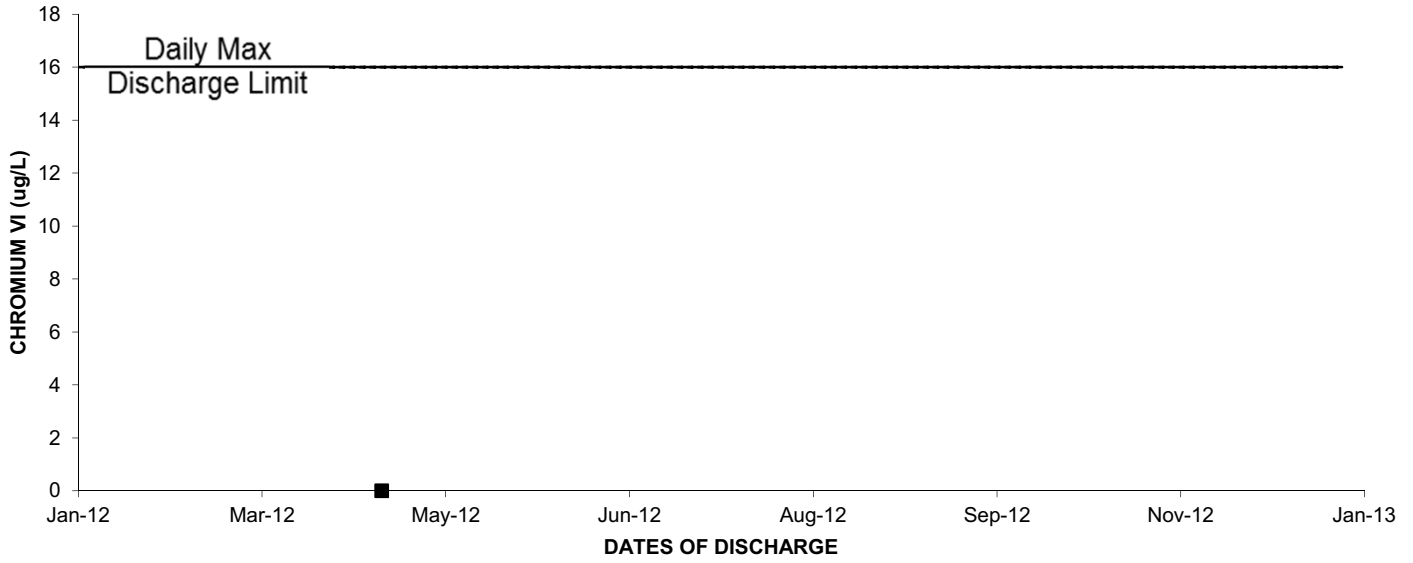
### 2012: OUTFALL 001 CADMIUM



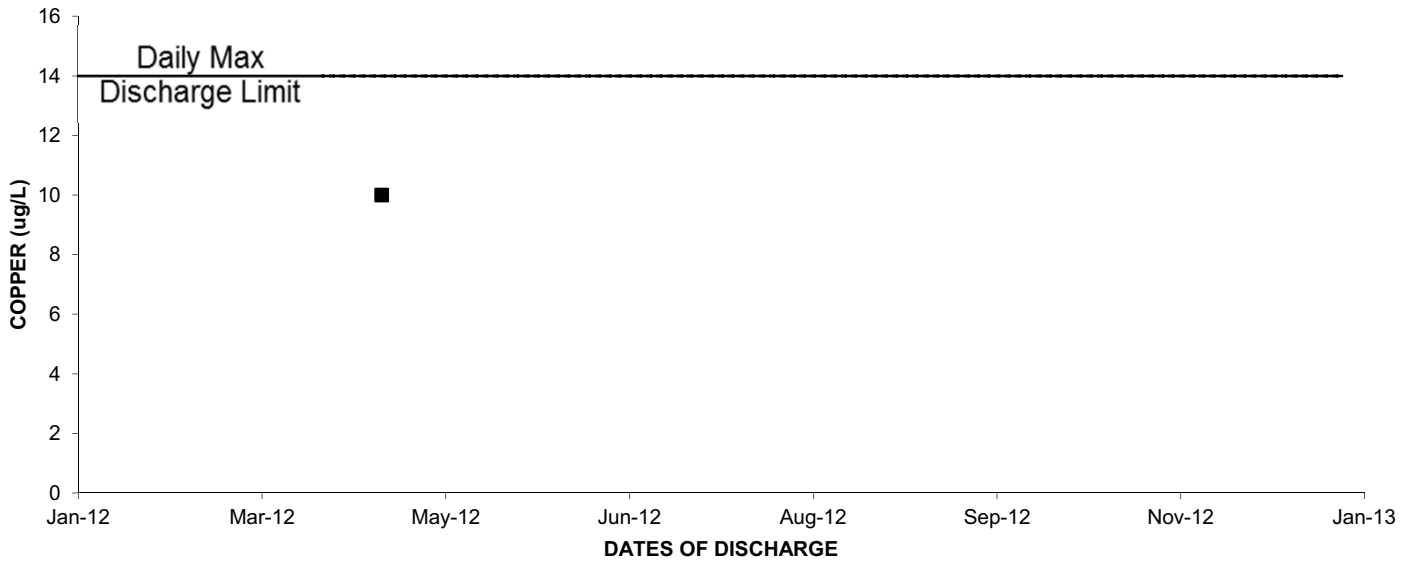
### 2012: OUTFALL 001 CHROMIUM



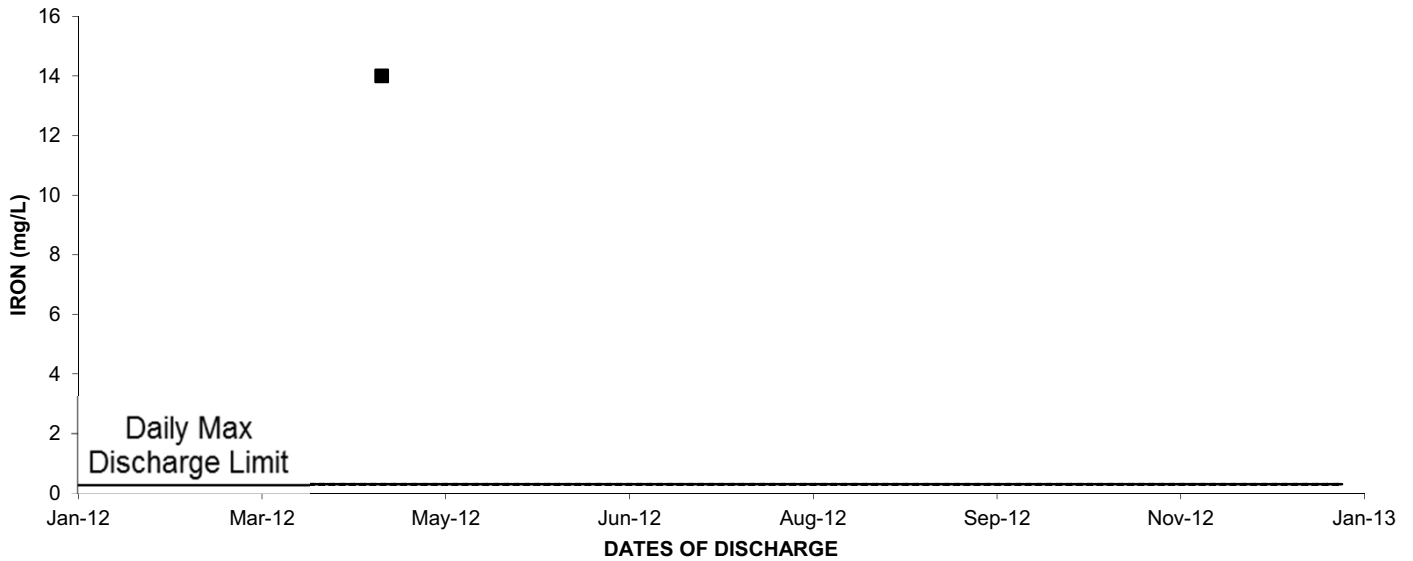
2012: OUTFALL 001 CHROMIUM VI



2012: OUTFALL 001 COPPER

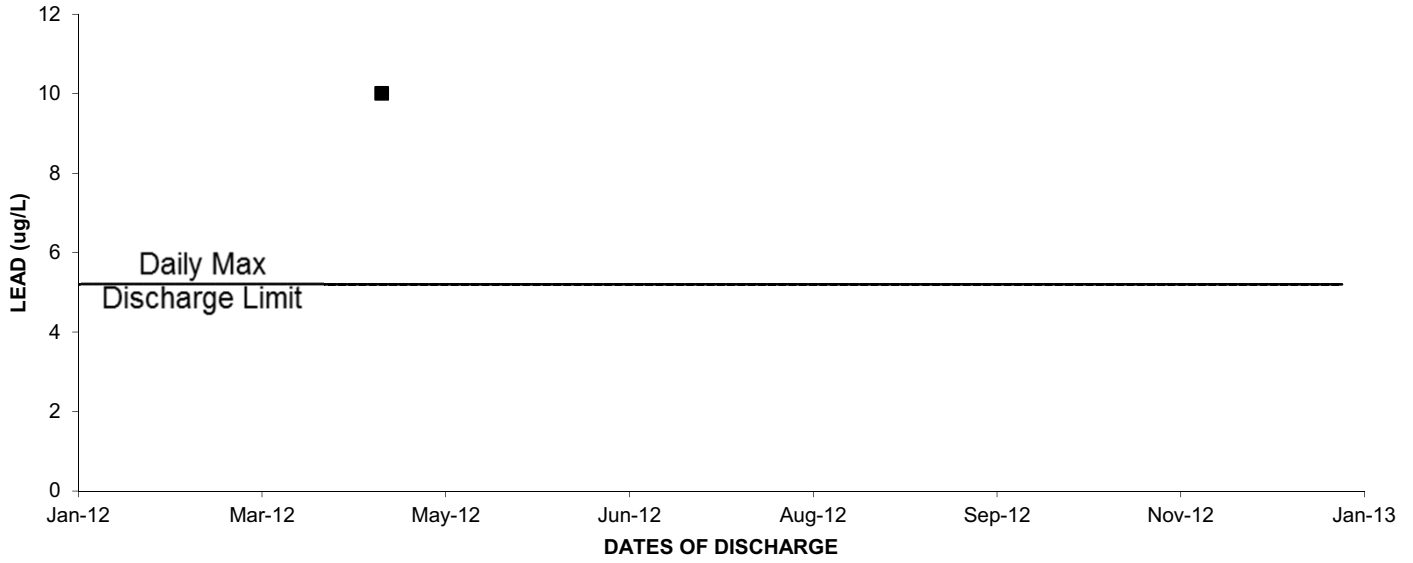


2012: OUTFALL 001 IRON

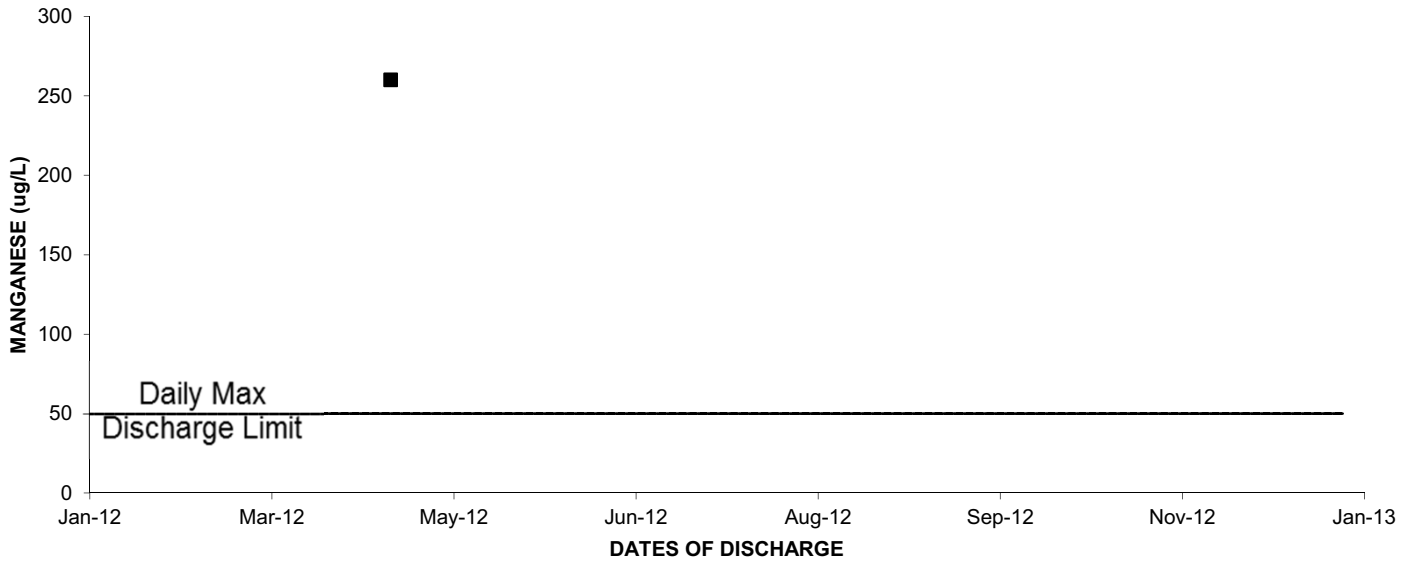




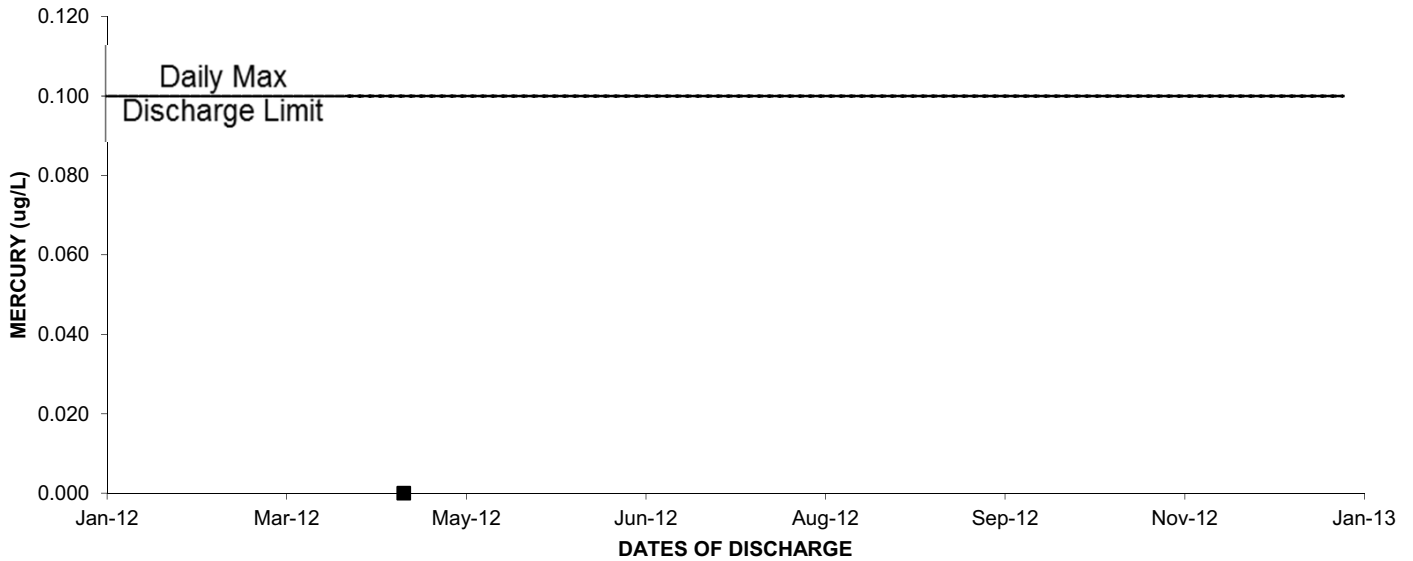
### 2012: OUTFALL 001 LEAD



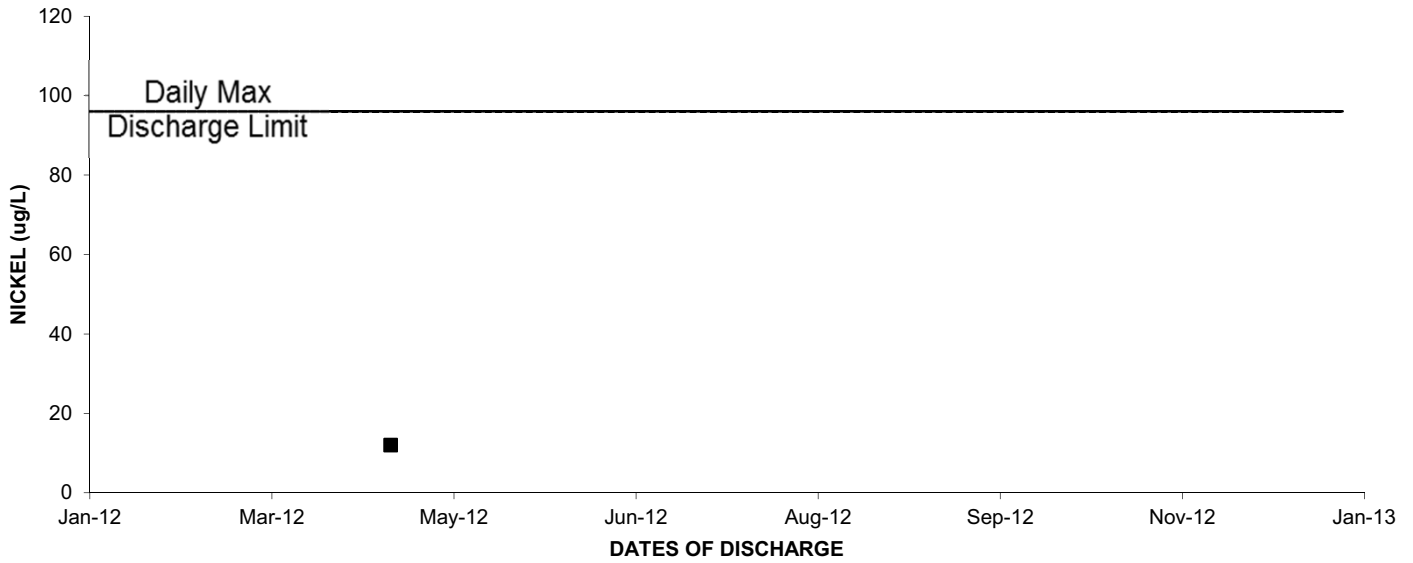
### 2012: OUTFALL 001 MANGANESE



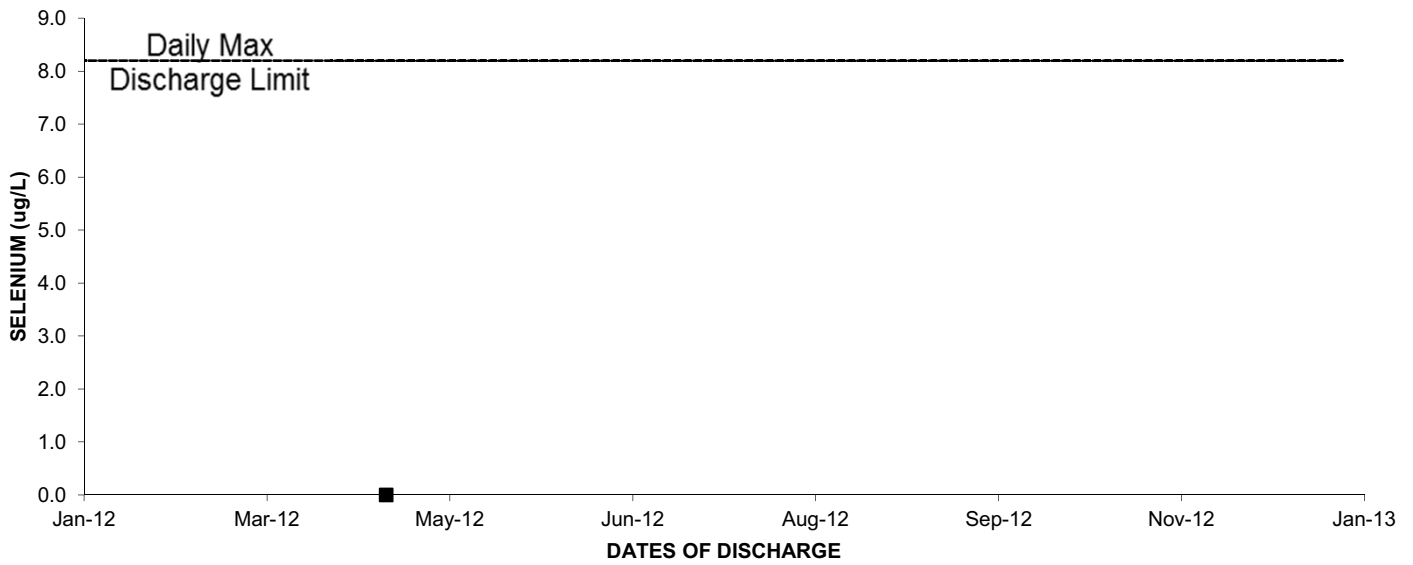
### 2012: OUTFALL 001 MERCURY



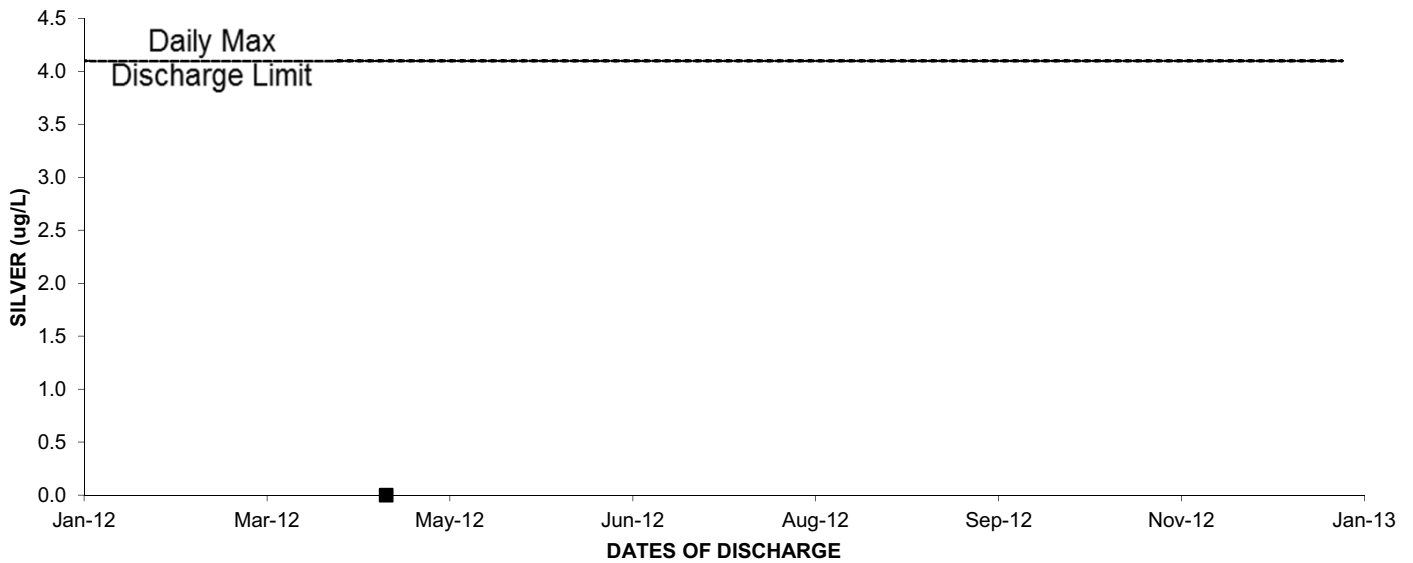
### 2012: OUTFALL 001 NICKEL



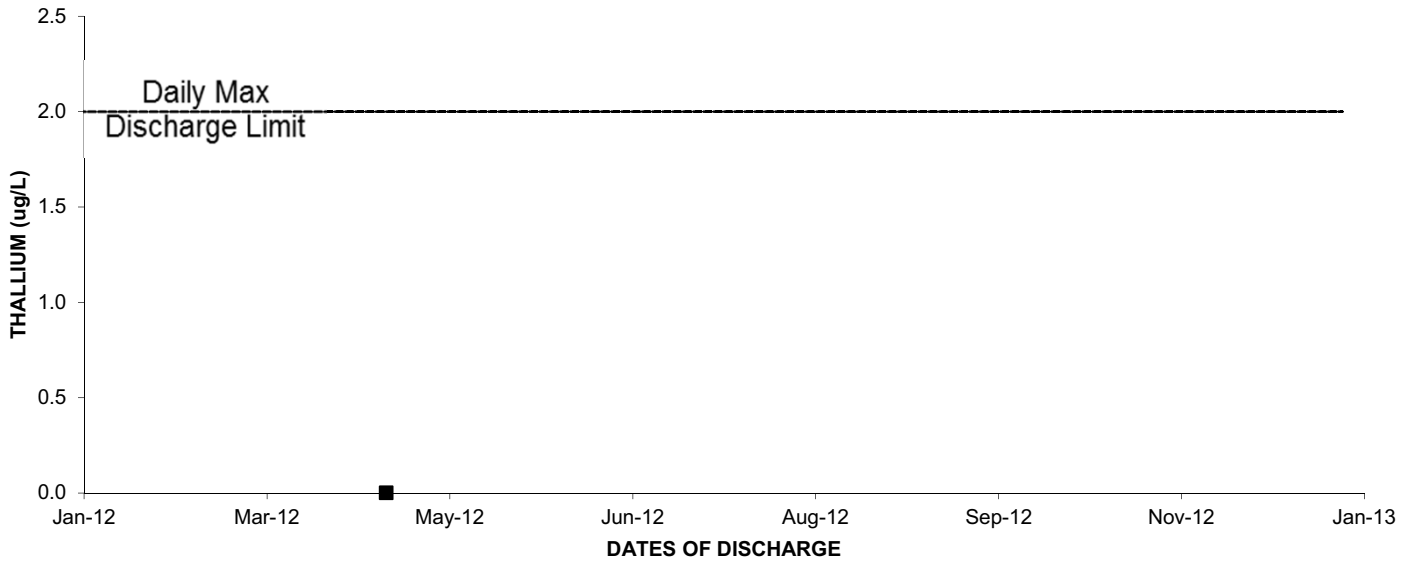
### 2012: OUTFALL 001 SELENIUM



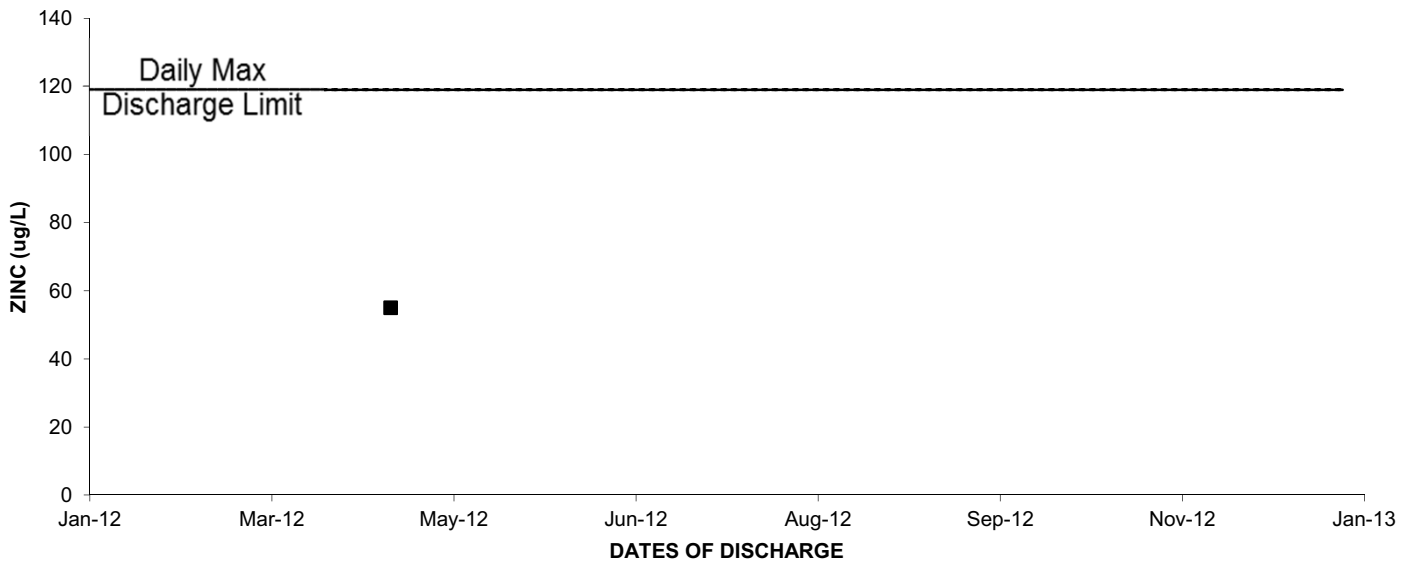
### 2012: OUTFALL 001 SILVER



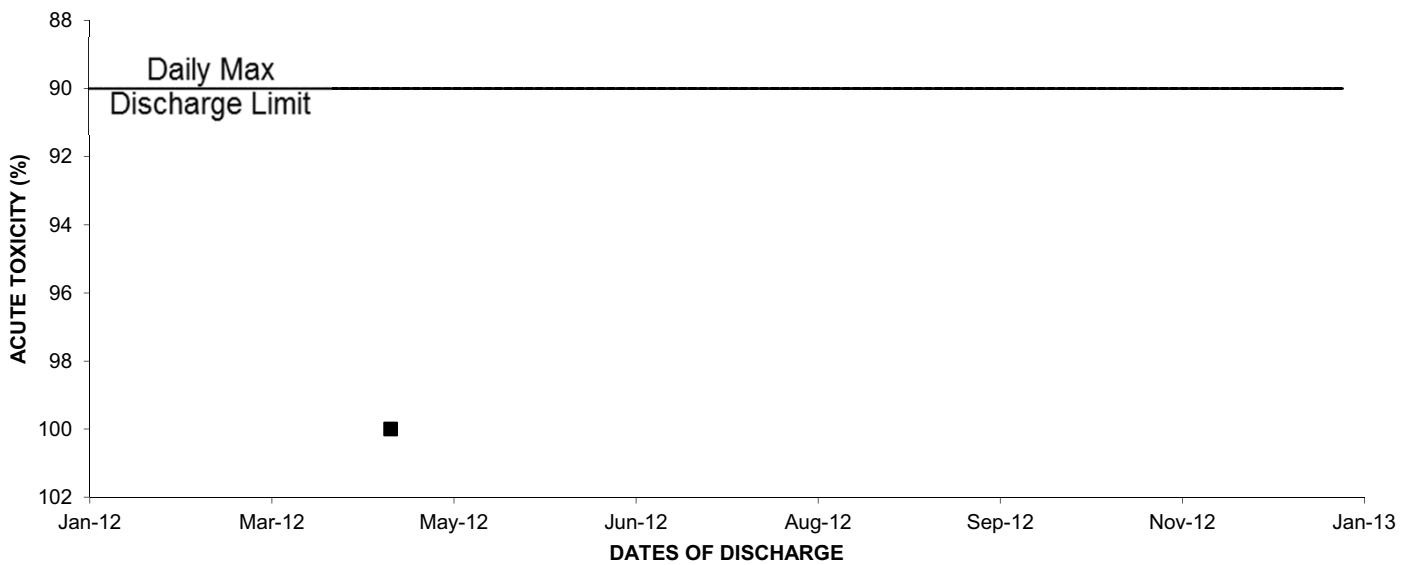
### 2012: OUTFALL 001 THALLIUM



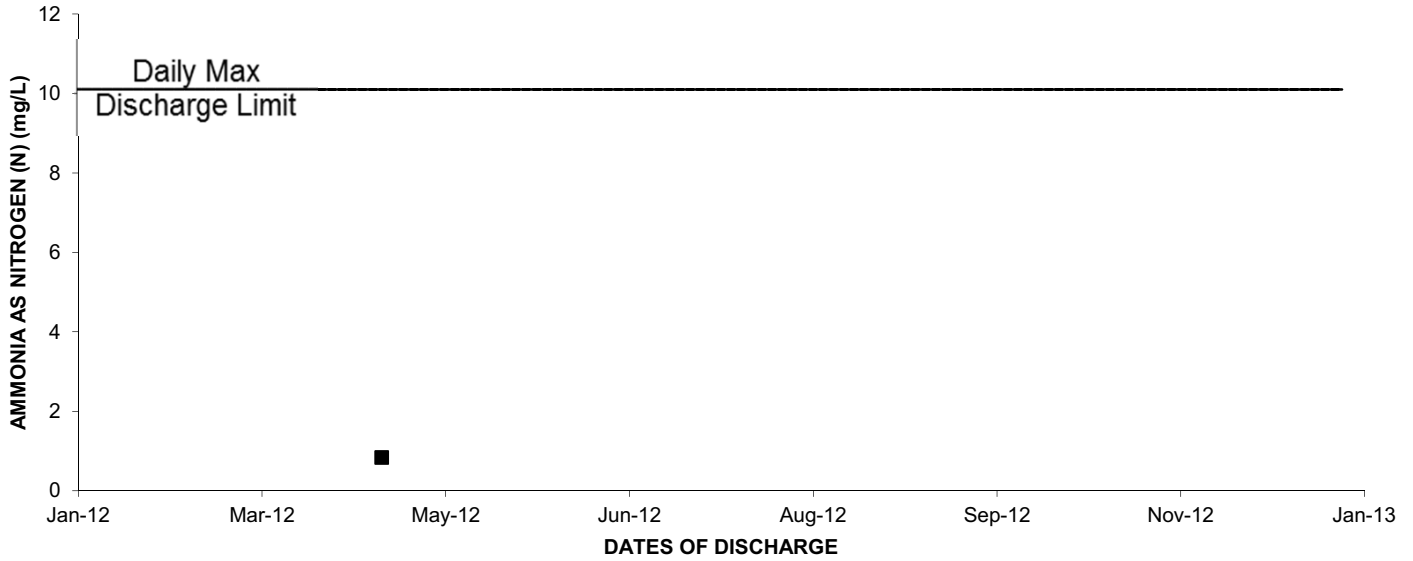
### 2012: OUTFALL 001 ZINC



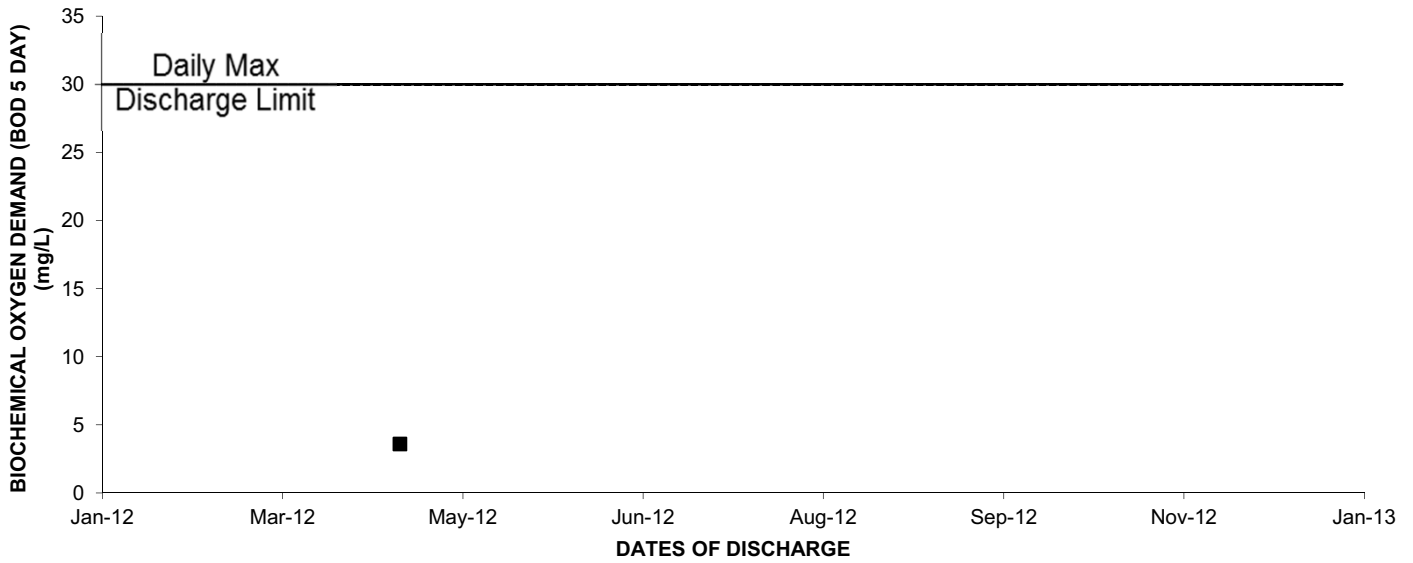
### 2012: OUTFALL 001 ACUTE TOXICITY



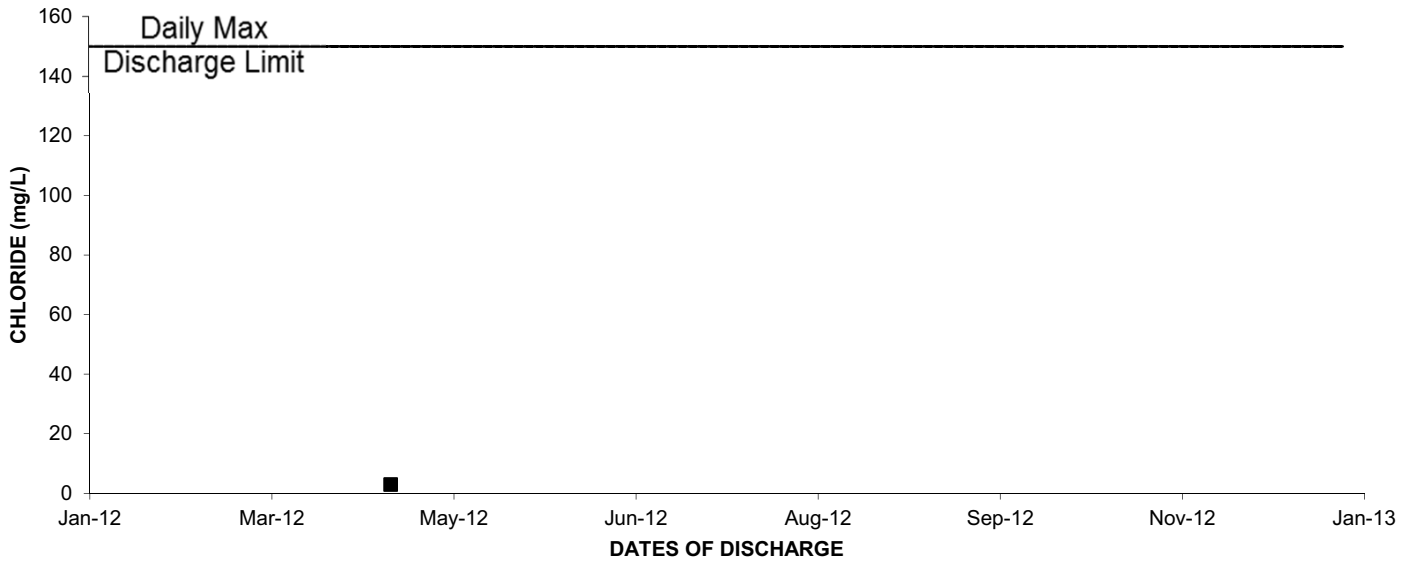
2012: OUTFALL 001 AMMONIA AS NITROGEN (N)



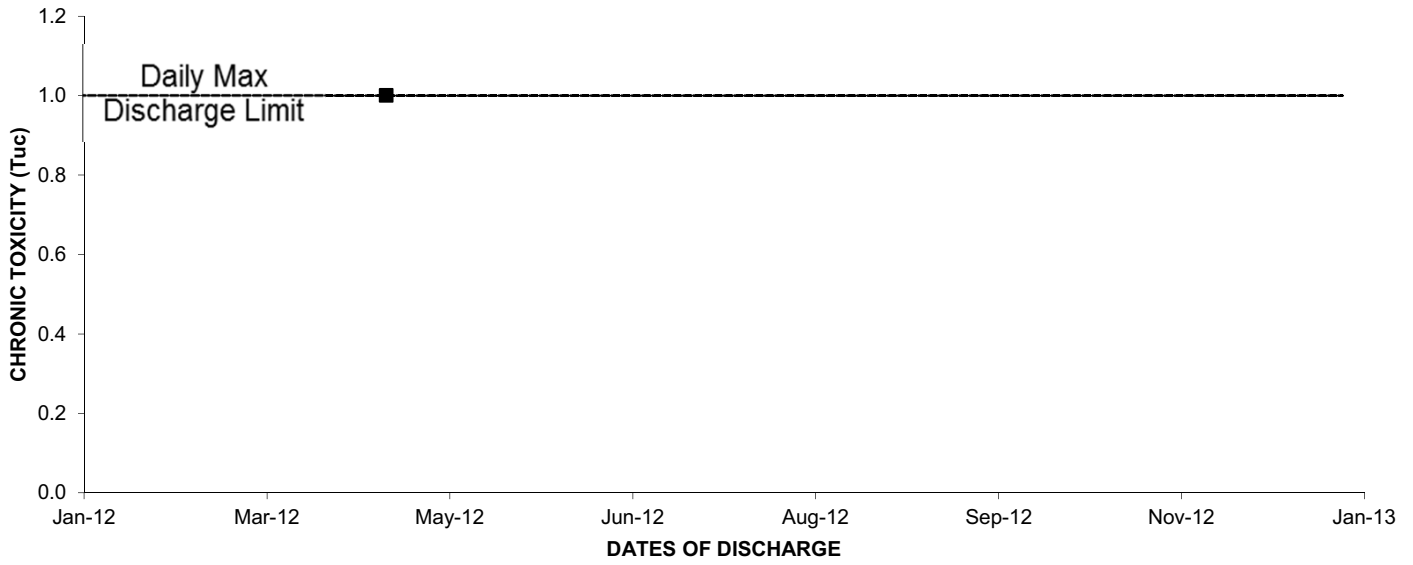
2012: OUTFALL 001 BIOCHEMICAL OXYGEN DEMAND (BOD 5 DAY)



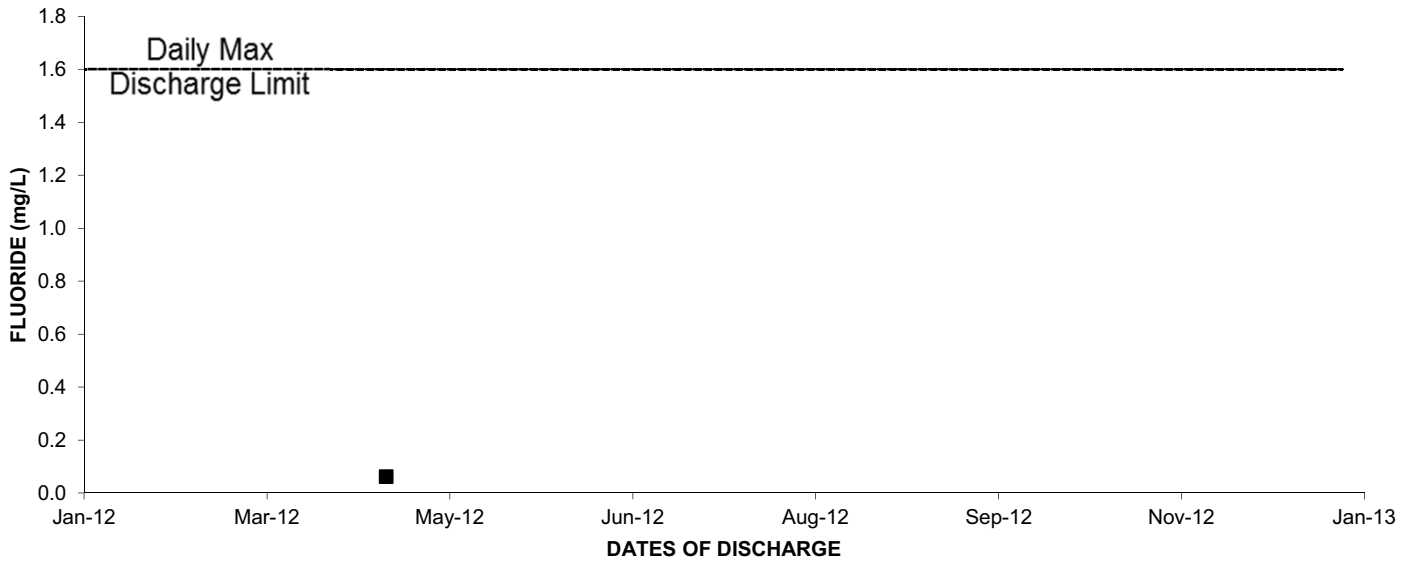
2012: OUTFALL 001 CHLORIDE



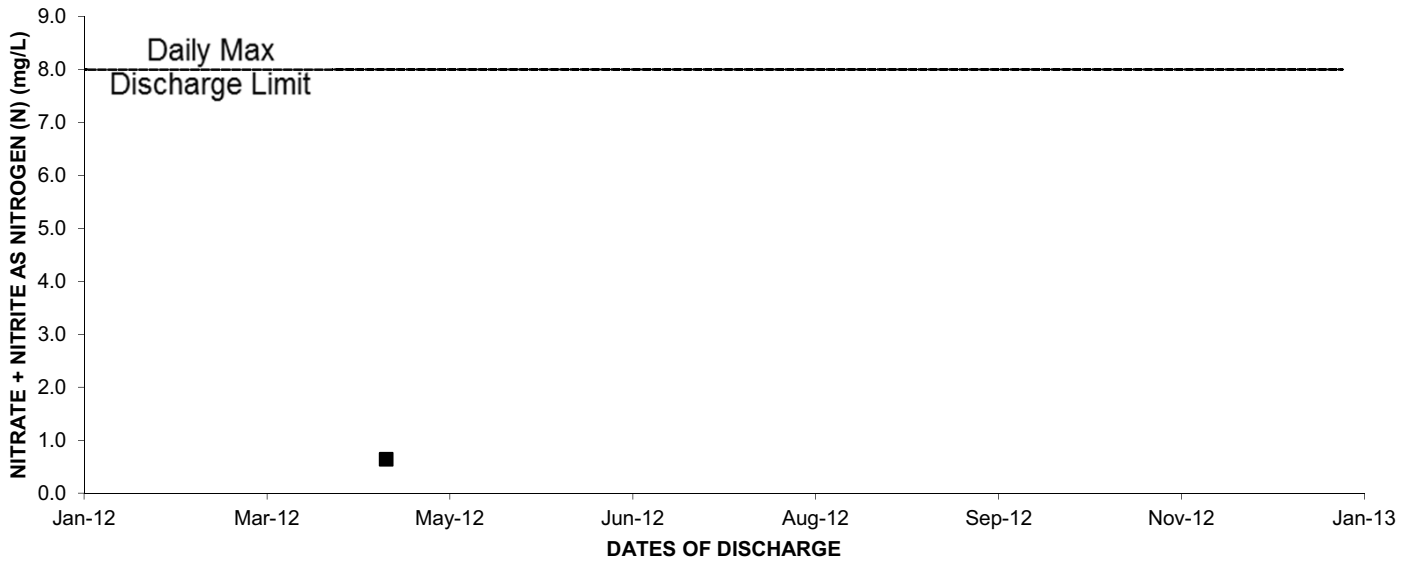
### 2012: OUTFALL 001 CHRONIC TOXICITY



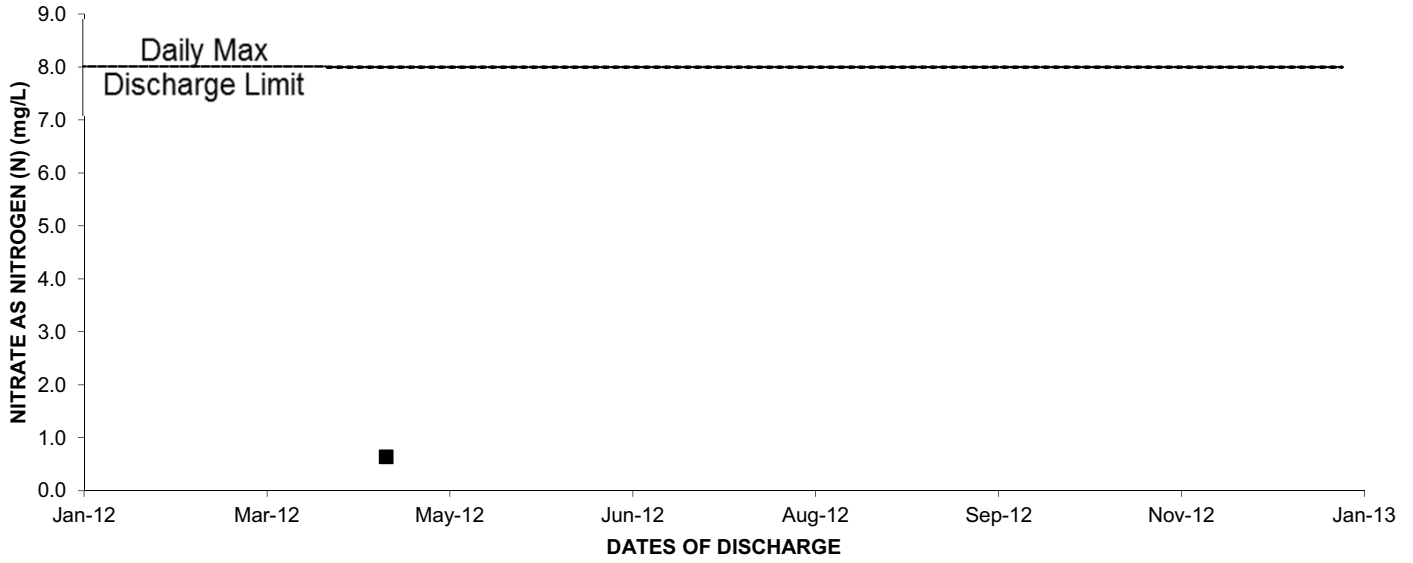
### 2012: OUTFALL 001 FLUORIDE



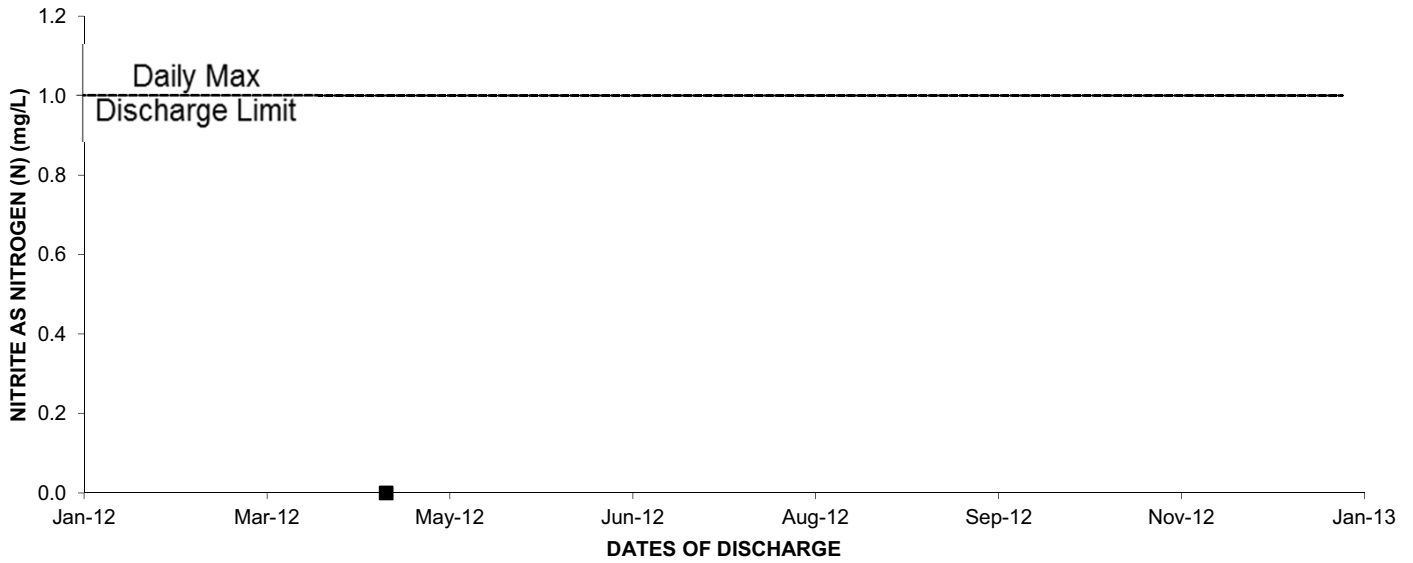
### 2012: OUTFALL 001 NITRATE + NITRITE AS NITROGEN (N)



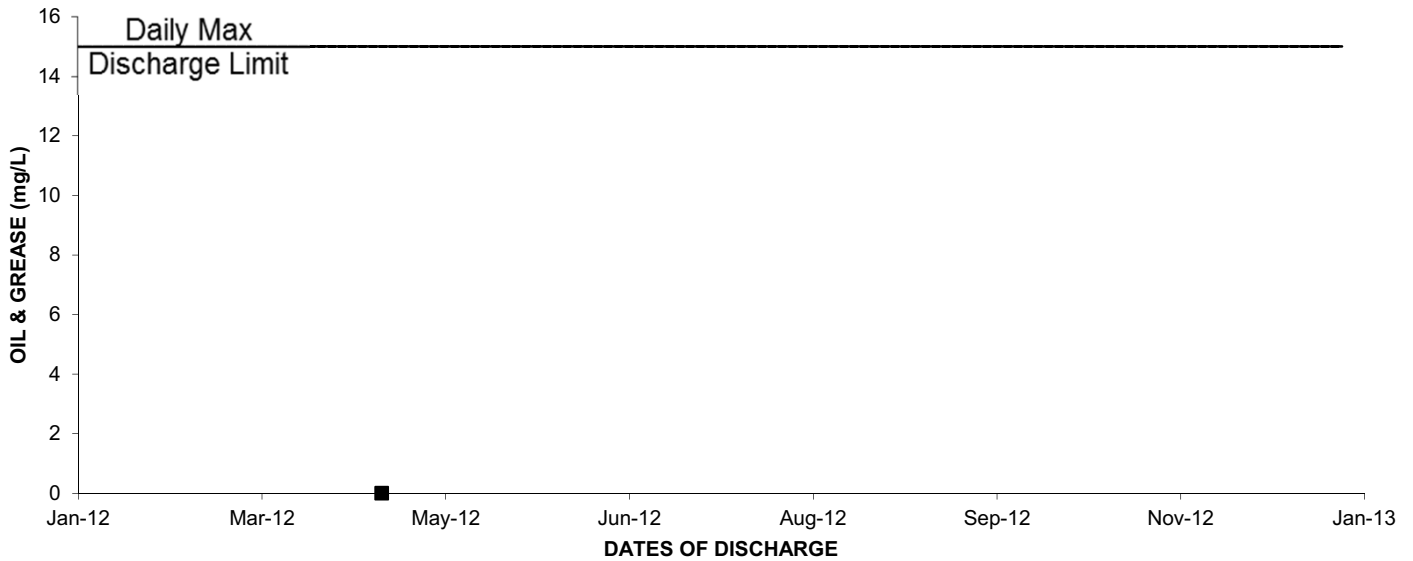
2012: OUTFALL 001 NITRATE AS NITROGEN (N)



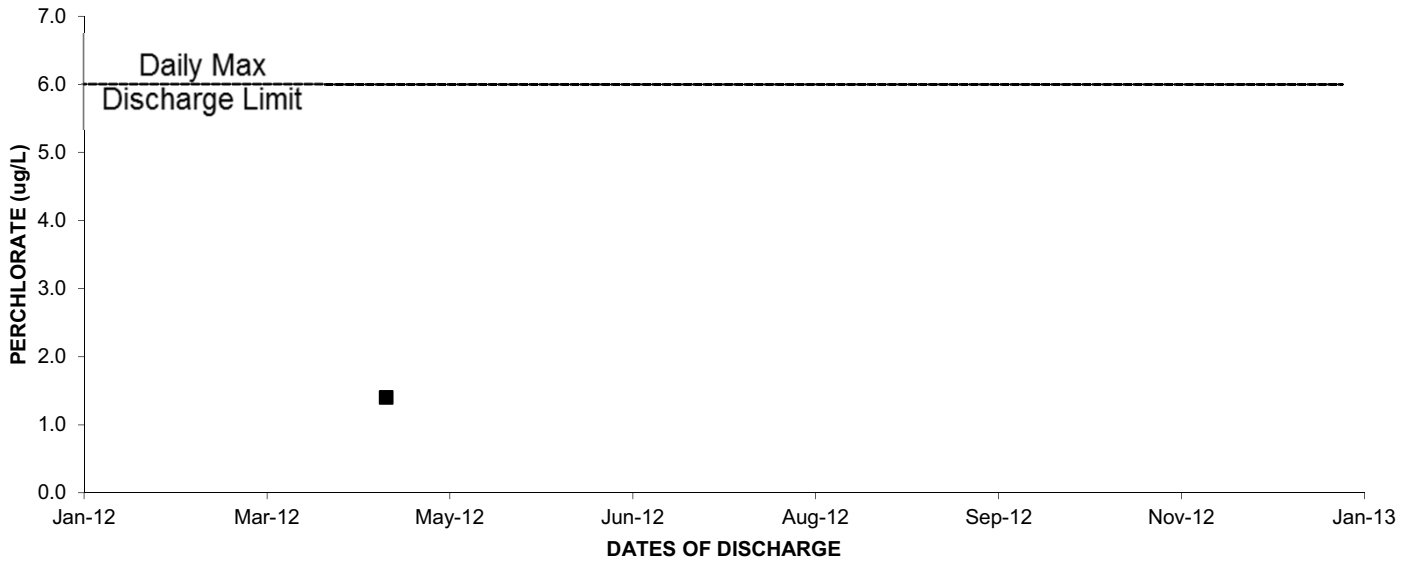
2012: OUTFALL 001 NITRITE AS NITROGEN (N)



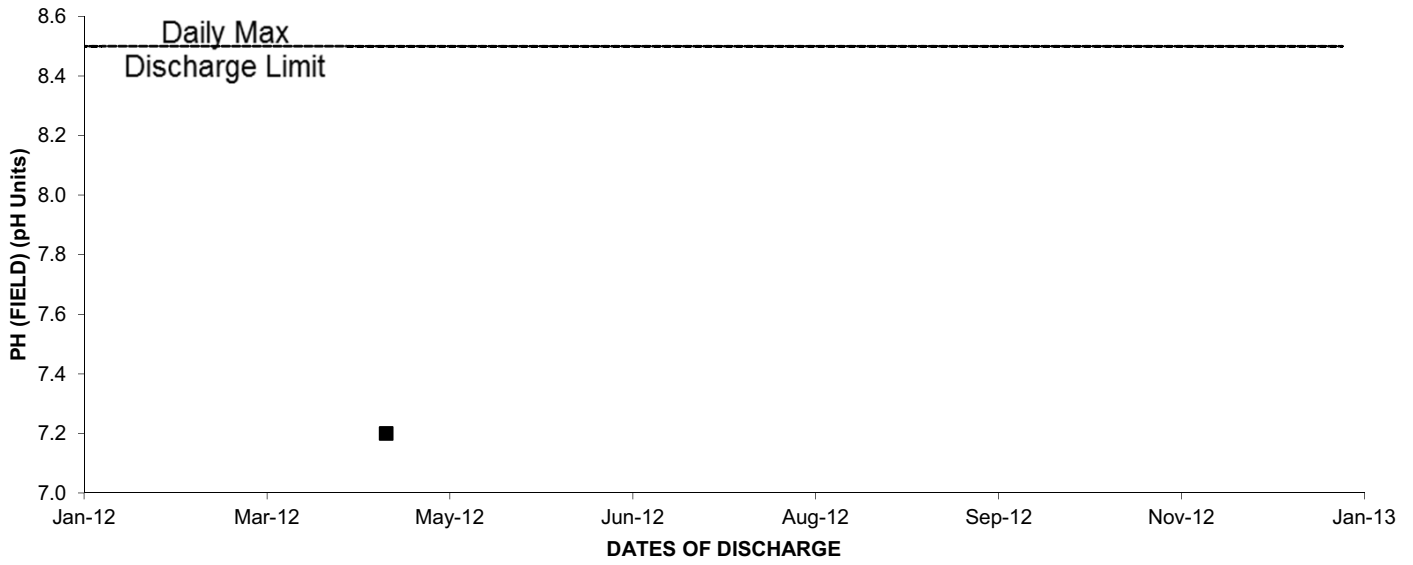
2012: OUTFALL 001 OIL & GREASE



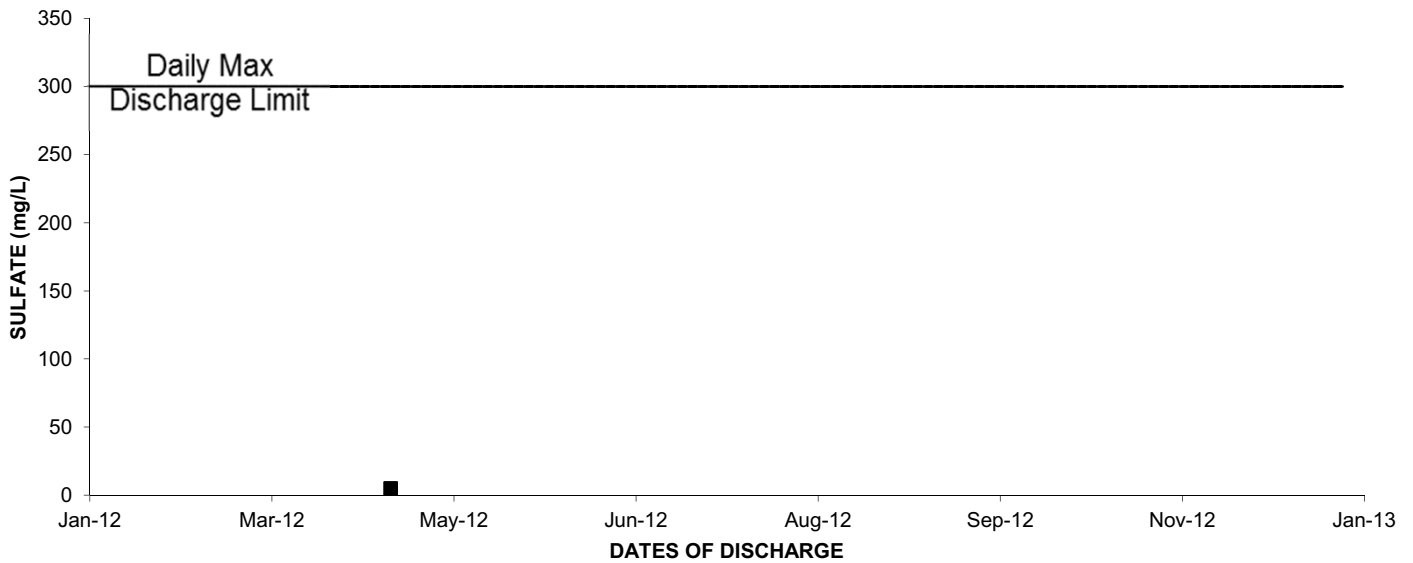
2012: OUTFALL 001 PERCHLORATE



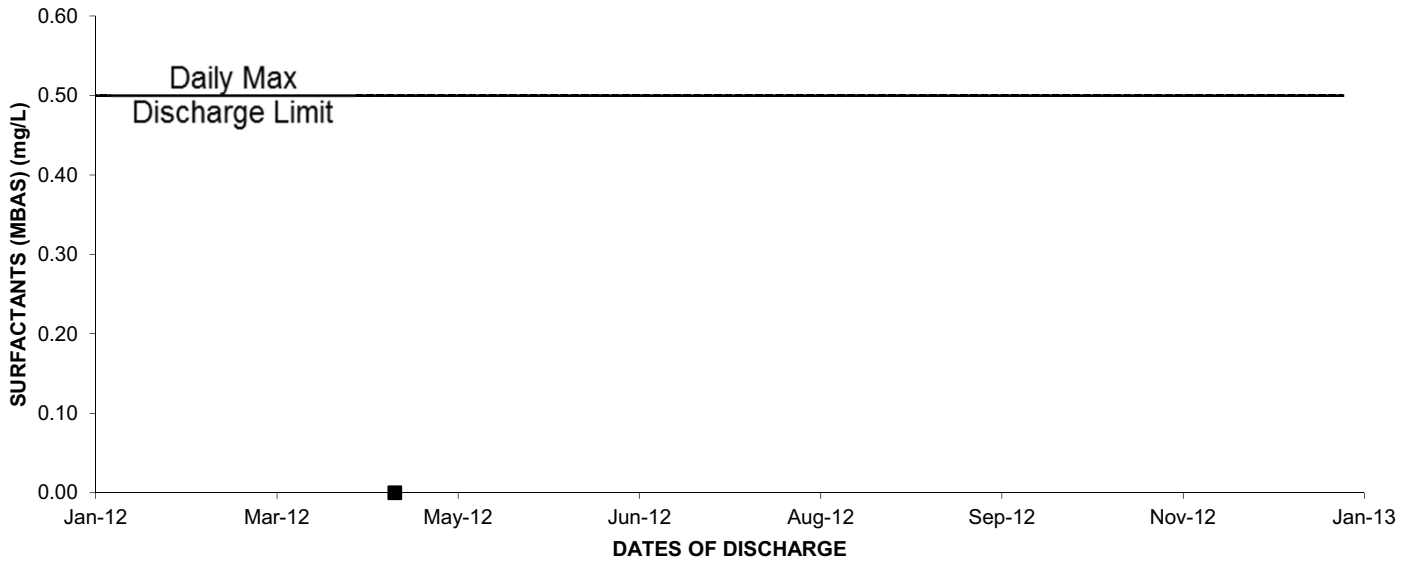
2012: OUTFALL 001 PH (FIELD)



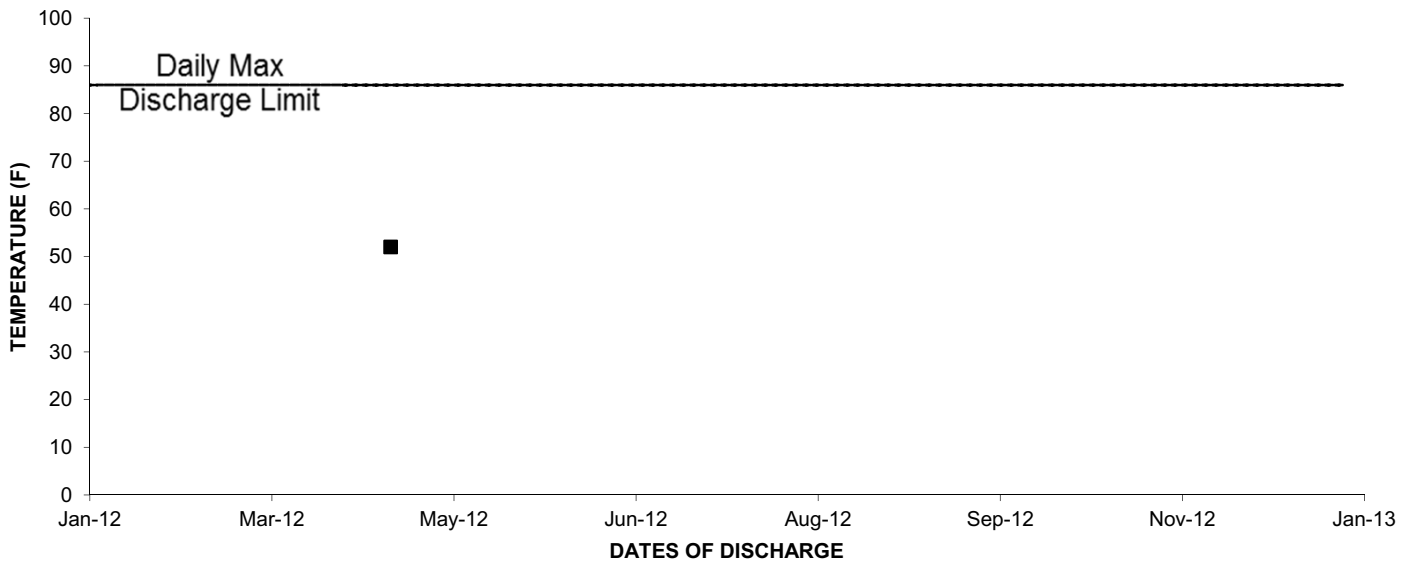
2012: OUTFALL 001 SULFATE



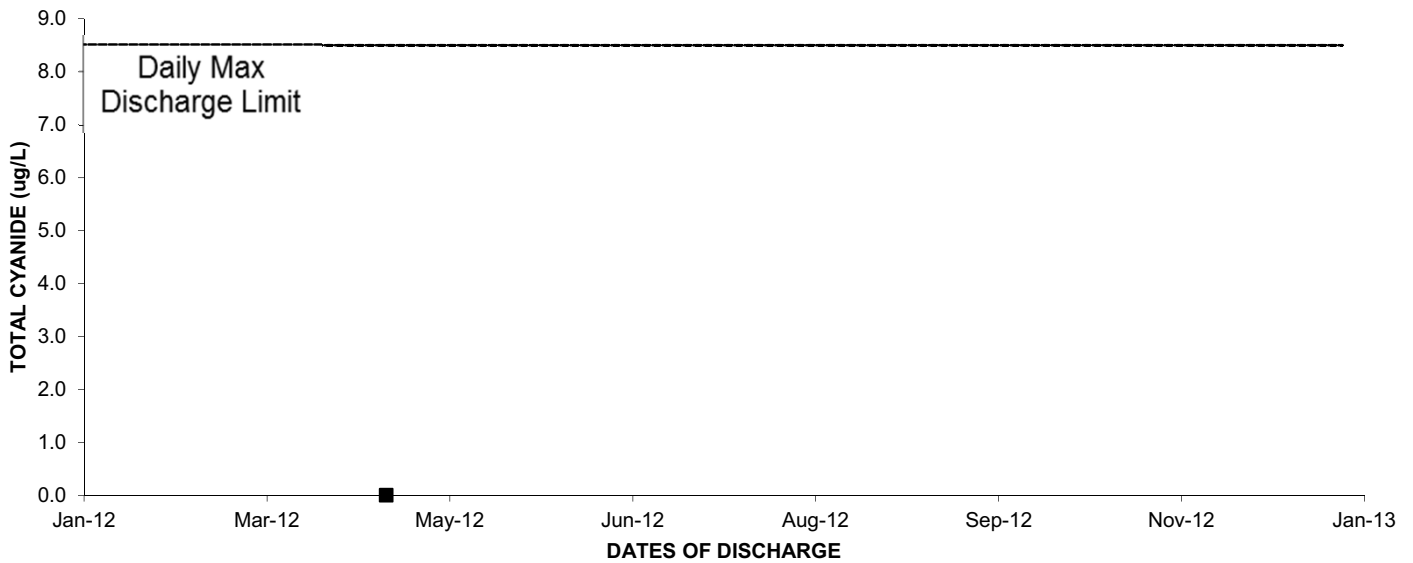
2012: OUTFALL 001 SURFACTANTS (MBAS)



2012: OUTFALL 001 TEMPERATURE

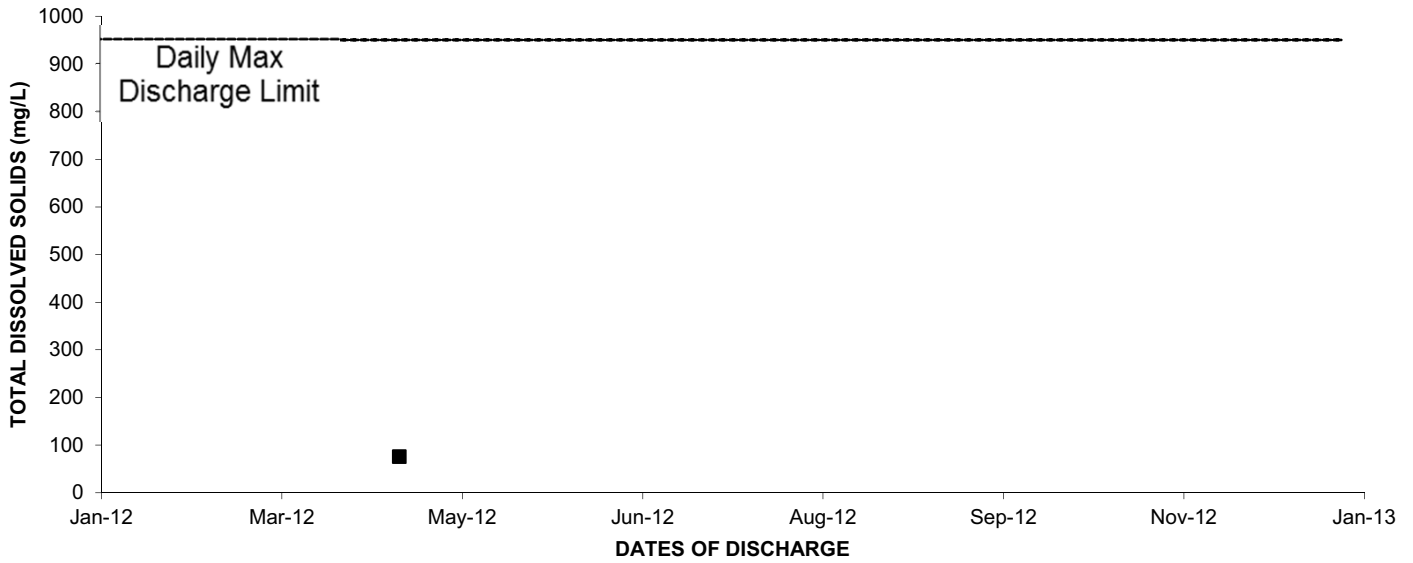


2012: OUTFALL 001 TOTAL CYANIDE

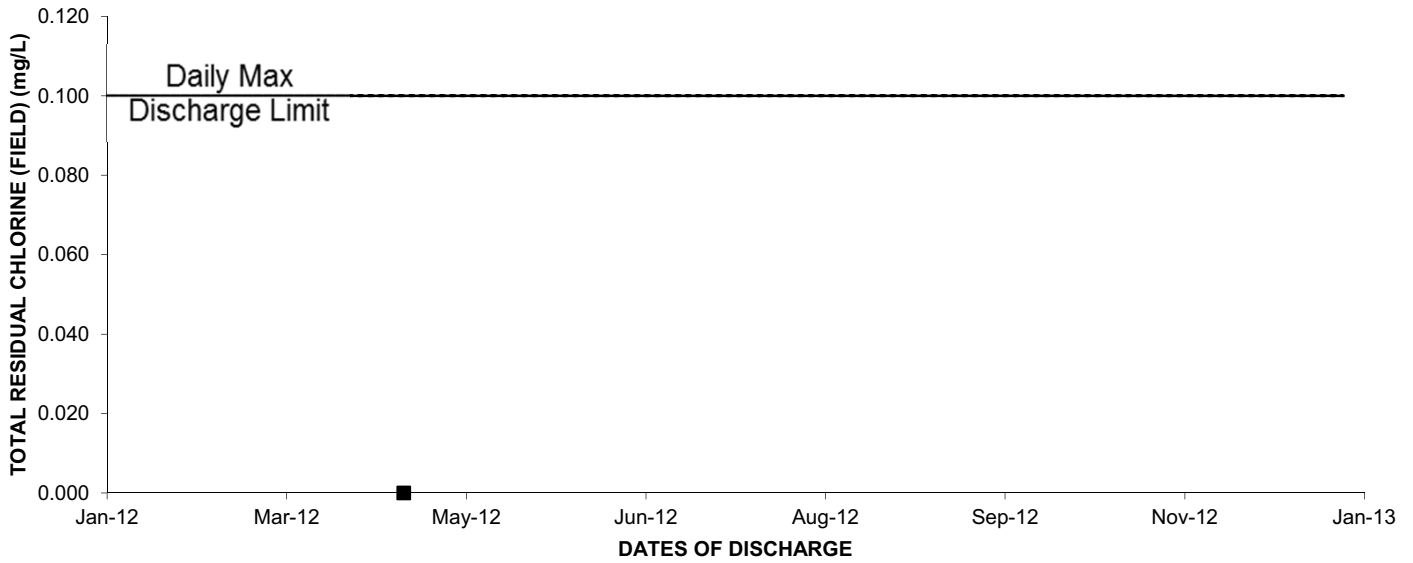




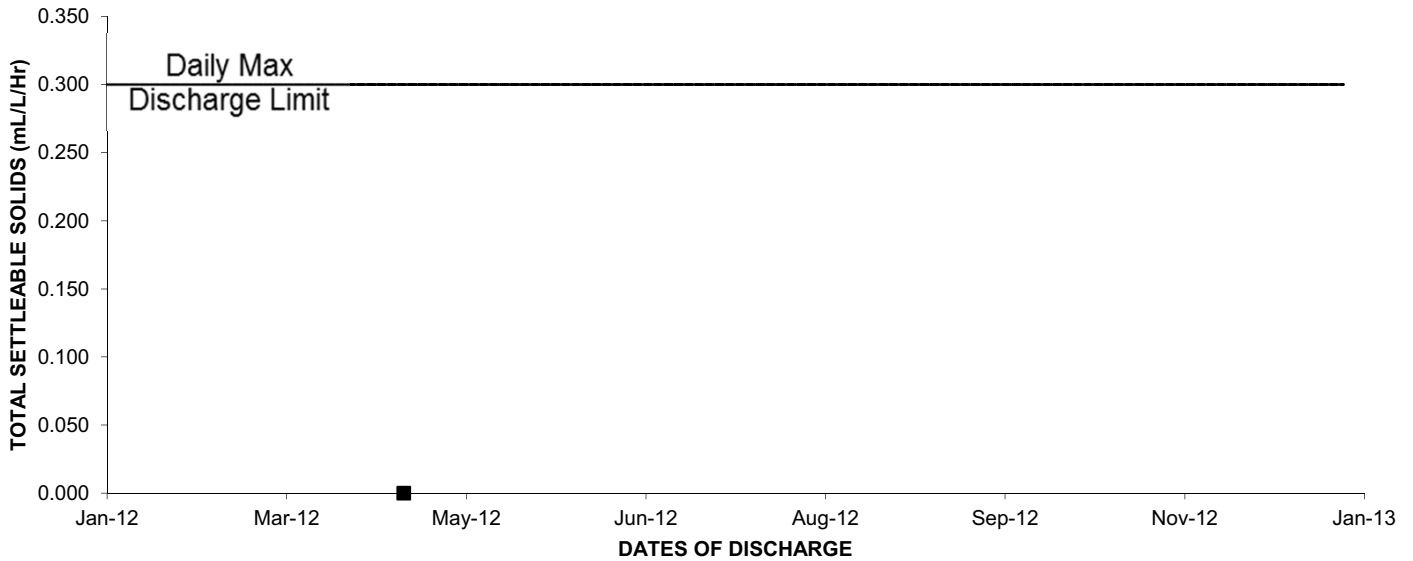
2012: OUTFALL 001 TOTAL DISSOLVED SOLIDS



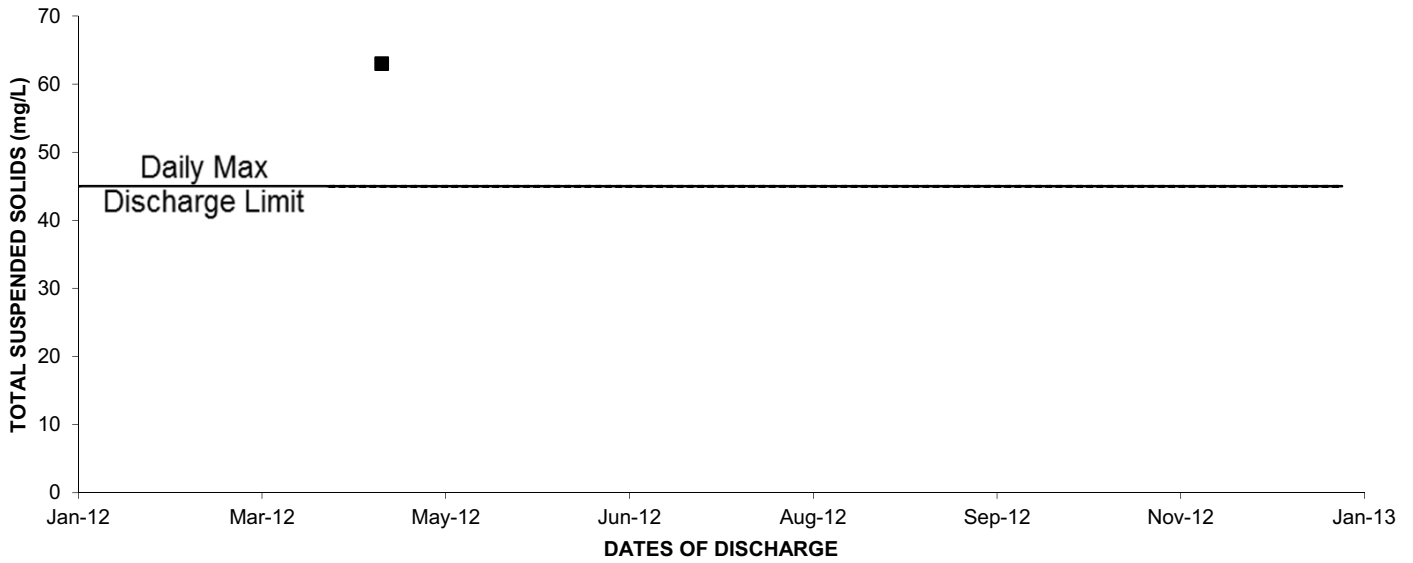
2012: OUTFALL 001 TOTAL RESIDUAL CHLORINE (FIELD)



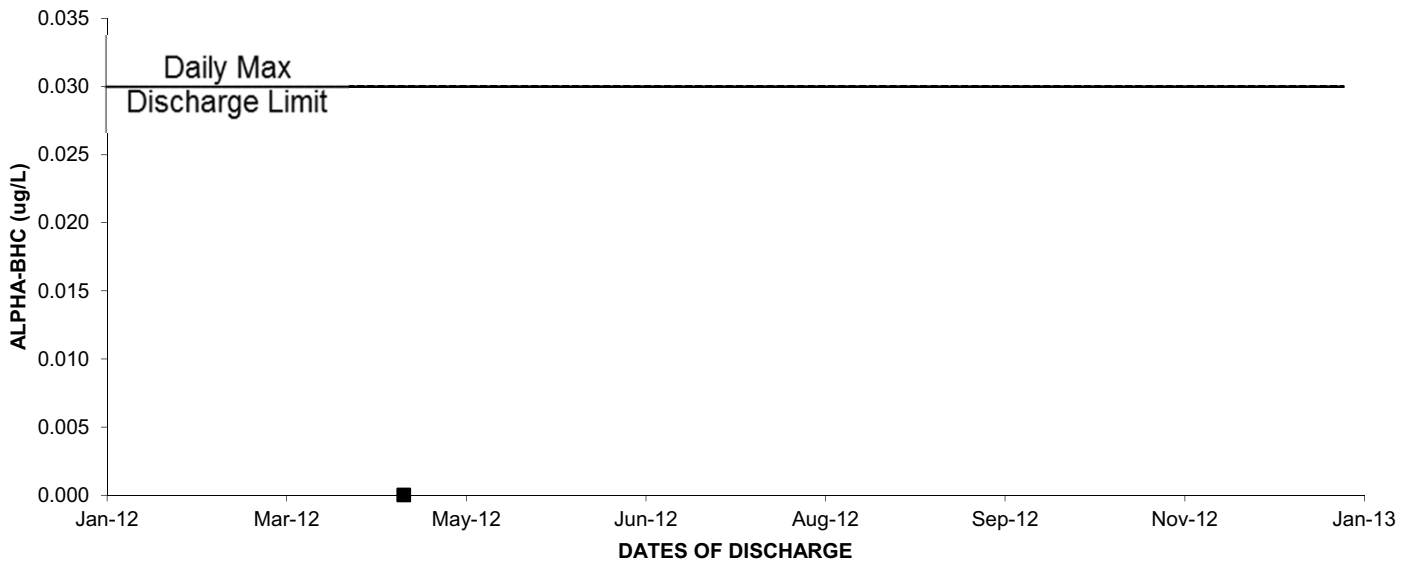
2012: OUTFALL 001 TOTAL SETTLEABLE SOLIDS



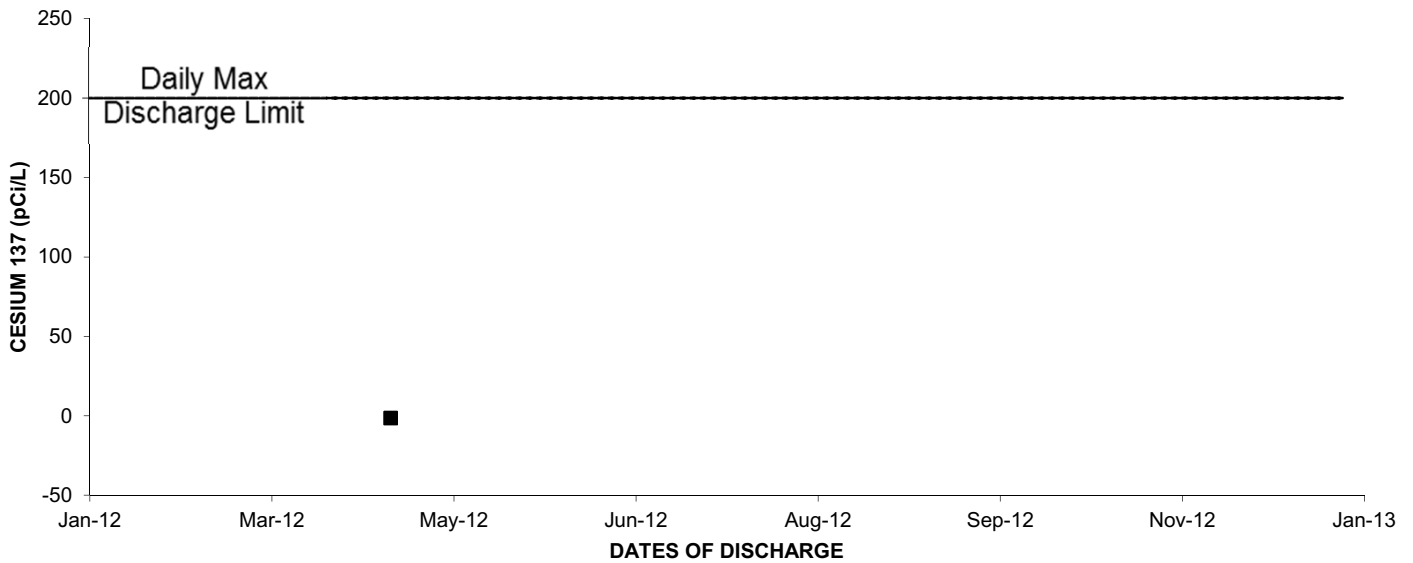
### 2012: OUTFALL 001 TOTAL SUSPENDED SOLIDS



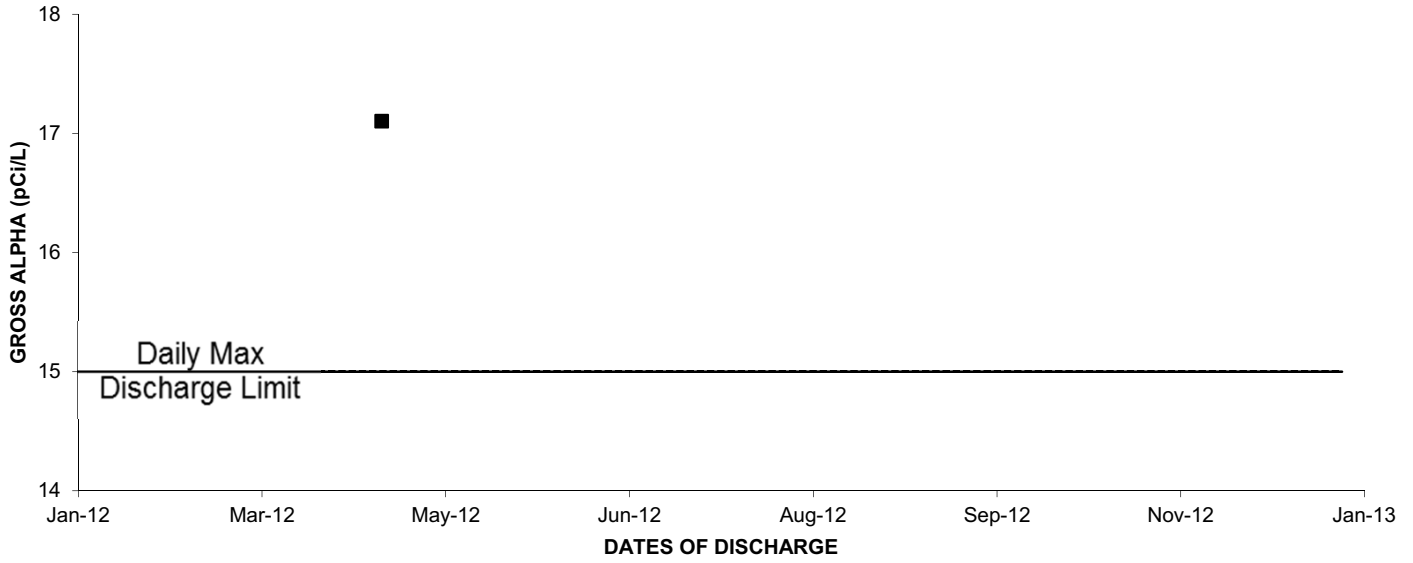
### 2012: OUTFALL 001 ALPHA-BHC



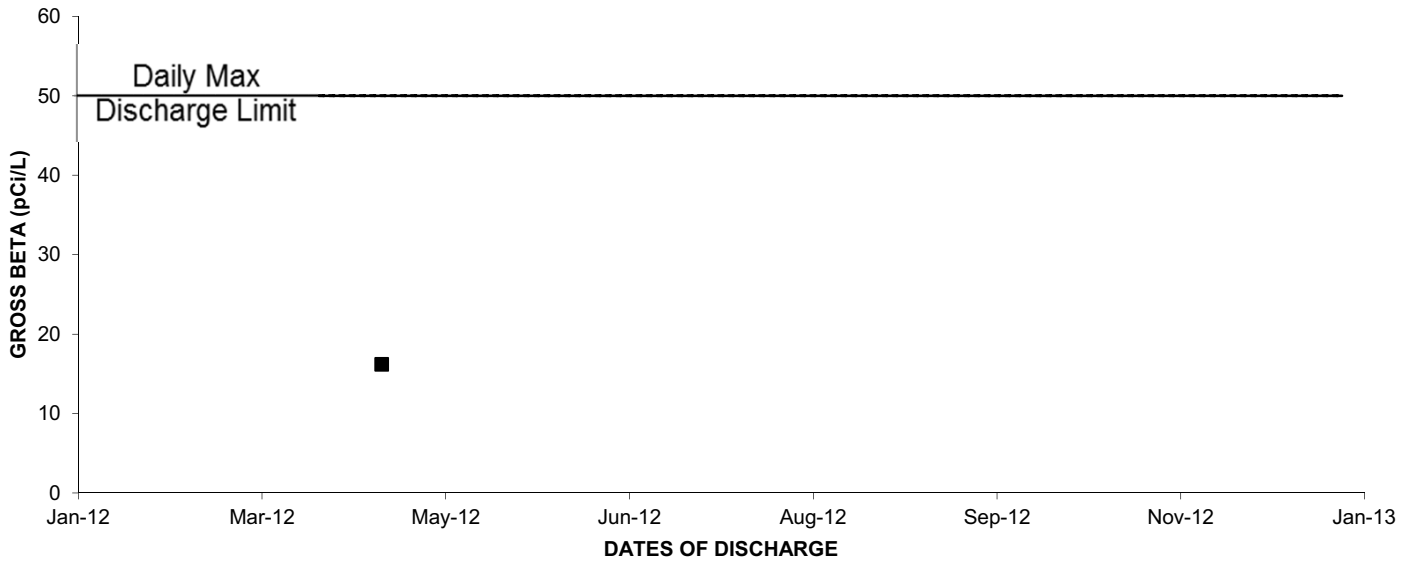
### 2012: OUTFALL 001 CESIUM 137



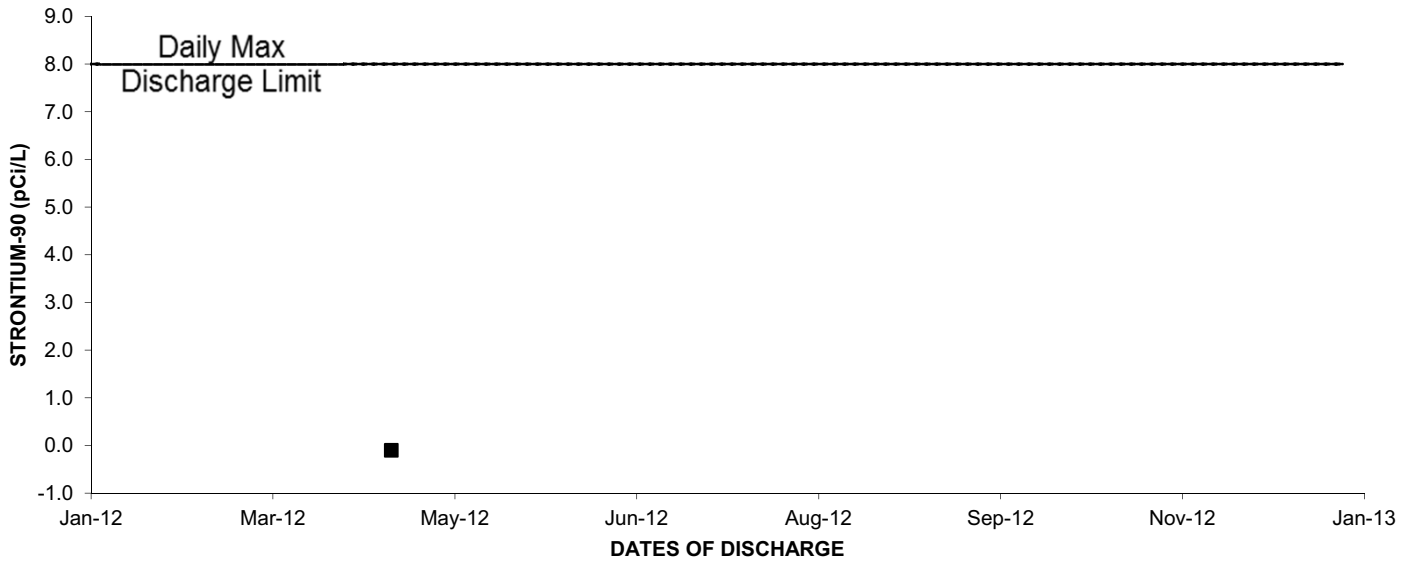
2012: OUTFALL 001 GROSS ALPHA



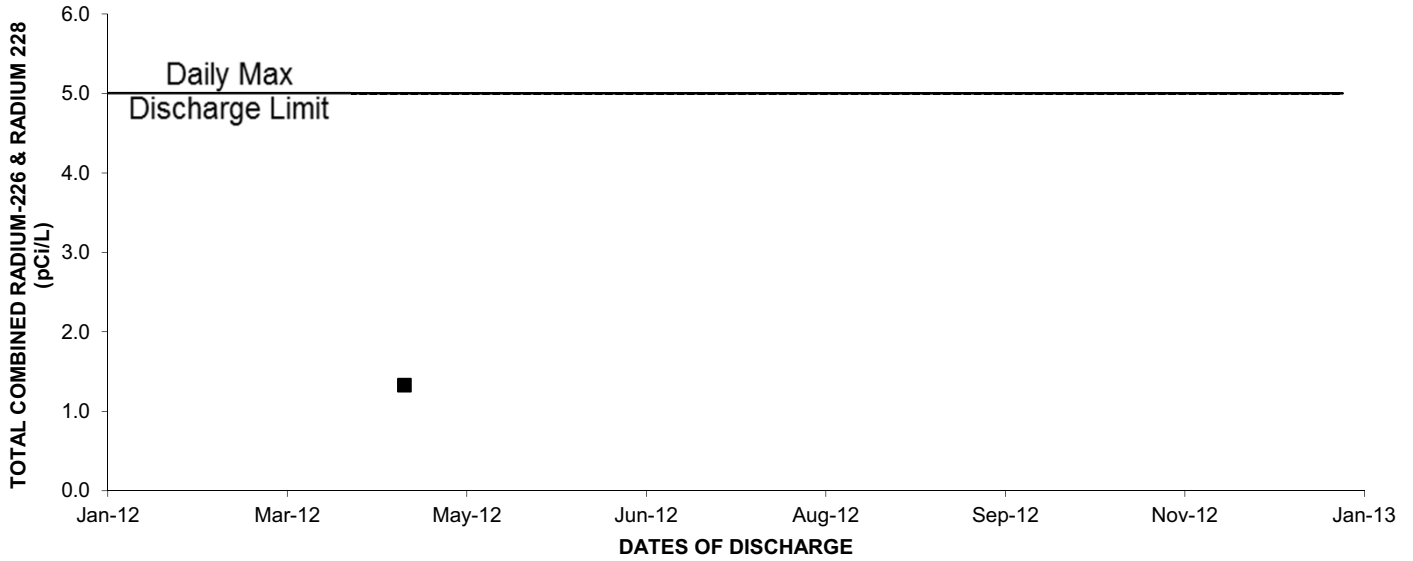
2012: OUTFALL 001 GROSS BETA



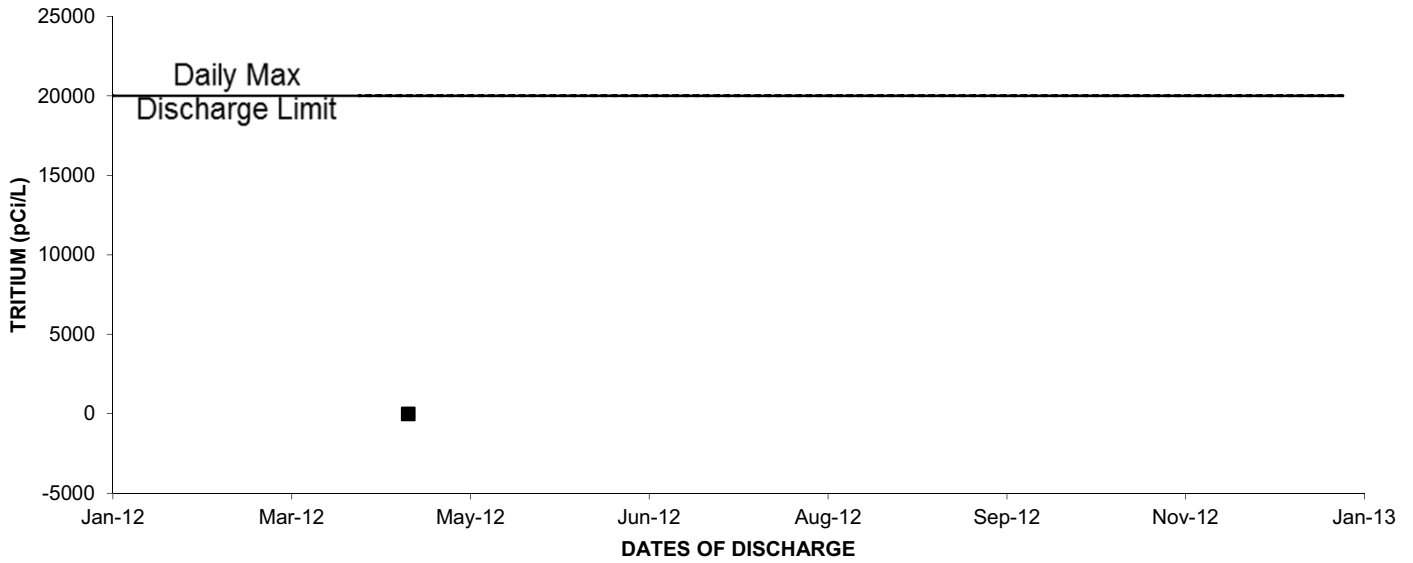
2012: OUTFALL 001 STRONTIUM-90



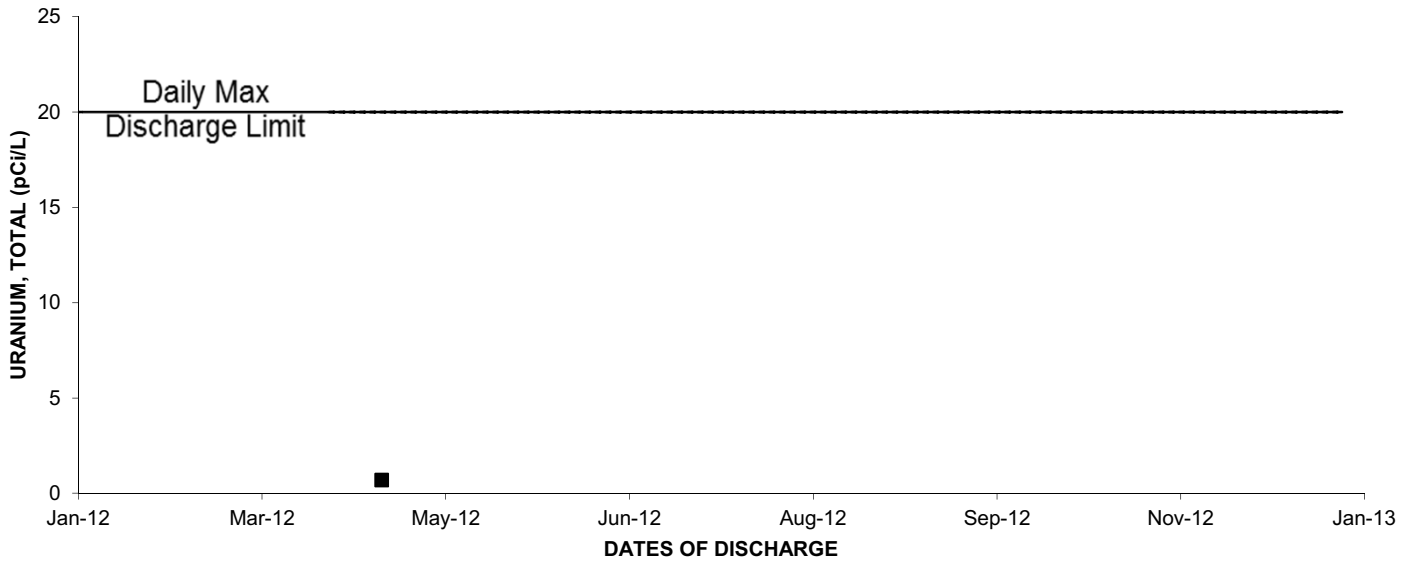
2012: OUTFALL 001 TOTAL COMBINED RADIUM-226 & RADIUM 228



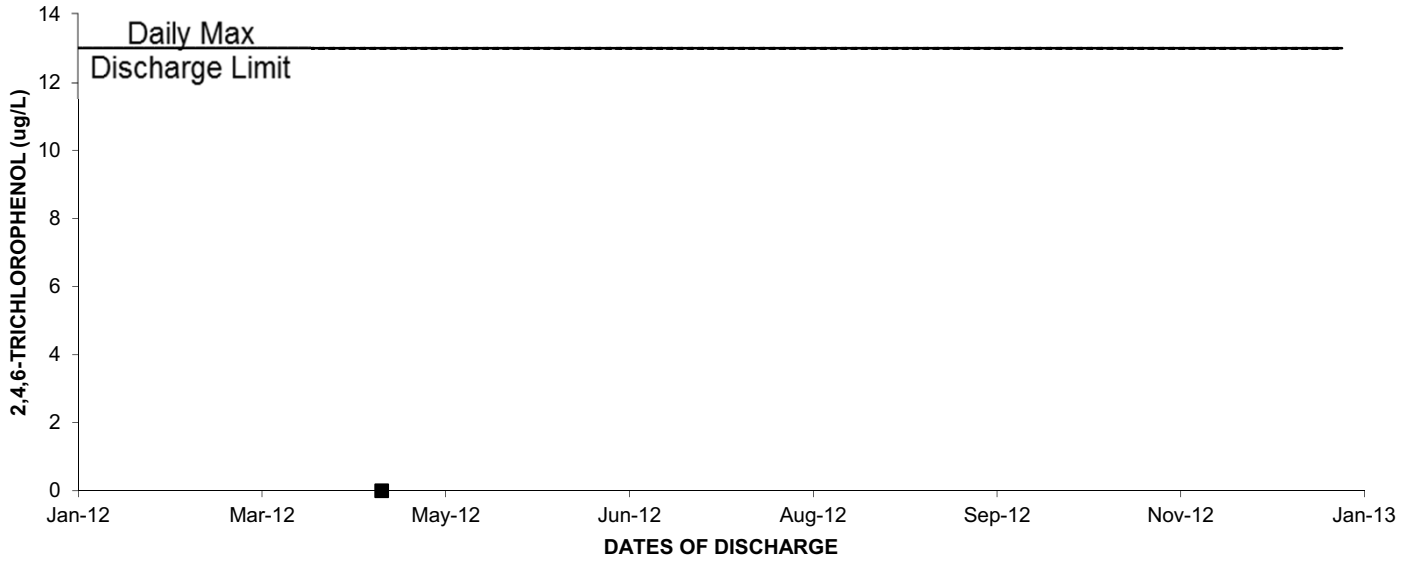
2012: OUTFALL 001 TRITIUM



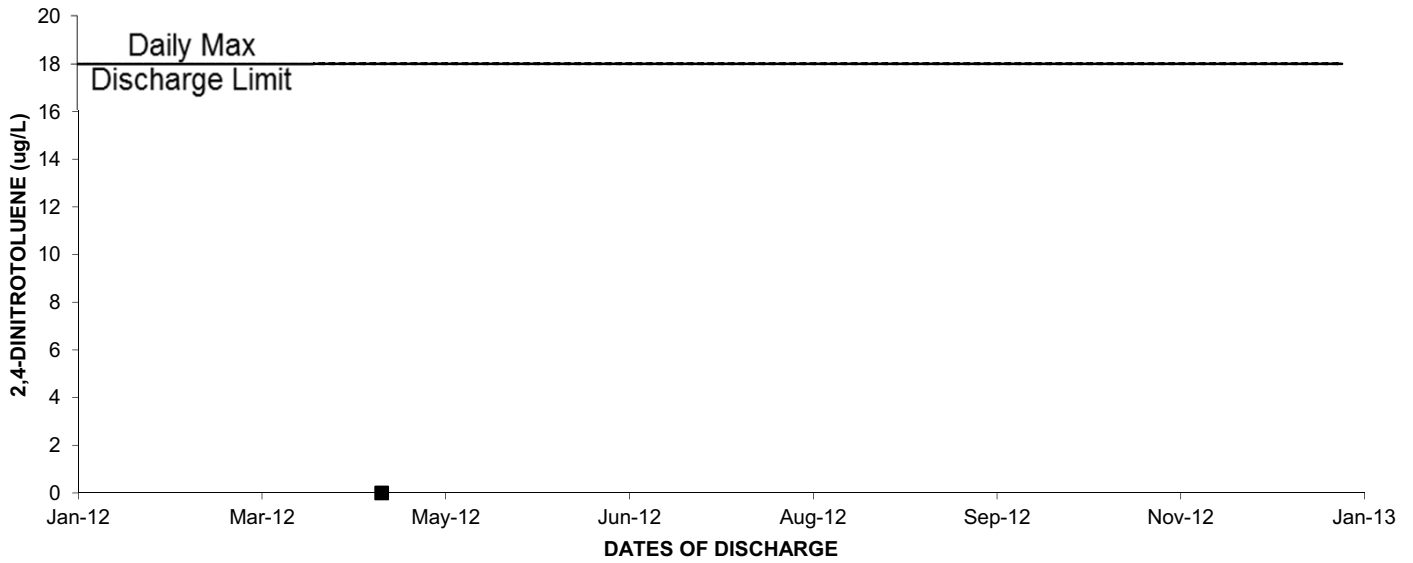
2012: OUTFALL 001 URANIUM, TOTAL



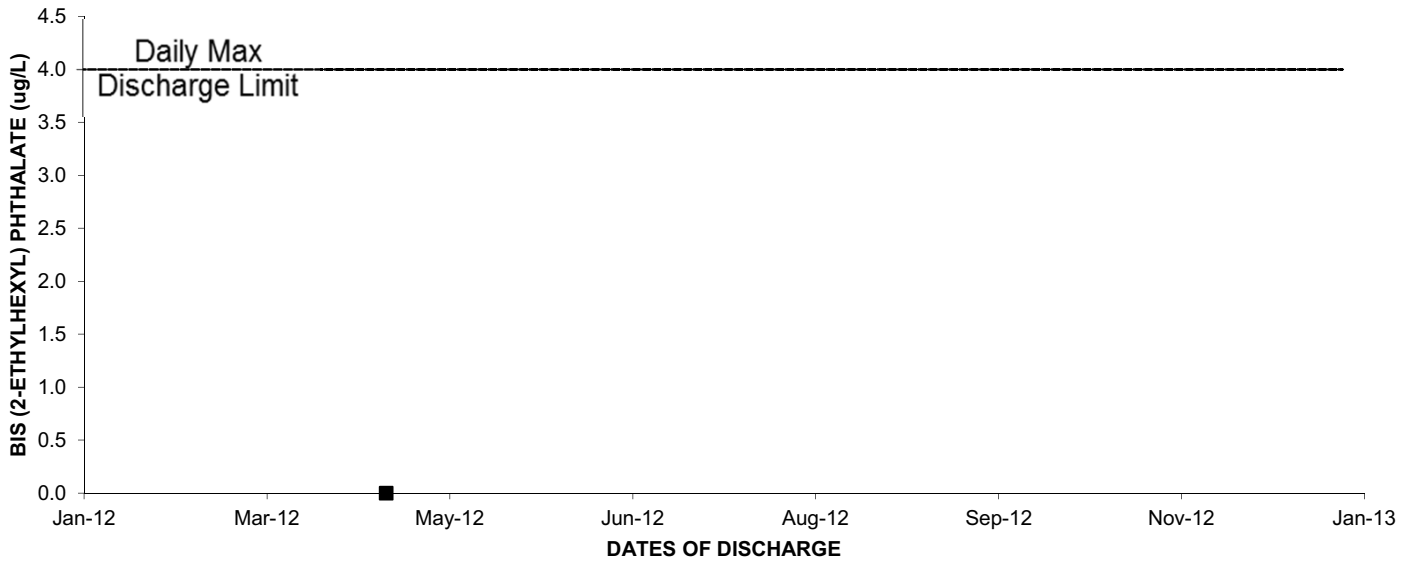
2012: OUTFALL 001 2,4,6-TRICHLOROPHENOL



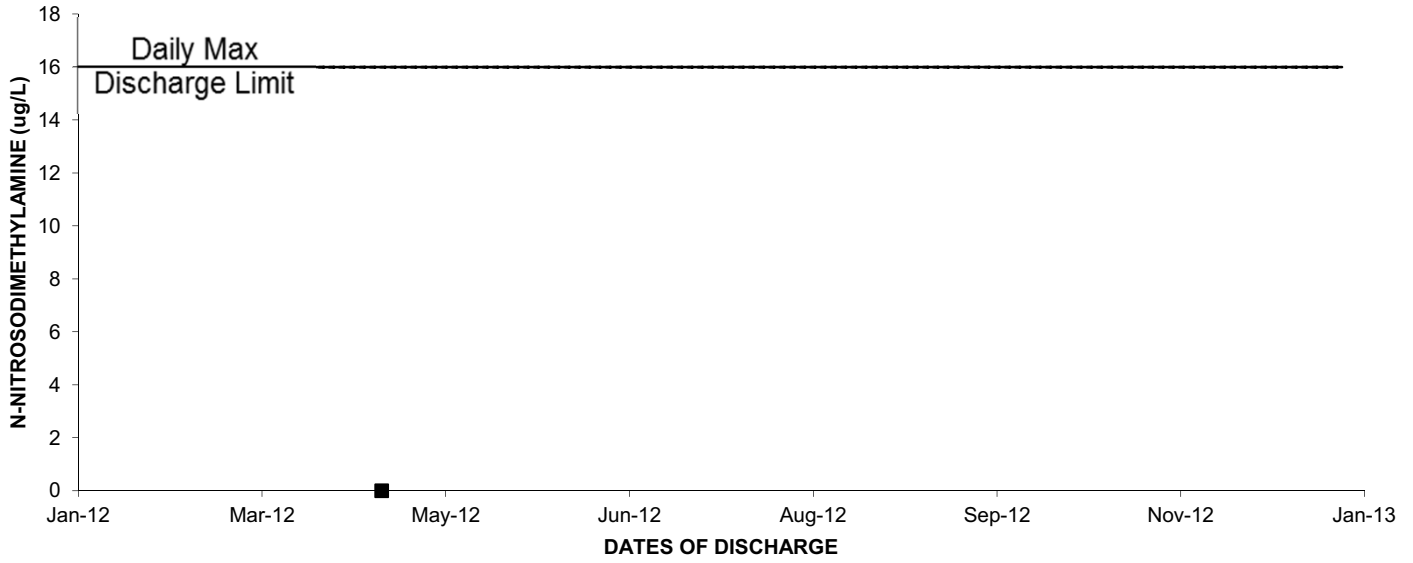
2012: OUTFALL 001 2,4-DINITROTOLUENE



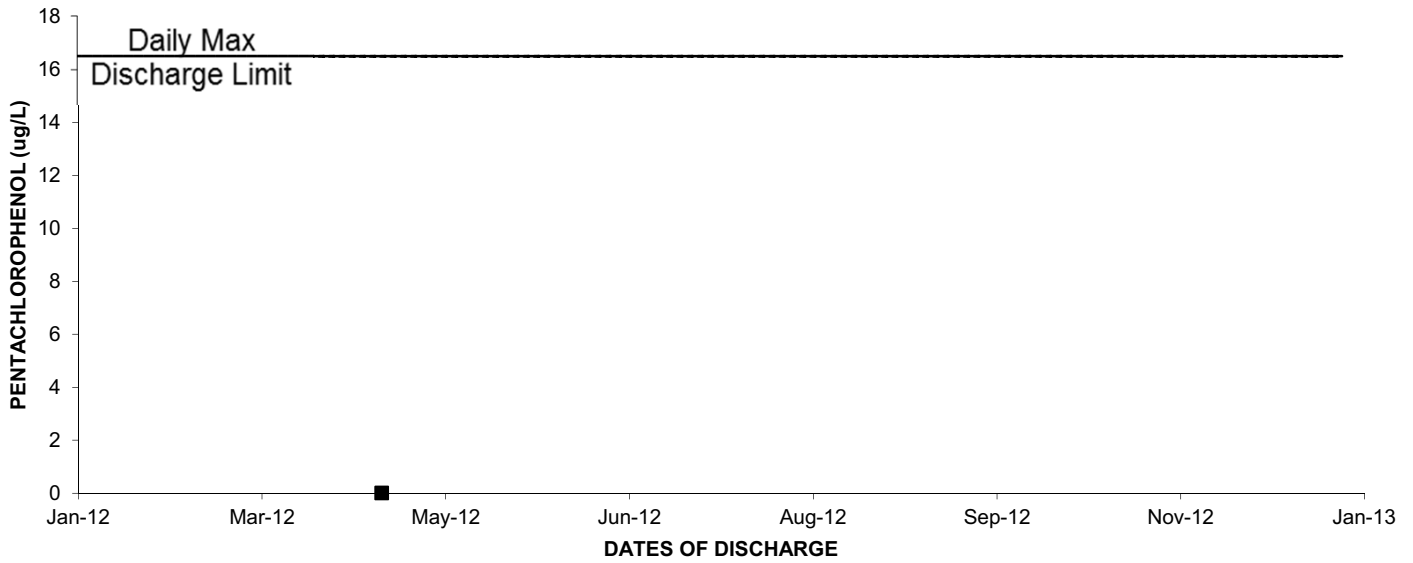
2012: OUTFALL 001 BIS (2-ETHYLHEXYL) PHTHALATE



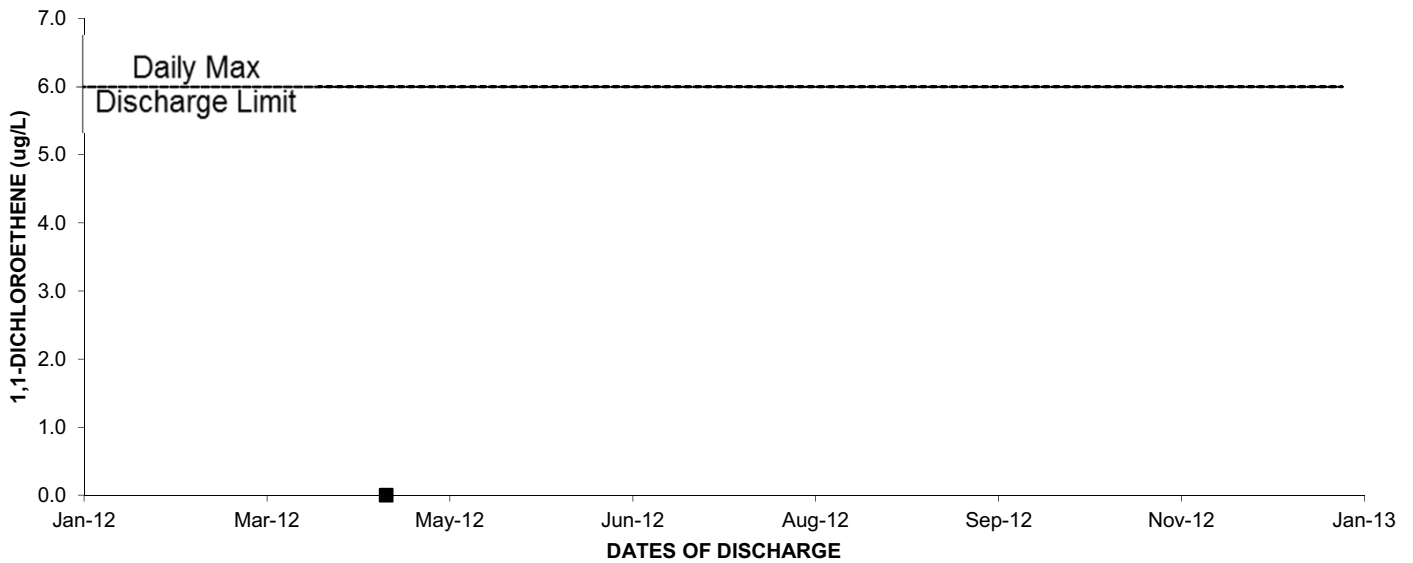
2012: OUTFALL 001 N-NITROSODIMETHYLAMINE



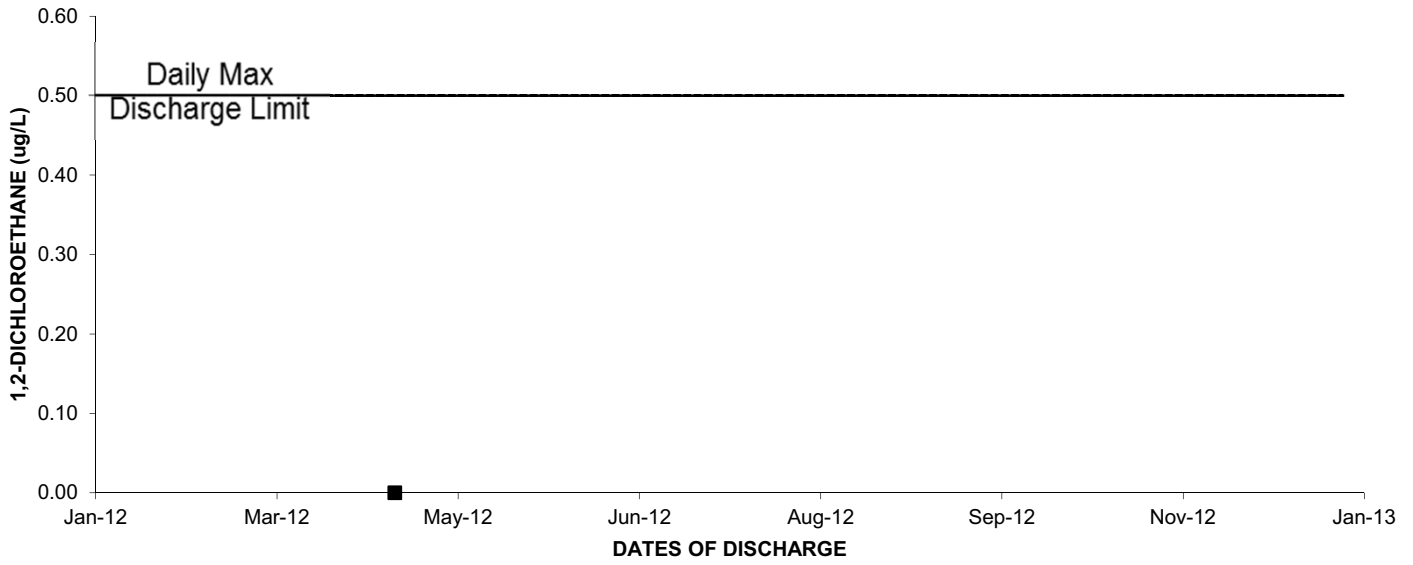
2012: OUTFALL 001 PENTACHLOROPHENOL



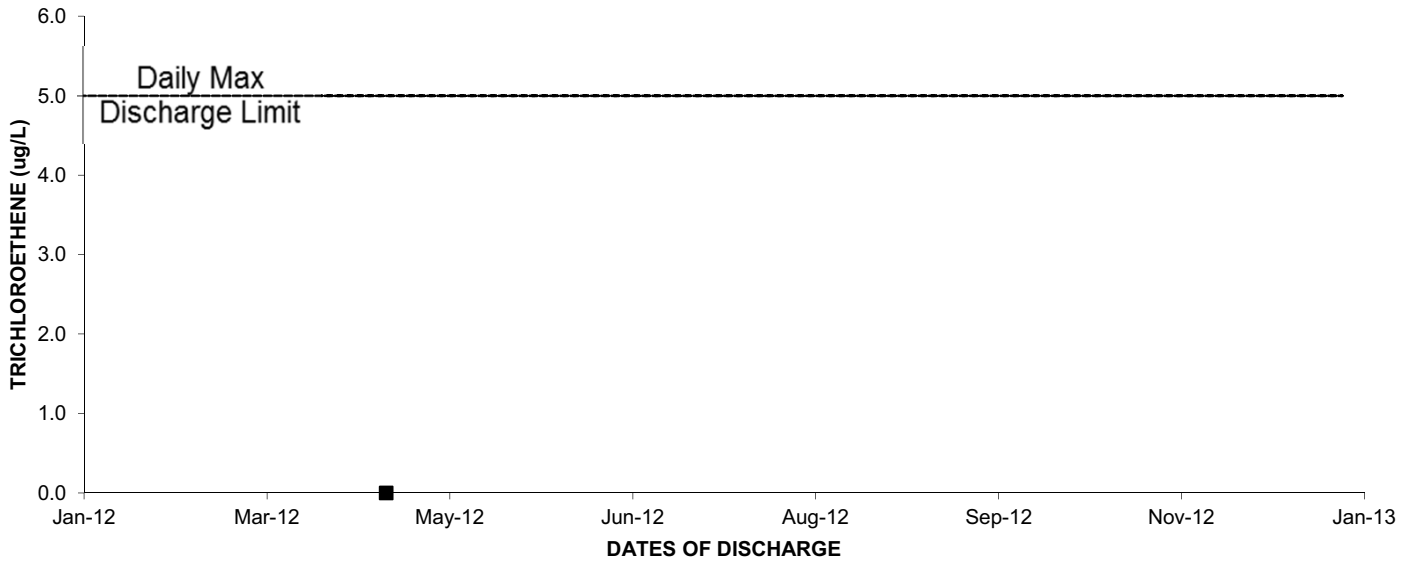
2012: OUTFALL 001 1,1-DICHLOROETHENE



2012: OUTFALL 001 1,2-DICHLOROETHANE



2012: OUTFALL 001 TRICHLOROETHENE



2012: Outfall 001 TCDD

